small firm DIARIES

www.smallfirmdiaries.org

MARCH 2024

Global Findings Overview

INTRODUCTION

The Small Firm Diaries is a global research initiative which seeks to understand the role of low-income small firms—businesses with 1-20 paid workers—in poverty reduction, and the barriers that limit their contribution to local economies.

This slide deck summarizes key insights and data from the 6 core countries in the study: Colombia, Nigeria, Kenya, Ethiopia, Indonesia, and Fiji.

For more details on the study methodology, locations and related details, and to read all related publications, visit www.smallfirmdiaries.org.

SUMMARY

4 Key Findings

1. A Distinct Group
2. Stability Entrepreneurs
3. Missing Ingredient: Working Capital
4. Fragile Jobs, Vulnerable Workers

4 Recommendations

1. Unbundle “MSME”
2. Design for Stability Entrepreneurs
3. Innovate Flexible Financing
4. Invest in Small Firm Jobs

Endnotes

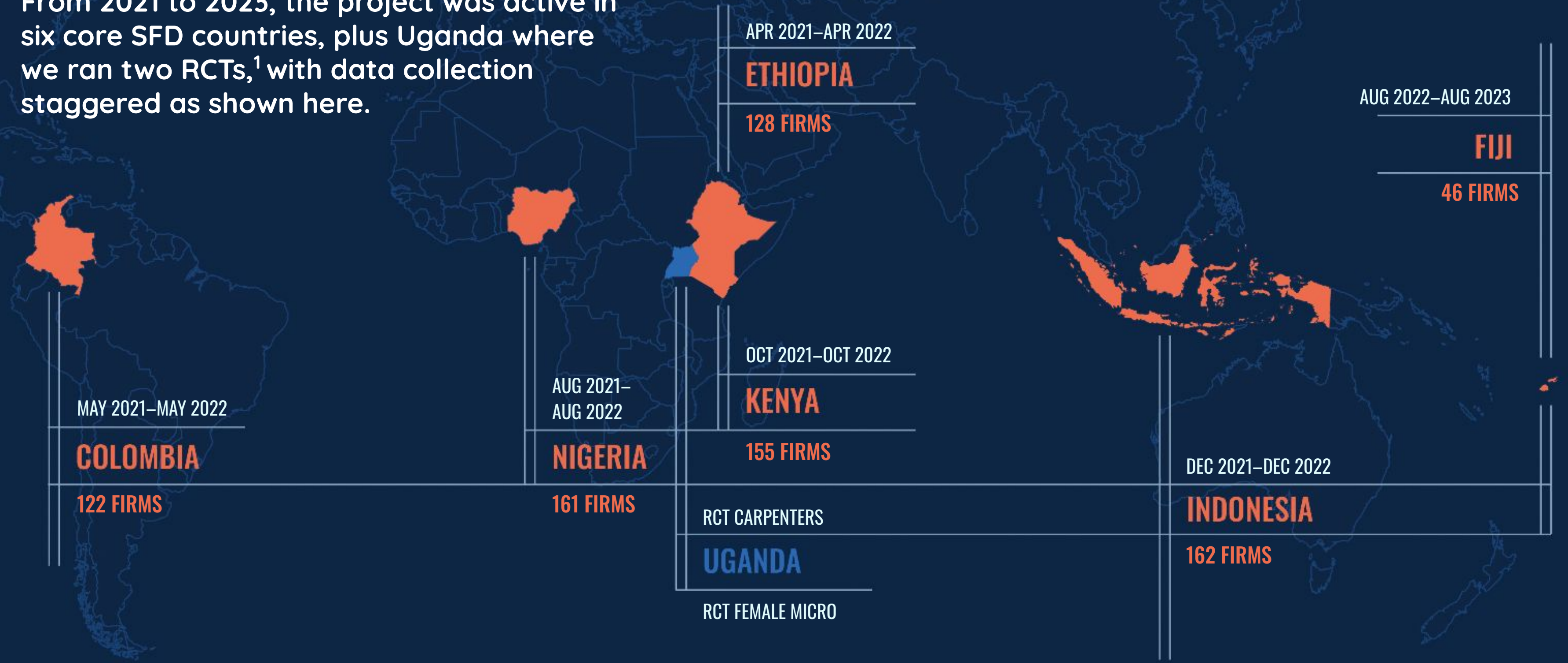
DEFINING "SMALL FIRMS"

The study includes only firms large enough to employ at least one non-family worker, but not so large as to employ professional managers (whose only job is to manage other workers). We used 1 to 20 workers as a guideline during sample selection, but the firms we found that meet all eligibility criteria skewed smaller: the average small firm had 2 to 3 workers at any given time.

MICROENTERPRISE	SMALL FIRMS	MEDIUM FIRMS
Household enterprises	**Firms that have non-family workers but not grown to include professional managers**	Firms that have professional managers (e.g. employees whose only job is managing other employees)
0 non-family employees	**1–20 non-family workers (with 90% between 1–5)**	20–100 employees
Informal	**Mix of formal and informal businesses**	Formal
Informal financing and/or microcredit	**Financing arrangements are mix of formal and informal**	Largely have access to formal finance, though depends on context

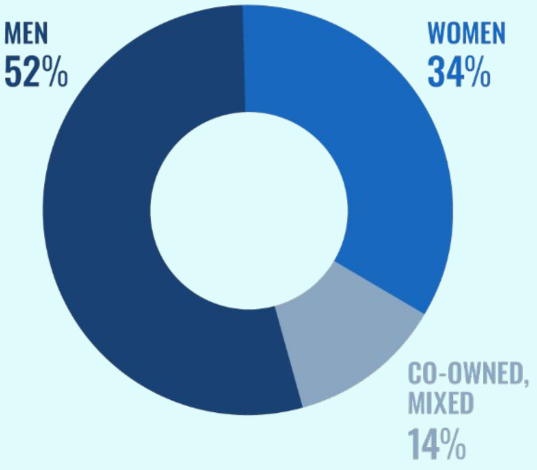
RESEARCH SITES: 774 SMALL FIRMS IN 6 COUNTRIES

From 2021 to 2023, the project was active in six core SFD countries, plus Uganda where we ran two RCTs,[1] with data collection staggered as shown here.

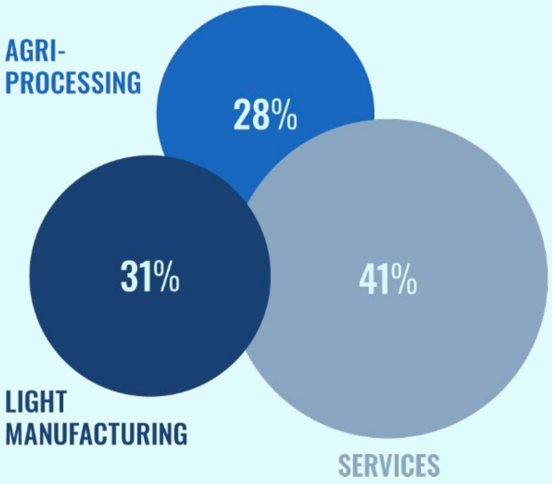


ABOUT THE 774 SMALL FIRMS IN THE GLOBAL SAMPLE[2]

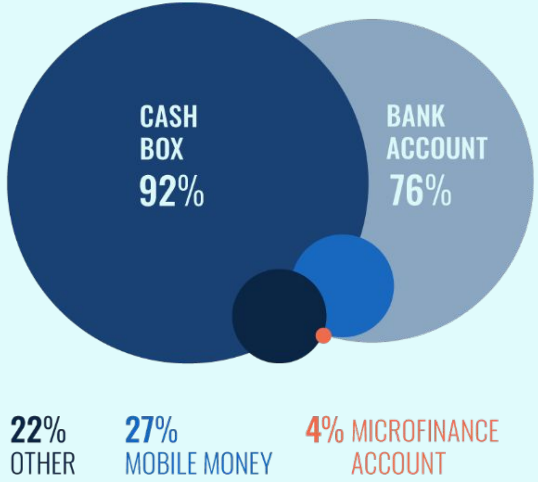
OWNER GENDER



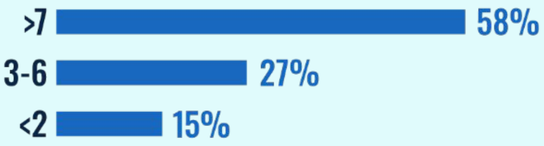
INDUSTY DISTRIBUTION



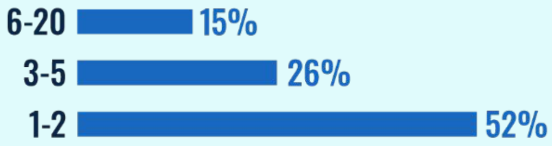
ACCOUNT OWNERSHIP[3]



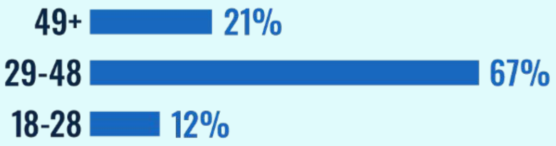
YEARS IN OPERATION



FIRM SIZE (Employees)

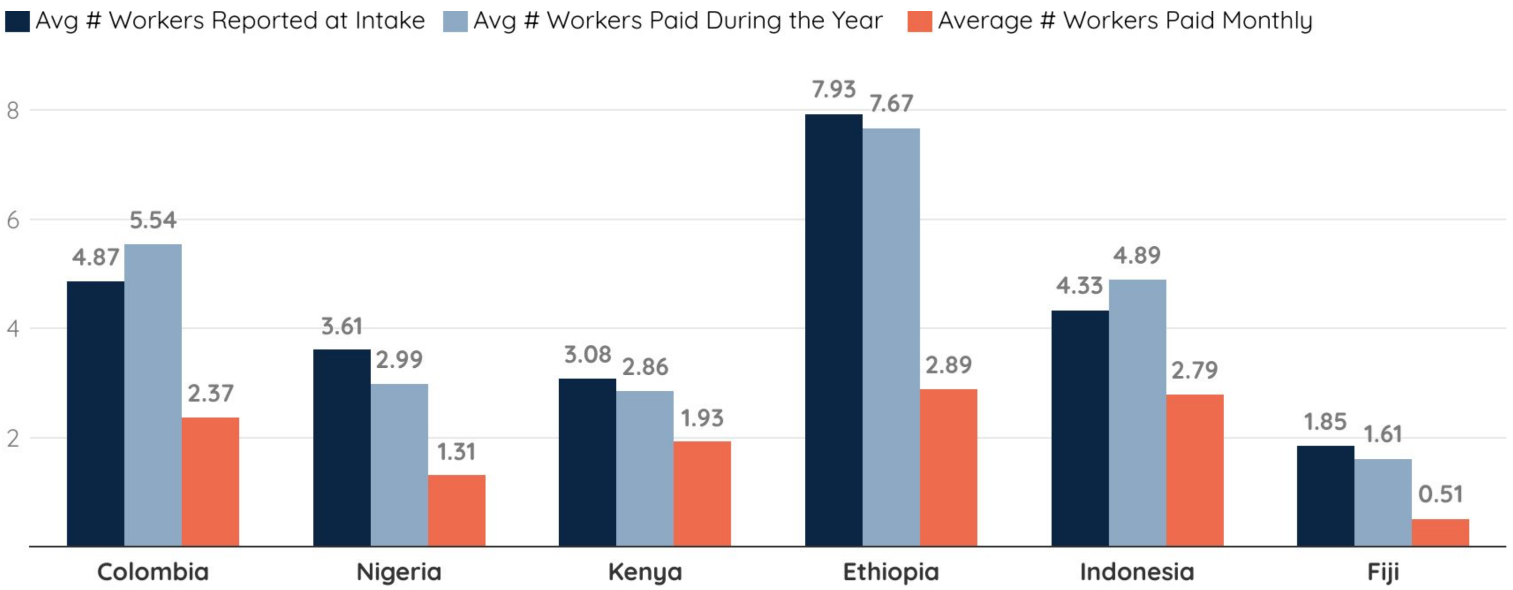


AGE OF OWNER



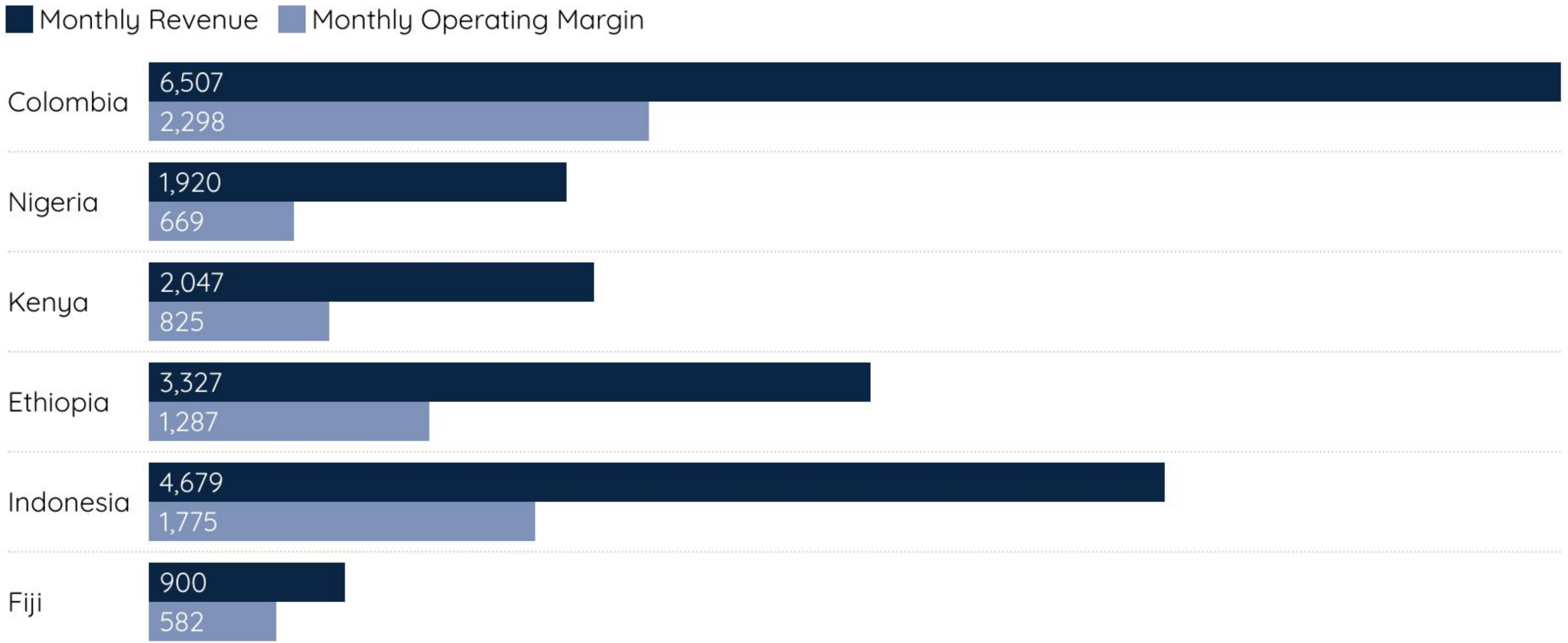
FIRM SIZE BY NUMBER OF WORKERS

The Diaries methodology allows us to see beyond one-time survey measures of firm size by number of workers, and to see more deeply into fluctuation in employment. This chart shows three metrics for the average firm in each country—first, the average number of workers reported by the owner at intake, second, the average number of people the firm paid at least once during the study, and third, the average number of workers paid each month, which in all cases is lower than the first two numbers, illustrating that jobs in small firms are volatile both from the perspective of small firm owners, and the workers. More data on small firm employment is shared under finding #4.



FIRM SIZE BY MEDIAN MONTHLY REVENUE AND OPERATING MARGIN

We are also able to look at firm size by median monthly revenue and operating margin—which we used throughout the study as a simplified proxy for profit. Suspecting that revenues and profits of small firms would be highly variable, and that extrapolating annual revenue or profit from short-term measures was unlikely to be reliable, we instead calculated each firm's revenue based on cash flow figures collected from firm owners on a weekly basis over 12 months.

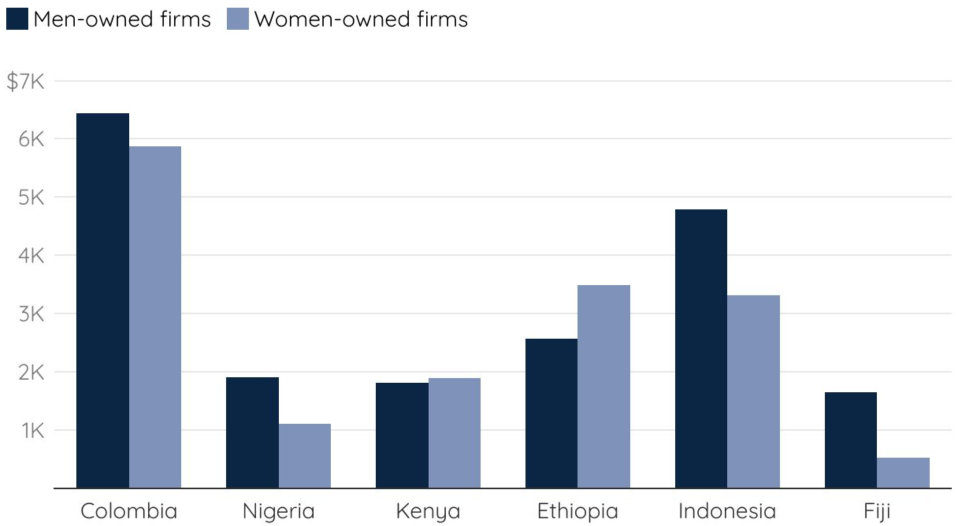


Figures are expressed in international-$ at January 2023 prices to account for inflation and differences in the cost of living between countries.

WOMEN-LED FIRMS AND THE GENDER GAP

We do not see consistent revenue differences between women- and men-owned firms across countries, as illustrated below. Contrary to expectations set by data on micro businesses and global data on persistent gender gaps[4], women-owned small firms in the SFD sample performed similarly to men-owned firms. This may be because the women who have started and are running firms with employees are likely distinct from the "average" situation of women in the SFD countries; these firms have overcome some barriers that women commonly face to be running and managing firms of this size, although clearly some barriers remain.

Median monthly revenues



More nuanced differences surface at the country level and can inform local policy and programs. For instance, **women-owned small firms:**

In **Colombia** were more banked and formalized but overall smaller in size than male-owned firms, based on annual revenues.

In **Kenya** were less banked, less digitally integrated, less formal.

In **Indonesia** were unbanked at higher rates, however those who were banked used their accounts more often.

In **Nigeria** were more highly financially integrated despite being smaller and less formalized.

Figures are expressed in international-$ at January 2023 prices to account for inflation and differences in the cost of living between countries.

4 KEY FINDINGS

1
A Distinct Group

2
Stability Entrepreneurs

3
Missing Ingredient: Working Capital

4
Fragile Jobs, Vulnerable Workers

A Distinct Group

FINDING #1: OVERVIEW

Small firms are a distinct group from microenterprises and mid-size firms. While they share some characteristics with both microenterprises and larger, more formal firms, small firms are different with unique needs.

1. They straddle the line **between formal and informal**. (slide 12)
2. They tend to **own and use bank accounts**, but **cash** is still the dominant mechanism for their finances. (slides 13-14)
3. Some use **digital financial services** including mobile banking, mobile money and debit cards, but this varies widely by firm and by country. (slide 15)
4. They have greater **access to formal credit** than microenterprises, but not through microfinance. They still **rely heavily on supply chain and informal finance** to meet their financing needs. (slide 16)
5. These firms experience **significant volatility of revenue** and expenses. (see finding #2) but are not wholly dependent on short-term cash flow.
6. Small firms are a key source of paid work, but the **jobs they provide are precarious**. (see finding #4).

Small firms straddle the line between formal and informal

FINDING #1: A DISTINCT GROUP

Compared with existing data on formalization (e.g. the World Bank Enterprise survey) the small firms are less formal than expected. Most firms held some type of registration, but less than 1/3 of firms in every country, with the exception of Ethiopia[5], were registered to pay taxes.

Country	SFD firms with a tax registration	SFD firms with any sort of business registration
Global	**36%**	**64%**
Colombia	37%	69%
Nigeria	23%	61%
Kenya	24%	74%
Ethiopia	66%	76%
Indonesia	32%	47%
Fiji	33%	54%

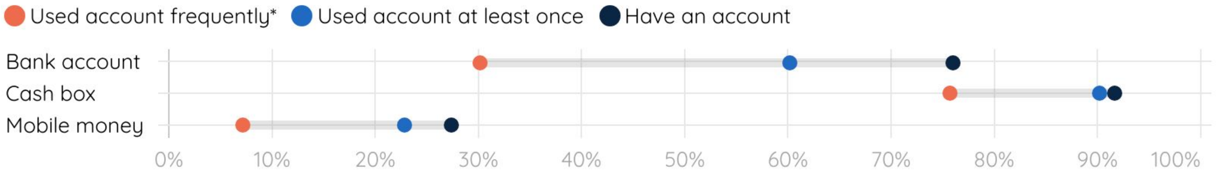
All global figures are averages of averages, which give equal weight to each country sample regardless of sample size.

Small firms are banked but favor cash

At the beginning of the Diaries, we asked each firm owner to list all the accounts they used for the firm, and then tracked how they used these accounts on a weekly basis.

- Across the global sample, 76% said that they own a bank account that they use for the business. But only 61% used that bank account at least once during the study. And fewer still—just 30%—use that account frequently (defined here as 25% or more of total transactions by value).
- Small firm owners are still overwhelmingly using cash accounts (that is, cash kept in a till or cash box): 75% of all the small firms globally used cash accounts for 25% or more of all transactions by value.
- The picture on mobile money is more varied by country (see slide 15), with firms in Kenya the most active users.

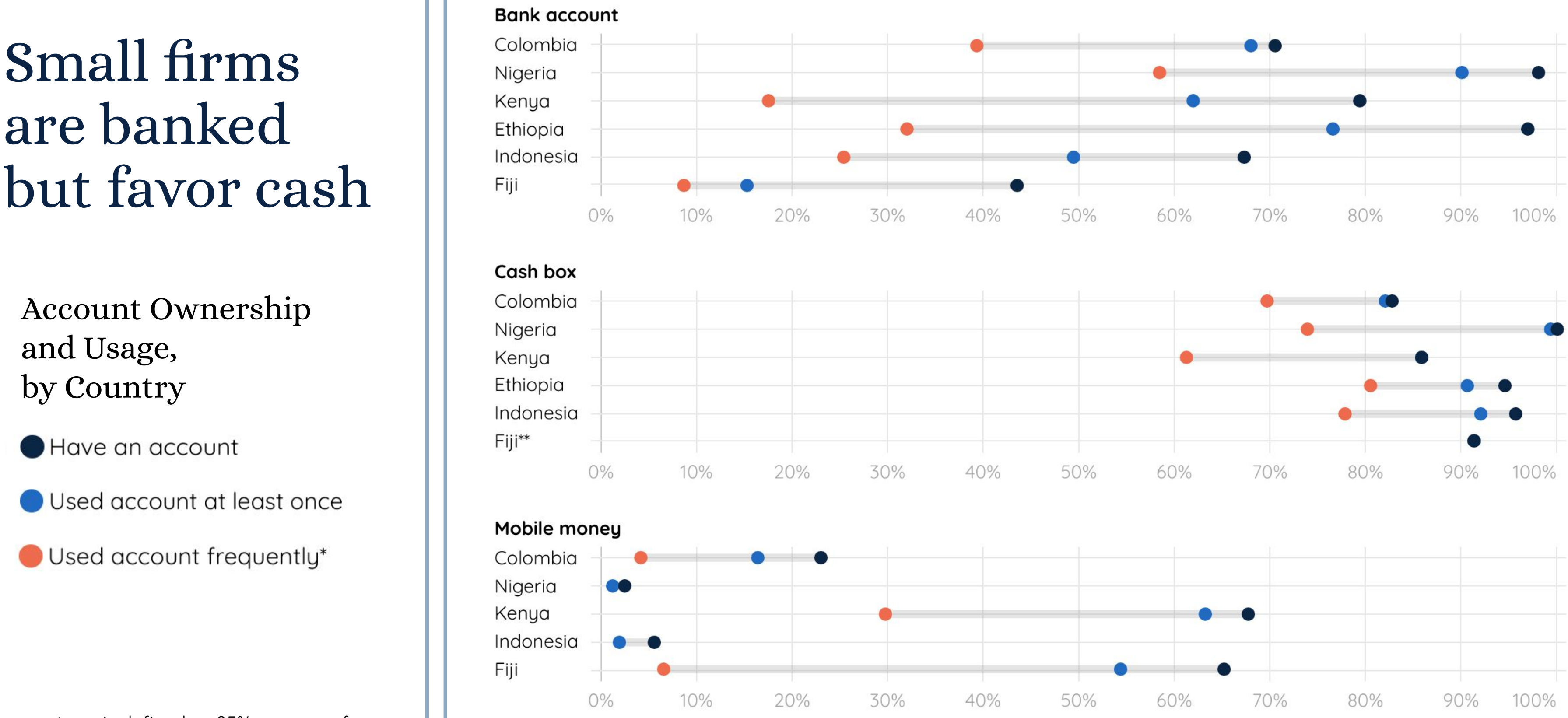
Account Ownership and Usage, Global**



*frequent use is defined as 25% or more of transactions by value
**All global figures are averages of averages, which give equal weight to each country sample regardless of sample size.

Small firms are banked but favor cash

Account Ownership and Usage, by Country



*frequent use is defined as 25% or more of transactions by value

Use of DFS varies widely by country

In a separate one-time survey question, we asked the firm owners which digital financial services (DFS) they use generally—not just for business.

As in the account usage data (previous slide), small firms in Kenya, Colombia, and Fiji are most likely to say they use mobile money. In Nigeria, where nearly 100% of businesses owned and used a bank account, 77% of small firm owners say they use mobile banking.

Country	Mobile Money	Debit Card	Mobile Banking	Credit Card
Colombia	56%	77%	63%	22%
Nigeria	14%	63%	77%	5%
Kenya	98%	66%	12%	4%
Ethiopia	11%	42%	0%	1%
Indonesia	11%	7%	26%	2%

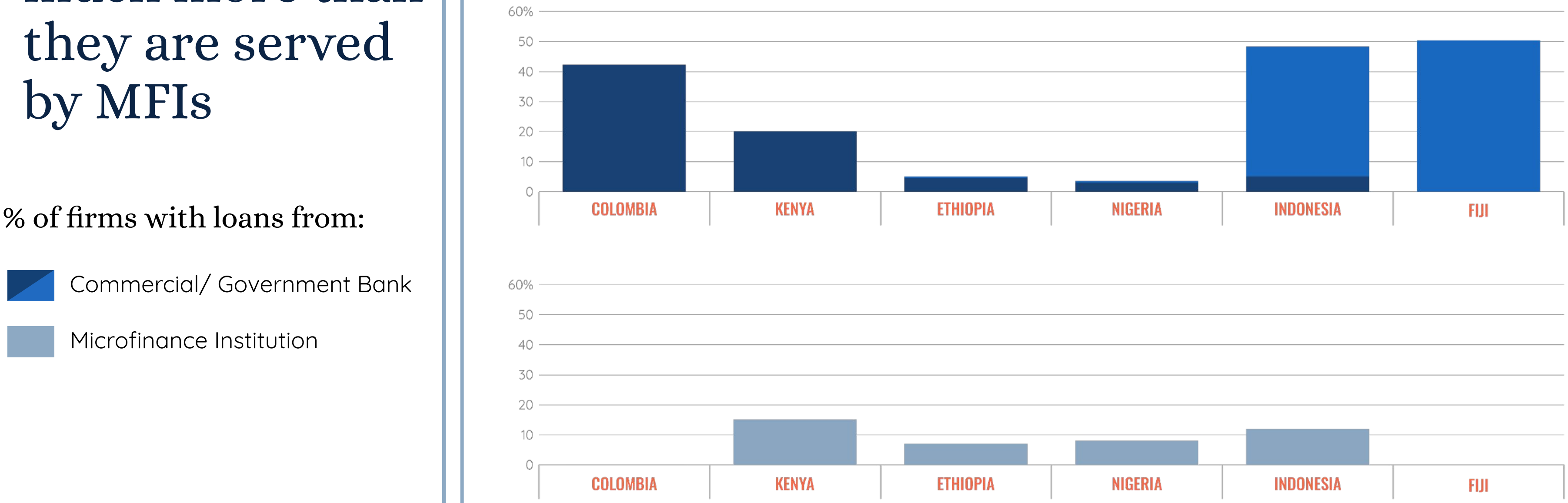
Mobile money refers to making and receiving payments to individuals and businesses through a mobile platform such as M-Pesa (Kenya), M-Birr (Indonesia), and Nequi (Colombia). Mobile banking refers to the management of current, savings, and credit accounts through an application hosted by a financial services provider.

FINDING #1: A DISTINCT GROUP

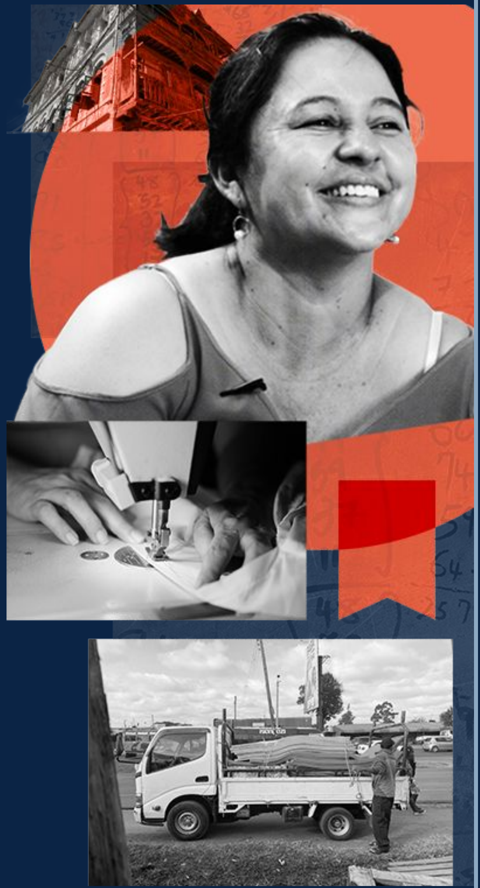
Small firms access formal bank loans much more than they are served by MFIs

Small firms are distinct from their micro counterparts when it comes to sources of credit. Small firms are largely not served by microfinance institutions—in all countries less than 15% have a loan from an MFI, with the largest MFI market being Kenya. In Colombia, Indonesia, and Fiji there is relatively higher use of bank loans. This reflects, in part, the active commercial banking sector in Colombia, and the long-standing KUR program of the Indonesian government which requires banks to make small business loans.

% of firms with loans from:



4 KEY FINDINGS



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Fragile Jobs, Vulnerable Workers

“Stability Entrepreneurs” seek growth with stability

FINDING #2: OVERVIEW

Many discussions of small firms and their role in economic growth and poverty reduction focus on a binary distinction between “reluctant entrepreneurs” who are “buying a job” in the absence of alternatives, and “gazelles” who aspire to rapid growth. These archetypes miss a large group: firms with aspirations to grow more slowly and that also prioritize stability.

1. Small firms **experience significant volatility of revenue and expenses** throughout the year (slides 19 and 20).

2. A large group of small firms say they seek stability as much as they seek growth in profit (slide 21). **We call these firms “stability entrepreneurs.”**

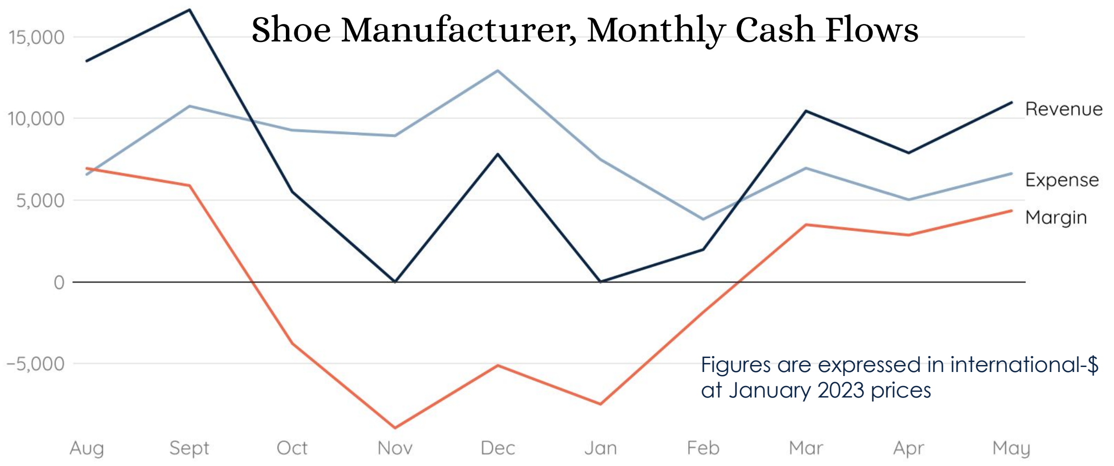
3. Most small firms experience a great deal of volatility from month to month but **over the year the majority neither grow nor decline rapidly** (slide 22). Judging the trajectory of firms, even with a year of data, is quite difficult.

These firms experience volatile revenue from month to month

Median monthly CVs for the global sample

Revenue	.54
Expenses	.62

To measure volatility of revenue and expenses, we use the coefficient of variation, or CV. **For the global sample, the median monthly CV of revenue is .54, and the median monthly CV of expenses is .62.** In comparison, this example firm has slightly more volatile revenue (.75), and slightly less volatile expenses (.34).



Unlike many microenterprises which tend, by necessity, to closely match expenses with revenue, we see in looking at the cash flows of individual small firms that they have some ability to break the close connection between spending and earning—that is, to spend in anticipation of future earnings, or cushion a downturn without incurring permanent damage. This shoe manufacturer, for example, is able to run for four months with significantly negative operating margins.

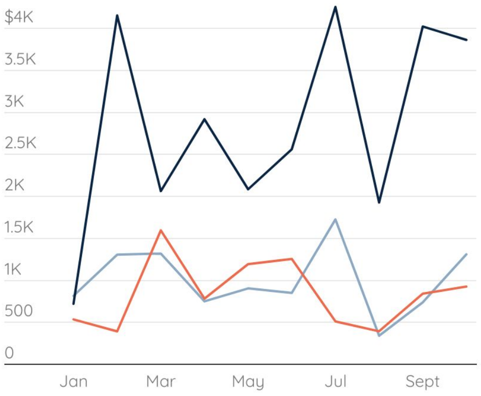
FINDING #2: STABILITY ENTREPRENEURS

Small firms match spending to earning less strictly than micro firms, though their ability to do so depends on their reserves of liquidity and appetite for risk

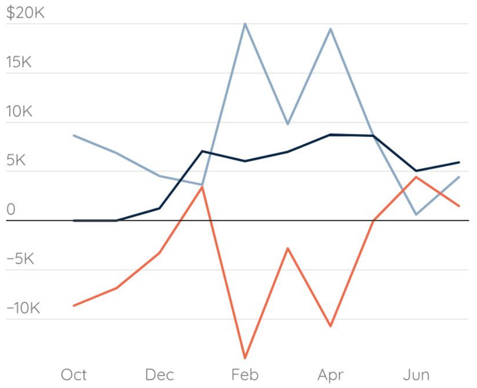
— Expense — Revenue — Margin

Figures are expressed in international-$ at January 2023 prices

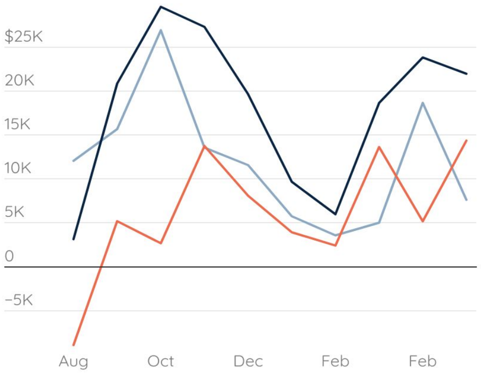
SEAMSTRESS IN KENYA



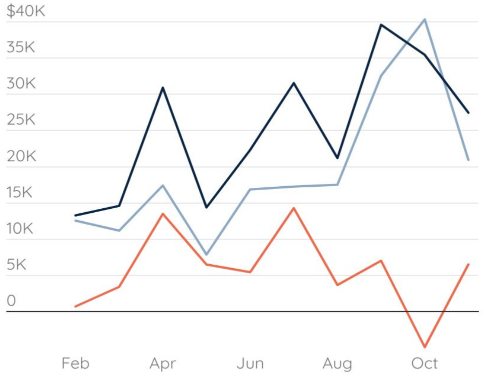
DAIRY PRODUCTION FIRM IN NIGERIA



HEALTH CLINIC IN COLOMBIA



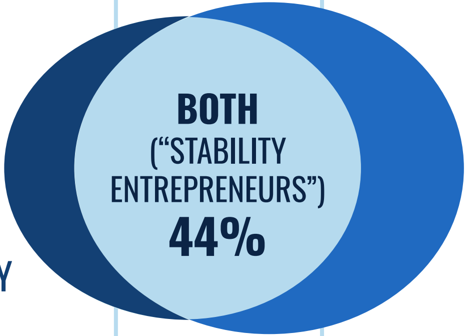
FOOD PREPARATION FIRM IN INDONESIA



The largest group of small firms are ones that seek both growth and increased stability

FINDING #2: STABILITY ENTREPRENEURS

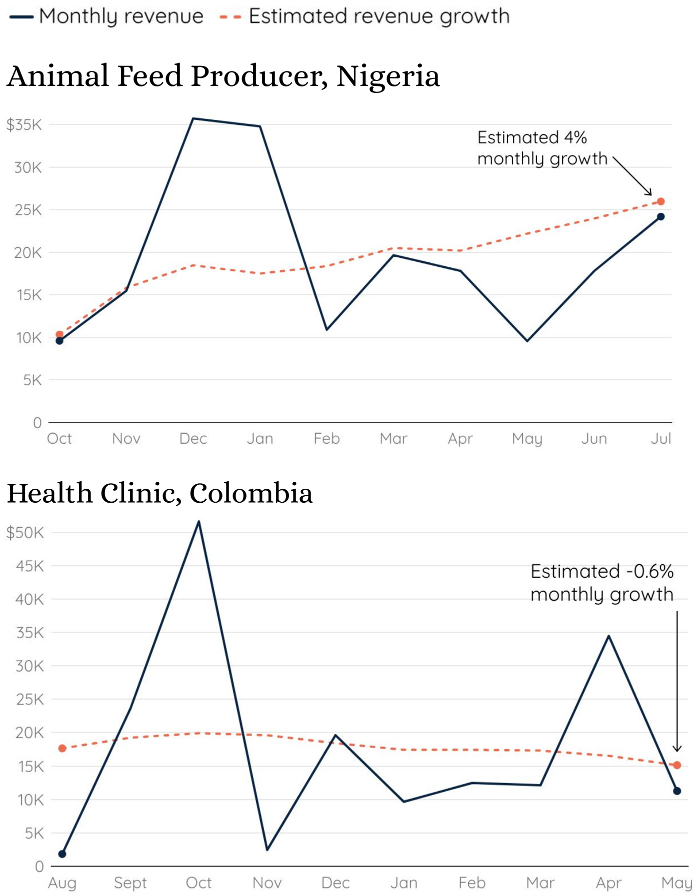
What is your vision for your business over the next year? (global)



	INCREASE IN STABILITY ONLY 14%	BOTH ("STABILITY ENTREPRENEURS") 44%	GROWTH IN PROFIT ONLY 32%
Kenya	11%	61%	25%
Fiji	13%	55%	21%
Colombia	20%	50%	17%
Nigeria	9%	44%	39%
Indonesia	28%	32%	33%
Ethiopia	3%	24%	56%

FINDING #2: STABILITY ENTREPRENEURS

Judging a firm's trajectory is difficult, even with high-frequency, long-term data



Figures are expressed in international-$ at January 2023 prices

Judging a firm's long term trajectory is impossible with a few months of data, and difficult even with a full year of data.

These graphs show actual monthly revenues of two firms in dark blue. The orange revenue growth line extrapolates the firm's revenue trend while adjusting for seasonality and other trends among firms within the same country and sector. Based on this estimated revenue growth line line, we see the animal feed producer has an estimated 4% monthly growth rate[6] and the the health clinic has an estimated -0.6% monthly growth rate.

In the global sample, 45% of firms had an estimated monthly growth rate between -2% and 2%.[7] Roughly half are at 0% or negative monthly growth. These small firms, faced with the constant need to manage cash flows in dynamic environments with high levels of volatility and risk are far from stagnant, but they struggle to consistently grow.

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Fragile Jobs, Vulnerable Workers

The missing ingredient is working capital

FINDING #3: OVERVIEW

Most efforts to help small firms have focused on providing credit for equipment or other capital investments. Data from the study shows that managing working capital and liquidity are a bigger need.

1. Small firms cite access to capital as a major barrier to success (only rising costs of supplies was cited more frequently). (slide 25)

2. Small firms demonstrate ambivalent attitudes towards credit. While 36% have an active loan of some kind, the majority say they rarely or never want loans. (slide 26)

3. Small firms say they would use a hypothetical loan for supplies or day-to-day liquidity needs as much as they say they would dedicate it to "investment." Actual large purchases, often described by firms as "investment", are mainly for inventory or supplies—not capital investments. (slide 27)

4. Small firms are active participants in supply chain finance, both offering credit to their customers, and relying on credit from their suppliers. (slide 28)

5. Small firms lack risk management tools beyond setting cash aside. (slide 29)

Most small firms cite access to finance as a barrier to success*

Top 3 Cited Barriers to Success, % of Firms, by Country

	Colombia	Nigeria	Kenya	Ethiopia	Indonesia	Fiji
Supply costs	60%	51%	70%	55%	43%	63%
Access to finance	42%	80%	49%	50%	39%	59%
Competition	28%	21%	56%	-	40%	65%
Regional/nat'l problems	-	-	-	43%	-	-

*This includes short-term working capital finance as well as asset finance.

Small firms have ambivalent attitudes about their need for and use of credit

FINDING #3: THE MISSING INGREDIENT IS WORKING CAPITAL

While access to finance was consistently cited by firm owners as a major barrier to firm success, second only to rising cost of supplies (see previous slide), the majority of firms in the global sample report that they “rarely” or “never” need a loan (compared to 11% who say they “often” or “constantly” need a loan).

When we look instead at actual loan use we see that 36% of small firms had at least one active loan during the study.

These somewhat contradictory preferences and behaviors suggest dissatisfaction with formal loans currently available to them, as well as a need for innovative products in the marketplace that meet the needs of this population.

	% of Firms, Global
Reported rarely or never needing a loan	54%
Reported often or constantly needing a loan	11%
Had an active loan during the study	36%

FINDING #3: THE MISSING INGREDIENT IS WORKING CAPITAL

Small firm owners say they want credit to "make an investment", but loans are often used as working capital

Firm owners express an equal or greater desire for loans to make "investments" compared to addressing day-to-day cash flow issues or purchasing inventory. But we also see that **most investment-sized purchases* made during the study are to replenish inventory rather than capital investments** (like equipment or real estate.)

	want to use loans to address cash flow issues/ buy inventory	want to use loans to make an investment	large purchases = raw materials
Colombia	32%	30%	66%
Nigeria	17%	47%	59%
Kenya	11%	27%	79%
Ethiopia	36%	44%	76%
Indonesia	20%	31%	81%
Fiji	11%	26%	63%

Large purchases are defined as any expense more than three standard deviations greater than the mean expense

We also find that most **actual loans for which owners disclosed the purpose were used for working capital**—59 out of 71 loans in Colombia; 108 out of 118 in Nigeria; 21 out of 26 in Kenya; 16 out of 21 in Ethiopia; 35 out of 41 in Indonesia; and 9 out of 12 in Fiji.

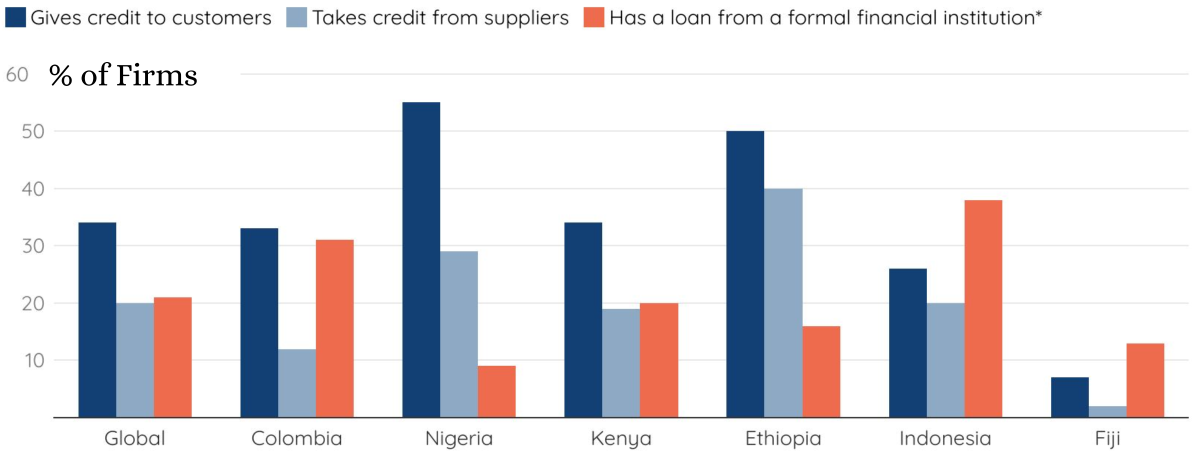
Small firms actively participate in supply chain finance

FINDING #3: THE MISSING INGREDIENT IS WORKING CAPITAL

Another indicator that banks do not supply small firms with the type of credit they need is the small firms' active participation in supply chain finance. This chart shows that small firms frequently give their customers flexible payment options, adding demand-side liquidity. They also try to ease their own liquidity constraints by taking credit from their suppliers.

In all countries except Indonesia, where the government has invested significantly in loans for small businesses, rates of participation in supply chain finance are higher than use of loans from formal financial institutions.

Supply chain finance vs formal loans



Small firms manage risk by reserving funds

FINDING #3: THE MISSING INGREDIENT IS WORKING CAPITAL

Finally, we can look at savings behavior and see that firms are setting aside available working capital to manage risk rather than using it for operational and opportunistic purposes.

Setting aside cash is far and away the primary risk management strategy reported by firms in all countries.

Country	Firms that reserve funds as primary risk management strategy
Colombia	60%
Nigeria	79%
Kenya	59%
Ethiopia	63%
Indonesia	75%
Fiji	54%

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Workers bear much of the volatility and risk that small firms face

FINDING #4: OVERVIEW

We collected data about employment, including from workers themselves, shedding light on a population that is less studied, and more precarious than the firm owners. Overall, we see that the employment picture is different and more volatile than it appears from simple counts of workers.

1. From the perspective of the firms, the number of jobs they offer fluctuates a great deal. Across the study, the **firms are not able to provide consistent income** to workers. (slide 32)

2. Even for workers who are paid by the firm in every month of the study, **the amount they are paid month-to-month is very volatile**. (slides 33-34)

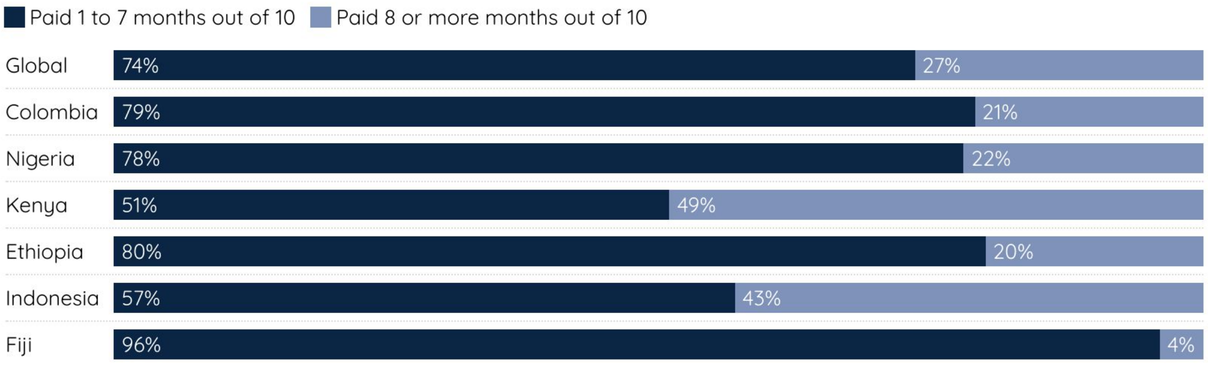
3. Many workers **struggle to meet their basic needs.** (slide 35)

Across the study, the firms are not able to provide consistent jobs or income to workers

FINDING #4: FRAGILE JOBS, VULNERABLE WORKERS

In Nigeria and Colombia, just over 20% of workers were paid for 8 or more months during the study, respectively. In Kenya and Indonesia, many firms had one key worker who was paid in at least 8 months of the study (49% and 43%, respectively, of workers were paid at least 8 months).

% of workers paid by number of months paid



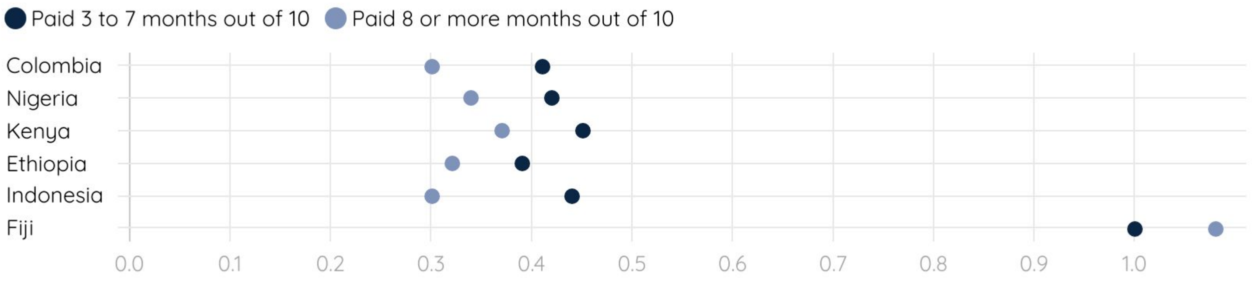
Even for long-term workers, the amount they are paid month to month is volatile

FINDING #4: FRAGILE JOBS, VULNERABLE WORKERS

This graph uses the coefficient of variation (a statistical measure of variability in a dataset) to show that **there is only slightly lower variation in payment amount for longer-term workers compared to more occasional workers**. Even these long-term workers, which make up about 30% of the global sample, typically saw their pay vary each month more than 30% from their average.

Fijian data here differs from the norm because Fijian firms had fewer workers and more frequently closed. Only 4% of Fijian firms had employees who were paid more than 8 months out of the study.

Coefficient of Variation (CV) for shorter vs longer-term workers

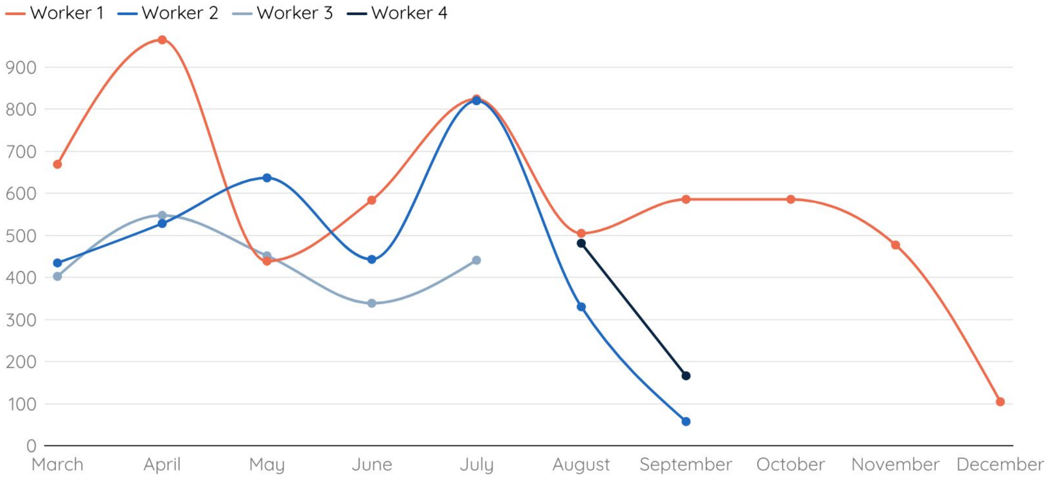


Worker payments from a single firm illustrate fluctuating workers and payment amounts

FINDING #4: FRAGILE JOBS, VULNERABLE WORKERS

During seven of the months of the study (months 3, 4, 5, 6, 7, 8, and 9) this firm pays three workers (but they are not consistently the same three people from month to month). During three months of the study (months 10, 11, and 12) the firm pays just 1 worker. The orange line shows the firm's single "core" worker, who was paid during all ten months, while the other workers have shorter spells of working at the firm—of seven months, five months, and two months.

Payments per worker at a firm in Indonesia



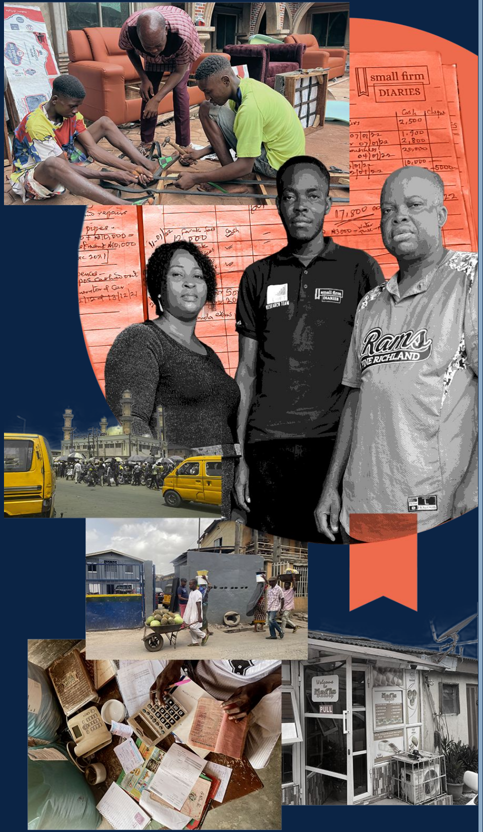
Figures are expressed in international-$ at January 2023 prices to account for inflation and differences in the cost of living between countries.

Many workers struggle to meet their basic needs

FINDING #4: FRAGILE JOBS, VULNERABLE WORKERS

Two-thirds of workers in Nigeria and Kenya said that they lacked money to meet their basic or food needs at some point during the study, half of workers did so in Indonesia, and a third of workers did in Colombia.

	Employee household lacked money to meet basic needs during the study	A child in the employee household did not eat enough in the week prior
Global	**47%**	**24%**
Colombia	32%	33%
Nigeria	57%	49%
Kenya	68%	22%
Ethiopia	38%	4%
Indonesia	39%	10%



RECOMMENDATIONS

1
Unbundle "MSME"

2
Design for Stability Entrepreneurs

3
Innovate Flexible Financing

4
Invest in Small Firm Jobs

1. Unbundle “MSME”

“MSME” hides more than it reveals, encompassing both informal micro entrepreneurs and professional businesses with more than 50 employees. Instead:

a. Fund and conduct research at a more granular level that distinguishes between non-worker firms and firms with a small number (1-5) of workers, to better understand the different types of businesses that make up this group, especially at the smaller end of the spectrum and in poorer communities.

b. Develop policies and financial products appropriate for the specific needs of small firms (and microfirms and medium firms).

2. Design for Stability Entrepreneurs

Gazelles exist, but **inclusive development can't ignore Stability Entrepreneurs.**

a. Design programs to target Stability Entrepreneurs.

b. Redefine metrics of success to include stability, not just (rapid) growth.

c. Within training programs, emphasize strategies to achieve stability and manage volatility.

3. Innovate financial tools to provide flexibility and cope with volatility

Liquidity and working capital financial tools are desperately needed

a. Forge new alliances among FinTechs, traditional Banks, suppliers, and government to overcome known challenges (e.g. related to risk and cost) to providing flexible and short-term liquidity to small firms.

b. Invest in programs for stability entrepreneurs and in expanding access to working capital credit for small firms.

4. Invest in Small Firm Workers and Jobs

Aid to small firms is not enough—benefits of stability may not be passed on to workers

a. Collect more finely grained data about the jobs that small firms provide, recognizing the high degree of volatility in both jobs and payments to workers.

b. Shift mindsets and mental frameworks about small firm jobs and workers.

c. Conduct/ fund research and analysis that looks more closely at small firm jobs and workers' livelihoods.

d. Develop support programs targeted to small firm workers directly.

Endnotes 1

1. **Uganda**: In Uganda, the Small Firm Diaries team is conducting two randomized control trials (RCTs). The first, led by Emma Riley, seeks to understand the effect of participating in financial diaries studies with a group of female microentrepreneurs in Kampala markets, and the second, led by Lore Vandewalle, is testing an intervention to remove market barriers to growth among carpentry firms.

2. **Global sample**: What we refer to here as the “global sample” contains 774 small firms in 6 countries—Colombia, Nigeria, Kenya, Ethiopia, Indonesia, and Fiji. Where possible in the charts that follow in the slidedeck we include all 6 countries. While our goal was to implement the study in a uniform way across all 6 countries this was not always possible—in particular, Ethiopia was the pilot country for the global study, and data collection coincided there with the outbreak of a civil war. In Fiji, our sample size was much smaller (46 firms), and firms themselves were also significantly smaller. As a result of these differences it was sometimes necessary to exclude those countries from the global analysis.

3. **Account ownership**: Small firm owners were registered as owning a certain type of account if they listed these accounts during the baseline interview, or mentioned having added them later in the study. In subsequent slides (and in country data overviews published for each country) we delve into ownership versus use, and we further distinguish between use and frequent use.

Endnotes 2

4. **Global gender gaps:** Large gender differences persist globally when it comes to firm ownership, size, income and wealth. For instance, according to the World Bank, the global average of firms with female participation in ownership is 34%.

5. **Ethiopian tax registration**: Ethiopian small firms are much more likely to be registered with the tax office, because such registration is tied to receipt of subsidies.

6. **Estimated growth rate:** We calculate the estimated growth rate by taking the logarithm of the last point on the of estimated growth line which adjusts for seasonality and industry trends minus the logarithm of the first point on the estimated growth line, divided by the number of months of data reported by the firm. All firms included have at least 8 months of data.

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7. **Global sample estimated growth rates**: This histogram plots the estimated growth rates for all the firms in the global sample: 45% of firms had an estimated monthly growth between 2% and -2%; 68% of firms between -5% and 5%; 53% were at 0 or below.

CREDITS

The Small Firm Diaries is a global initiative to better understand small firms in low-income neighborhoods of developing countries. It is led by the Financial Access Initiative (FAI) at NYU Wagner.

Field research was implemented and managed by L-IFT and MFO.

Funding for the global study was provided by the Mastercard Center for Inclusive Growth, the Bill & Melinda Gates Foundation, and the Argidius Foundation. Country-specific funding was provided by Financial Sector Deepening Kenya, ANDE and UNESCAP.

Visit smallfirmdiaries.org for all study publications, including “Methodology and Process: An Introduction to the Small Firm Diaries,” country-specific data overviews and reports, and more information on local partners and our global advisory board.

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