

NOV 2025

ISSUE BRIEF

Big Challenges for Small Firms

By Laura Freschi, Timothy Ogden, and Jonathan Morduch

Financial Access Initiative at NYU Wagner Graduate School of Public Service

Table of Contents

3	Facing a year of ups and downs
7	Job creators and job destroyers
10	Aiming for stability and steady growth
12	Capital for the right purpose, at the right time
15	(In)formality as a strategy
17	The small firm balancing act
19	Bibliography
21	Credits

VOLATILITY IS THE WEEK-TO-WEEK REALITY FOR SMALL FIRMS—SHAPING HOW THEY HIRE, BORROW, AND BALANCE FORMAL AND INFORMAL PRACTICES

FIGURE 1
UNSTEADY MONTHLY CASH FLOWS OF A SHOEMAKER IN CALI, COLOMBIA, PPP

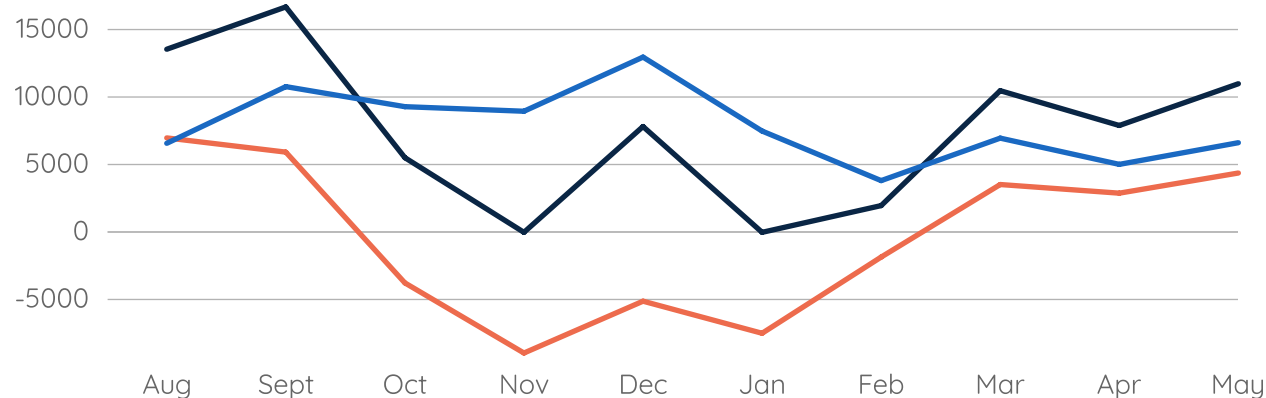
Expense	Revenue	Margin
---------	---------	--------

Continuing a tradition started by her grandfather, this firm owner produces shoes for sale to other businesses in a small workshop in Cali, Colombia. As shown in the cash flow graph below, her revenues and expenses fluctuate markedly from month to month.³ “When orders are low,” the firm owner told us, “you don’t use as much labor and you don’t call on [all the machine] operators in that season, but you call on them as orders grow.” We return to a closer analysis of how businesses manage their cash flows in the penultimate section of the paper on liquidity management and capital needs. Figures are expressed in international dollars at January 2023 prices.

Facing a year of ups and downs

The Financial Access Initiative at NYU Wagner launched the Small Firm Diaries to better understand a specific group of small businesses: firms in low-income neighborhoods around the world, with at least one and no more than 20 non-family, paid workers.¹ We call these “small firms” to distinguish them from “microenterprises,” which traditionally have no paid workers beyond immediate family members.² Below, we report on firms in Colombia, Nigeria, Kenya, Ethiopia, and Indonesia.

In our study, the research team visited the firm owners every week for a full year. These frequent visits helped us see something that doesn’t come through in typical yearly or even quarterly surveys—the variability in both income and expenses that firm owners face from week to week. This variability flows into all parts of the business, from managing workers to inventory to cash flow. Some of this variability is predictable, and some is not, but both kinds can be difficult to manage, requiring skill, resources, and attention. **Navigating these ebbs and flows—in contexts characterized by a lot of uncertainty and little extra money to go around—is a major constraint both by itself and together with other challenges like poorly working capital and labor markets.**



¹ The definition of small firm used in this study includes only those firms that are large enough to pay at least one, non-family worker, but have not yet grown large enough to have professional managers on the team. We originally used 1 to 20 workers as our guideline during the sample selection, but the firms we found that met all eligibility criteria clustered towards the smaller side of that spectrum: the average firm in the global Small Firm Diaries sample had 2 to 3 workers at any given time.

² For more on selection criteria see the box “About the Small Firm Diaries Study” on page 2; for more on the distinction between micro versus small, see the box “How ‘Small’ is Different” on page 8.

³ To measure volatility of revenue and expenses, we use the coefficient of variation, or CV, a statistical measure defined as the ratio of the standard deviation to the mean, which allows comparison of variation between months given the dispersion in size of cash flows. For the global sample, the median monthly CV of revenue is .54, and the median monthly CV of expenses is .62. In comparison, the Cali shoemaker has slightly more volatile revenue (.75), and slightly less volatile expenses (.34).

ABOUT THE SMALL FIRM DIARIES STUDY

The Small Firm Diaries is a global research initiative led by the Financial Access Initiative aimed at understanding the barriers to growth faced by small firms in low-income communities.

The findings discussed here come from data gathered in Colombia, Nigeria, Kenya, Ethiopia, and Indonesia between 2021 and 2023. This “Financial Diaries” study combines high frequency, qualitative and quantitative data: locally hired field researchers visited about 100 small firm owners in several sites within each country weekly for a year, gathering detailed data about each firm’s financial flows and the decisions behind them.

The firms studied were engaged in light manufacturing (e.g. garment production, carpentry, metalwork), agri-processing (e.g. milling, drying and packing fruit, drying fish), and some select services (e.g. printing, health clinics, private schools).

The study paid close attention to workers within small firms and included two surveys administered to firm owners on management and labor market conditions, and one survey administered to a firm worker. We also sought to understand how female firm owners’ experiences might differ from male firm owners; to this end, 47% of firms in the sample had at least one female owner.

For details on methodology, see “Methodology and Process: An Introduction to the Small Firm Diaries” and for study publications visit: www.smallfirmdiaries.org.

Some of the disruptions we saw were impossible to predict and hard to plan for—sickness, power cuts, government land seizures, the lingering effects of Covid-19 lockdowns, unforeseen supply chain disruptions, spontaneous political demonstrations or outbreaks of violence. Any of these could throw plans and projections out the window. Still, many firm owners could predict with confidence their best and worst weeks or months, based on weather trends, holiday and festival calendars, the start and end of school term, or other, more idiosyncratic (yet still predictable) factors. One Nigerian bakery owner told us that her high season began with the start of the rainy season, because wet weather made people want to drink hot tea, and with tea, they craved the soft sandwich bread turned out by her shop.

“Seasonality” is a part of life for most businesses, from large to small. Amazon, for instance, makes about 35% of its sales in the fourth quarter.⁴ It also replaces more than 100% of its employees annually,⁵ a staggering human resources challenge. But Amazon has immense resources to manage these ups and downs. It reported \$46.8 billion in operating cash flow for 2022⁶ and employed a roster of nearly 4,000 senior executives and 69,000 mid-level managers in its US operation alone.⁷ The small firms we studied, in obvious contrast, have no professional managers on staff to handle turnover, very little business strategy training to call upon, and operate with almost no liquidity reserves.

This juxtaposition helps to draw out what we see in the Small Firm Diaries data as the essence of what it means to operate as a small firm: **While income and expense variability may be common among businesses of all sizes, small firms must manage these ups and downs in uniquely difficult environments, with few tools at hand.** These basic conditions shape the way that firm owners frame and approach decisions across different areas of the business. This brief outlines the distinct features of the small firm population studied in four areas, each shaped and influenced by the fundamental dynamic of volatility amidst scarcity:

1. Hiring and retaining workers,
2. Creating aspirations for their business,
3. Demanding loans, and
4. Formalizing their business.

We find common patterns and strategies in firm-owner decision-making across these areas, despite considerable diversity among the small firms studied.

- **Decisions are rarely binary.** Rather than deciding to employ two full-time workers instead of one, small firm owners are more often carefully calibrating the mix of temporary, casual, part-time and full-time workers that will best allow them to respond to fluctuating demand and supply. Similarly, firm owners most often do not formalize with a single decision; there are many registrations and certifications with different authorities and with different implications that would push them a little further along the spectrum from informality to formality, or vice versa.
- **Caution is often strategic.** Firms frequently make decisions that appear incompatible with growing the business—but these choices are often grounded in considered thinking. When asked about their

⁴ Amazon annual reports, accessed from <https://ir.aboutamazon.com/annual-reports-proxies-and-shareholder-letters/default.aspx>

⁵ The Guardian, “Amazon Could Run Out of Workers in US in Two Years, Internal Memo Suggests,” June 22, 2022. <https://www.theguardian.com/technology/2022/jun/22/amazon-workers-shortage-leaked-memo-warehouse>

⁶ Amazon. “Amazon.com Announces Fourth Quarter Results.” News release, February 2, 2023.

⁷ Amazon’s 2023 Equal Employment Opportunity Commission (EEOC) Employer Information report

aspirations for their business, firm owners said they wanted to grow, but they showed little appetite for rapid growth that might exacerbate the business' volatility.

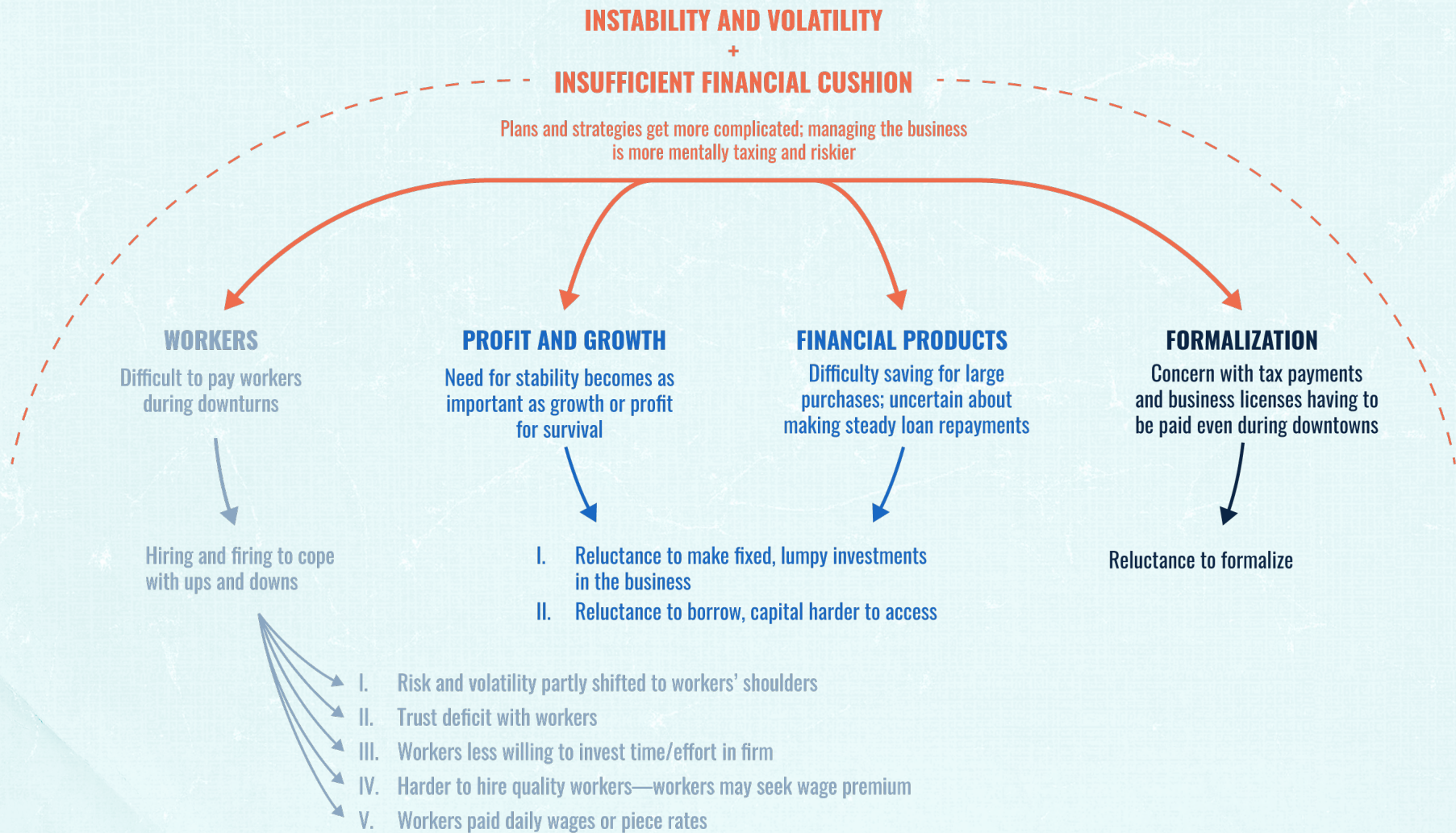
- **The hardest tradeoffs happen where challenges collide.** The most difficult decisions for small firm owners happen at the intersection of two or more of what Jonathan Morduch has called the “three i’s”—insufficiency, instability, and illiquidity.⁸ The firm owners studied here have overcome the first insufficiency hurdle, in that they have amassed the assets needed to build and sustain a business large enough to employ workers. It’s when their environment throws in illiquidity, uncertainty, or volatility that we see them make the most difficult tradeoffs.

These patterns—eschewing binary choices, balancing stability against risky growth, and navigating tradeoffs where constraints intersect—have vast implications for how small firm owners manage their business and their employees, with consequences for their growth trajectories. At times, our findings contradict or complicate fundamental assumptions and conventional wisdom about how firms operate and how to help them grow.

⁸ Morduch, Jonathan. “Rethinking Poverty, Household Finance, and Microfinance.” In *Handbook of Microfinance, Financial Inclusion and Development*, edited by Valentina Hartarska and Robert Cull, 21–40. Cheltenham: Edward Elgar, 2023.

FIGURE 2**WHAT A HIGHER FREQUENCY LENS REVEALS ABOUT SMALL FIRMS**

Small firms frequently need to respond to instability and volatility, despite having little financial cushion to draw upon. This makes managing the business more complicated, more mentally taxing, and riskier, and has consequences across several major areas of a business' operations. As illustrated in this diagram, the uncertainty and irregularity of cash flows make firm owners wary of taking on additional commitments that require making major payments on fixed dates or in steady increments. Similarly, owners may try to pay workers as flexibly as possible (only paying them when work is completed, for example) and letting workers go.



SMALL FIRMS CREATE JOBS, BUT THEY ALSO DESTROY THEM—AS VOLATILITY DRIVES FREQUENT WORKER TURNOVER

Job creators and job destroyers

We start with jobs, since job growth is frequently cited as small firms' greatest potential contribution to economic growth and poverty alleviation. According to the ILO⁹, micro, small, and medium enterprises provide two-thirds of all existing employment globally, and create the majority of new jobs. What's less frequently discussed is the inverse of this last statistic: that these firms are also responsible for much job destruction.¹⁰ Results from the World Bank's Enterprise Surveys in developing economies found small and medium enterprises exhibit 1.3 times¹¹ higher job "churning"—both creation and contraction—compared to larger firms.¹²

One reason for the Small Firm Diaries' focus on workers was to better understand the nature of jobs offered by small firms, and the population working these jobs. Are these jobs good jobs? Do they provide stable employment, and opportunities for advancement? And what can be done, from a policy standpoint, either to improve these jobs or to support the wellbeing of the workers who hold them? We were particularly interested in the tradeoffs workers face in choosing small firm jobs compared to other options available to them, such as starting one's own microenterprise.

What we see clearly in the Small Firm Diaries is that small firms face a tough human resources problem. Because of spikes and dips in their income, combined with low profit margins, firms need to be nimble—to scale up and ramp down quickly. They also can't get too big, since without professional managers, their supervisory capacity is quickly exhausted. This constant recalibration underscores how employment decisions are made along a spectrum rather than through simple binaries, and how caution about expansion may reflect not just limited capacity but a deliberate strategy to limit additional instability.

This dynamic plays out in the way small firms manage workers day to day, as illustrated in Figure 2. Small firms do a lot of hiring and a lot of firing, churning through both individual workers and jobs (in the sense that the number of total workers changes frequently). Small firms often pay piece rates or daily rates, and very few offer any kind of legally binding employment contract.¹³ Even workers with relatively stable employment, which we defined as being paid during at least 8 out of 10 months used for data analysis¹⁴, saw their pay vary each month by 35% from their average.

Figure 3 shows two metrics for firms in each country studied. There is a large difference between the first number (average total number of people paid at least once during the study) and the second number (the average number of workers paid per month) in every country. This gap can be seen as a measure of the firm's agility to grow and shrink as volatile conditions demand it; on the flip side it is also a measure of job instability for the workers.

9 ILO. *Resolution Concerning Small and Medium-Sized Enterprises and Decent and Productive Employment Creation*. Geneva: International Labour Organization, 2015.

10 Marta Bertanzetti, Shubhanka Mondal, Rania Nasir, and Matthieu Teachout, ICG, "Why do SMEs matter?: The impact of small and medium-sized enterprises (SMEs) in developing countries and implications for development finance institutions (DFIs) and impact investors." Jan 2024 <https://www.theigc.org/publications/why-do-smes-matter>

11 World Bank Group. *Enterprise Surveys: Employment Indicators*. Washington, DC: World Bank Group. <https://www.enterprisesurveys.org/en/employment-indicators>

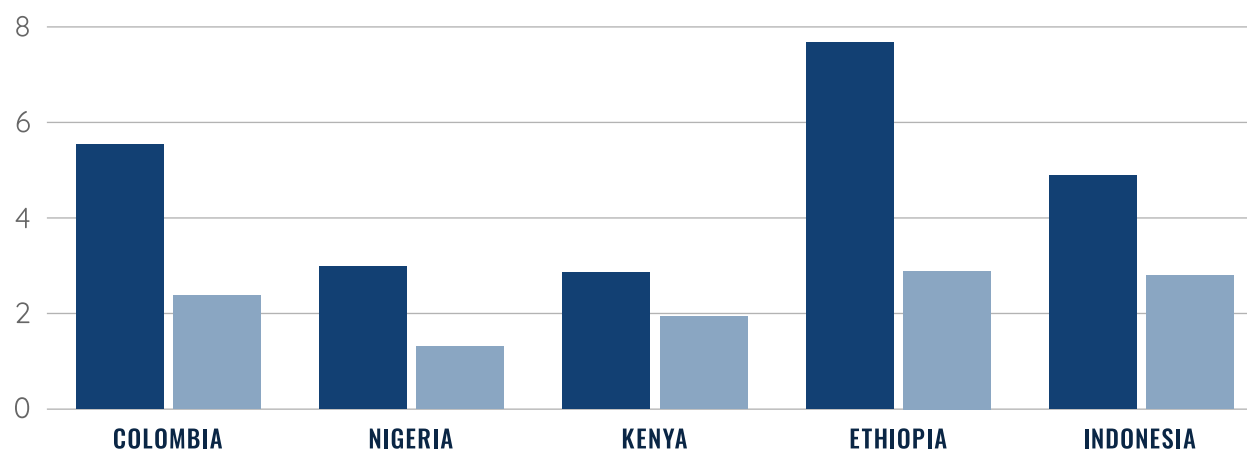
12 Aga, Gemechu, David C. Francis, and Jorge Rodriguez Meza. *SMEs, Age, and Jobs: A Review of the Literature, Metrics, and Evidence*. World Bank Policy Research Working Paper 7493. Washington, DC: World Bank, 2015.

13 In the Small Firm Diaries, the most common payment arrangements are informal salaries (most frequent in Indonesia and Colombia) and piece-rate pay (most frequent in Nigeria and Kenya).

14 To improve data quality and reliability, throughout the analysis of Small Firm Diaries data, we exclude the first two months of data collected while trust is still being established between the firm owner and researcher, and report data for months 3 through 12, for a total of 10 months.

FIGURE 3
THE SMALL FIRM WORKFORCE

■ Avg. # workers paid per year
■ Avg. # workers paid per month



“”

In the absence of alternatives, firm owners push a lot of the risk they face onto workers, using their workforce as a cushion to absorb uncertainty and variability.

Firm owners articulate many different ideas on their role and responsibilities as an employer. A bag manufacturer in Bandung, Indonesia spoke about her struggle to keep paying one particularly loyal worker, even when pandemic restrictions caused her orders to dive—but she let her other workers go. A baker in Lagos emphasized the responsibility she feels as an employer to take on vulnerable members of her church community as trainees or workers. Still, the overarching employment story is about responding to instability—from ups and downs in demand, to political protests, election violence, power cuts, skyrocketing costs of basic supplies, local officials demanding fees, to name but a few commonly cited sources. In the absence of alternatives, firm owners push a lot of the risk they face onto workers, using their workforce as a cushion to absorb uncertainty and variability. The workforce becomes the pressure valve when insufficiency, instability, and illiquidity collide, making labor decisions the site of some of the hardest tradeoffs owners face.

High worker turnover, as useful as it may be as a strategy for survival in uncertain contexts, leads to a trust deficit that cuts both ways. The lack of long-term investment in a durable and consistent workforce is a constraint on growth for the business. One shoemaker in Lagos, for instance, planned to stay small for lack of a good manager: he told us he wouldn't consider opening in a second location, even though he thought that it would be a sure way to reach wealthier clients, because he didn't trust any of his workers to oversee a second shop. Workers, on the other hand, have less incentive to perform well for firm owners who are unlikely to invest in their future. In cases where workers have specialized, in-demand skills and their own tools—for example, a metal worker—this lack of long-term trust may actually work to their advantage, at least in the short term: these workers had some ability to set their own prices as they moved among multiple similar firms like contractors. The sporadic nature of small firm work may also in some cases be desirable to workers with significant household care responsibilities—most commonly, women—in the sense that they may not want long and consistent hours.

But in the long term, high worker turnover and the lack of trust that underlies it is a drag on the productivity of each single firm and the industry as a whole, as it hinders firms from reaching new levels of stability and growth. And for unskilled workers with little market power, the lack of long-term trust and consistent employment leaves them scrambling to piece together enough income from different sources.

HOW “SMALL” IS DIFFERENT

Small firms have until now been less studied than microenterprises, and present the possibility to chip away at poverty and contribute to economic growth because they provide employment and thus multiple pathways for firm owners, their workers, and their families to improve their livelihoods.



“Microenterprises” gained renewed attention from international development and finance communities with the rise of Muhammad Yunus’ Grameen Bank and other similar microfinance institutions that sprang up and spread in the 1970s and 1980s. The microfinance movement set out to serve the most vulnerable, unbanked populations—landless villagers or the urban poor, mainly women, operating very small, subsistence-level businesses, often with no paid employees.

These microenterprises have been studied extensively as part of the effort to understand the impact of microfinance. And while the microfinance sector can count many successes, research shows that most microenterprises do not propel their owners out of poverty, they do not grow much, and they seldom add paid workers.¹⁵

According to research on business formation and growth in several countries, hiring even a single worker—bringing in someone from outside the immediate family and paying them for their work—is a significant operational breakpoint for an entrepreneur.^{16 17} The jump from 0 to 1 paid workers is likely a psychological breakpoint too: even in informal environments without enforceable labor contracts, taking on a single worker is a responsibility and a commitment that pushes the business from the realm of side gig to a steady, going concern.

The Small Firm Diaries takes these factors as the basis for the study’s definition of “micro” (businesses with zero paid workers, which have also been called “own-account workers” or simply “self-employed”), and “small” (businesses with at least one, non-immediate family, paid worker).¹⁸

15 For instance: Morduch, Jonathan. “The Microfinance Promise.” *Journal of Economic Literature* 37, no. 4 (1999): 1569–1614. <https://doi.org/10.1257/jel.37.4.1569>; Banerjee, Abhijit V., Esther Duflo, Rachel Glennerster, and Cynthia Kinnan. “The Miracle of Microfinance? Evidence from a Randomized Evaluation.” *American Economic Journal: Applied Economics* 7, no. 1 (2015): 22–53. <https://doi.org/10.1257/app.20130533>; and many others. For a contrasting view: Khandker, Shahidur R. “Microfinance and Poverty: Evidence Using Panel Data from Bangladesh.” *The World Bank Economic Review* 19, no. 2 (2005): 263–286. <https://doi.org/10.1093/wber/lhi008>

16 The Global Entrepreneurship Monitor’s international business surveys find that more than half of new businesses don’t expect to hire any workers within five years of forming: GEM (Global Entrepreneurship Monitor) (2023). *Global Entrepreneurship Monitor 2023/2024 Global Report: 25 Years and Growing*. London: GEM. <https://www.gemconsortium.org/file/open?fileId=51377>

17 Research by David McKenzie and co-authors in Sri Lanka find that even financial incentives don’t reliably induce business owners to hire and retain workers: McKenzie, David, Suresh de Mel, and Chris Woodruff. “Labor Drops: Experimental Evidence on the Return to Additional Labor in Microenterprises.” *American Economic Journal: Applied Economics* 11, no. 1 (2019): 202–235

18 Based on the idea that having workers is itself a differentiator, the Small Firm Diaries sample includes firms that are large enough to employ at least one non-family worker, but not so large that they have professional managers (e.g. workers who only manage other workers). The study used one to 20 workers as a guideline during sample selection. The firms we found that met all eligibility criteria skewed on the smaller side, such that the average small firm in the sample had two to three workers at any given time, and 90% had fewer than five. This definition departs from the criteria for “small” firms in many SME definitions of small and medium-sized businesses. In the World Bank Enterprise Surveys, for example, small firms can have between 5 and 19 workers.

MANY FIRMS ARE NEITHER SUBSISTENCE BUSINESSES NOR “GAZELLES,” BUT “STABILITY ENTREPRENEURS” WHO BALANCE GROWTH WITH SURVIVAL

“”

In the Small Firm Diaries a majority (54%) of firms said their vision for business over the next year was both to grow and gain stability. We call these firms “stability entrepreneurs.”

Aiming for stability and steady growth

In the United States, 67% of new businesses close within the first five years, and of those that survive, the majority don’t grow too much beyond their initial size.¹⁹ Small firms in lower-income countries also have low survival rates; in a 2019 study, for instance, David McKenzie and Anna Luisa Paffhausen find that a new firm has a 62% chance of dying in the first five years.²⁰ With such slim odds of success, policymakers, creditors, and investors would love to be able to predict which businesses will take off and grow, which will persist much as they are, and which will fail, in order to target the “right” ones with investment or business support.

Predicting success and failure is also a focus in low-income countries. By the early 2000s the term “gazelle” had been plucked from the US context by international organizations to describe a fast-growing small business that plays an outsized role in job creation. In 2010, Antoinette Schoar argued for a distinction between “subsistence” and “transformational” entrepreneurs who, while often lumped together in a single category, differ fundamentally in their aims in starting a business, their skills, and their ultimate role in the economy.²¹ While subsistence entrepreneurs set out to earn enough money for themselves, transformational entrepreneurs intend to create large, dynamic businesses that provide income for others. Development policy errs, she argued, in the assumption that the former is a stepping stone to the latter; in fact very few subsistence entrepreneurs ever become transformational. In 2017, Banerjee et al contrasted “reluctant” entrepreneurs as distinct from “gung-ho” entrepreneurs.²² The former seek to get by, while the latter are driven to prosper.

Yet our research shows that, while the distinctions are an important starting point, the reality is often more complicated. First, we find that most firms do not fit neatly into one of these conceptually similar binary groups (subsistence, reluctant, livelihood-oriented, vs. transformational, gung-ho, gazelle, growth-oriented). And second, the case for targeting support to the firms that are most likely to grow rapidly is unclear.

On the first point, we find that these archetypes miss a large group: firms with aspirations to grow that also prioritize stability. In the Small Firm Diaries a majority (54%) of firms said their vision for business over the next year was to both grow and gain stability. We call these firms “stability entrepreneurs.” We use the term “entrepreneur” deliberately, in recognition that the majority of the small firm owners entered into business with the motivation to be a business owner (for instance, because they desired independence, saw an opportunity, or wanted to put experience, skills, or family expertise to use), not reluctantly, simply because they saw no better opportunity to earn a living. And we use the term “stability” to emphasize that these firms—operating with limited resources and facing volatile income and expenses—aspire to more than subsistence, but perhaps less

19 The best data here comes from the US context, e.g. from Fairlie, Robert W., Javier Miranda, Nikolas Zolas, and John Haltiwanger. *The Promise and Peril of Entrepreneurship*. Cambridge, MA: MIT Press, 2023., which finds that only 33 percent of startups survive past 5 years (p.11).

20 McKenzie, David, and Anna Luisa Paffhausen. “Small Firm Death in Developing Countries.” *The Review of Economics and Statistics* 101, no. 4 (2019): 645–657. https://doi.org/10.1162/rest_a_00788

21 Schoar, Antoinette. “The Divide between Subsistence and Transformational Entrepreneurship.” In *Innovation Policy and the Economy*, vol. 10, edited by Josh Lerner and Scott Stern, 57–81. Chicago: University of Chicago Press, 2010.

22 Banerjee, Abhijit V., Emily Breza, Esther Duflo, and Cynthia Kinnan. “Do Credit Constraints Limit Entrepreneurship? Heterogeneity in the Returns to Microfinance.” *Global Poverty Research Lab Working Paper No. 17-104*. Evanston, IL: Northwestern University, 2017. <https://ssrn.com/abstract=3126359>.

Stability and steady growth, cont'd

than rapid transformation: they seek steady, step-by-step growth.²³ Understanding this fundamental aspiration helps make sense of decisions that appear to be incompatible with growing the business, but in fact, in the firm owners' judgment, are necessary to reduce the risk of greater instability.

On the second point, there is not enough effort in recognizing and supporting the much larger group of stability entrepreneurs who—even if they don't hold the promise of rapid growth—have the potential to improve lives through increased profits for themselves and their families, and better, more stable jobs for their workers. Further, for policymakers concerned with reducing poverty and inequality, casting a broader net of support to encompass businesses pursuing stable growth is more compatible with anti-poverty goals, compared to focusing efforts on a narrow slice of the small businesses that are most likely to succeed, which typically excludes the most disadvantaged groups in society.

23 Recent research by the Center for Financial Inclusion at Accion reinforces the finding; in their study of 20,000 MSEs in 5 cities they find that small firm owners are oriented towards stability more than “growth and risk taking” on the one hand, or “survival” on the other. See: Edoardo Totolo, Paul Gubbins, Lucciana Alvarez Ruiz, Anindita Chakraborty, Liz McGuinness, and Colin Rice, Small Firms, Big Impact: Digitization, Financial Services, and Climate Resilience in Five Emerging Markets (Washington, DC: Center for Financial Inclusion at Accion, April 2025), 22-23 <https://www.centerforfinancialinclusion.org/small-firms-big-impact-digitization-financial-services-and-climate-resilience-in-five-emerging-markets/>

FINANCE FOR SMALL BUSINESS IS OFTEN LESS ABOUT MAKING BIG INVESTMENTS THAN ABOUT SURVIVING CASH-FLOW GAPS—YET MANY SMALL FIRMS DON'T SEE FINANCIAL PRODUCTS DESIGNED FOR THAT REALITY

“”

Credit choices, like labor and formality decisions, rarely reduce to a single yes-or-no decision; instead, firms stitch together a mix of formal, informal, and supplier credit to manage volatility as best they can.

Capital for the right purpose, at the right time

For small firms, the central financing challenge is not raising capital for big investments or asset purchases, but coping with the constant ups and downs of cash flow. In our surveys, small firm owners consistently cited access to finance as a major barrier to firm success, second only to rising cost of supplies.²⁴ This result echoes larger studies—the World Bank Enterprise Surveys find that 21% of firms globally (and 39% of firms in Sub-Saharan Africa) consider access to finance to be their largest obstacle,²⁵ while the IFC estimates the micro, small, and medium enterprise finance gap at 8 trillion dollars when informal firms are included.²⁶ But in practice, most loans in the Small Firm Diaries were used to cover day-to-day liquidity gaps, not to purchase large assets or expand operations. This is not simply a sign of risk aversion—it reflects owners' recognition of a context where volatility is constant and liquidity scarce, and where loan products on offer are not designed with those realities in mind.

Firm owners have access to some forms of credit,²⁷ though the source of those loans varies widely from country to country. In Nigeria the most common source of loans was friends and family. In Indonesia borrowers were most likely to get credit from government and commercial banks, due to the popularity of the long-standing People's Business Credit program (known as KUR for the acronym in Bahasa Indonesia), sponsored by the Indonesian government. In Kenya loan sources were split more evenly between commercial banks (19% of loans reported) and microfinance institutions (19%).²⁸ Credit choices, like labor and formality decisions, rarely reduce to a single yes-or-no decision; instead, firms stitch together a mix of formal, informal, and supplier credit to manage volatility as best they can.

Across the countries studied, small firm owners were ambivalent about credit: they wanted more credit, yet doubted that existing products in the marketplace were designed to serve them effectively. While access to finance was clearly felt to be an obstacle, the majority of firms in the Small Firm Diaries (50% overall) reported that they “rarely” or “never” needed a loan (compared to 13% who said they “often” or “constantly” needed a loan). In interviews small firm owners told us they feared the stress and obligation of taking formal loans, sharing stories of acquaintances who had gotten into more debt than they could pay back, and explaining that they thought that the interest on available products was too high or the loan payment schedules too rigid.

Firm owners often mentioned loans when interview questions turned to plans for future growth, though these plans were often hypothetical. “What would you do to grow the business?” we'd ask. A sweater manufacturer in the Indonesian town of Bandung, for instance, mentioned a faster type of knitting machine. “But I'd rather continue as I am now,” he was quick to add. An evening rain pounded on the metal roof of the workshop as

24 During the study, countries were suffering the after-effects of pandemic lockdowns, the war in Ukraine's effects on global prices, and a spike in global inflation.

25 World Bank Group. Enterprise Surveys: Employment Indicators. Washington, DC: World Bank Group. <https://www.enterprisesurveys.org/en/employment-indicators>.

26 IFC. MSME Finance Factsheet. Washington, DC: International Finance Corporation, World Bank Group, April 2025. <https://documents1.worldbank.org/curated/en/099903509132441713/pdf/IDU-c61827d6-725f-4fd9-8b81-dd6a1000c851.pdf>

27 The majority of the small firms are also financially included: firm owners have and use a bank account for their business (though far fewer use those accounts for even a quarter of their transactions, relying mainly on cash).

28 The small firms in Kenya more frequently held loans from microfinance institutions than in the other countries studied: Indonesia (15%), Nigeria (11%), Ethiopia (5%), and Colombia (none reported.)

“”

We saw over and over again that small firms' real-world financing challenges more often had to do with managing ups and downs than with making investments or purchasing large assets.

he surveyed his nine workers. He'd need a loan (about IDR 50 million or USD 3,300), and didn't know if he'd have the orders to justify the investment. He was worried he'd end up offering his workers, whom he knew had families to feed, less stable work than he could give them now.

It's hard to make sense of his reluctance to pursue a loan to grow the business, given that he didn't seem daunted by the size or the cost of the loan per se, without understanding how the many sources of volatility (in his case, both seasonal and unpredictable fluctuations in demand for his products) influenced his thinking and made him wary to commit to a growth strategy that required a step change rather than slow, incremental commitments. His hesitation points to a potential product design gap—between loans structured for big, transformative investments and the kinds of flexible financing tools small firms feel they need to manage volatility and pursue growth more gradually.

Across the countries studied, 37% of the small firms held loans during the study. But they rarely reported buying large assets with those loans. Instead they covered day-to-day expenses, stocked up on inventory, and purchased supplies. At least as much as they borrowed from formal financial institutions, firms also relied on credit from their suppliers.²⁹ We saw over and over again that small firms' real-world financing challenges more often had to do with managing ups and downs than with making investments or purchasing large assets.

A comparison with businesses both smaller and larger than the firms we studied helps to illuminate the small firms' particular capital dilemma. On the one hand: microenterprises with no paid workers run simple businesses and rely on short-term transactions with very little spare capital on hand. They spend only when they earn, and earn only when they spend. On the other side of the spectrum are big firms with dozens or hundreds of workers and healthy amounts of working capital, whether in the form of available cash, stocks of inventory, or raw materials. Because they can finance short- and medium-term cash needs, they can make large purchases or invest in future productivity—such as by hiring more workers or expanding operations—without relying solely on contemporaneous revenue streams.

Businesses in the Small Firm Diaries occupy a middle ground between these two poles, able to manage cash flows and finance gaps in liquidity just enough so that their earnings and expenses can be somewhat separate—but not completely divorced—from each other, as illustrated in the example on the next page.

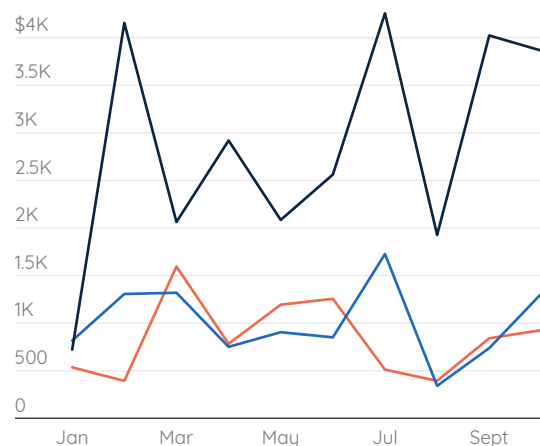
²⁹ If anything, the number of firms that took from suppliers was under-reported because we learned that many firm owners did not think of these arrangements as a loan per se but rather as a way of doing business.

FIGURE 4
SMALL FIRMS STRIVE TO MATCH
EXPENSES WITH REVENUE

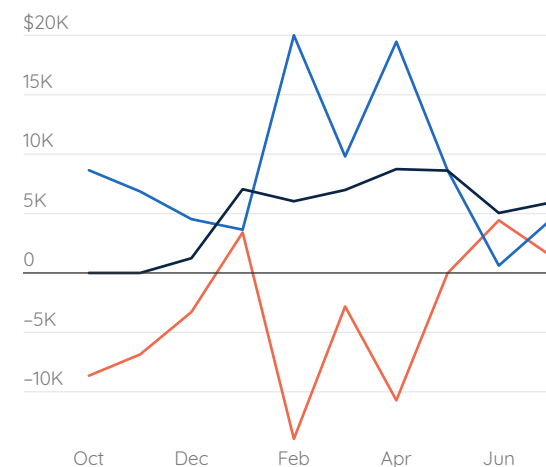
Expense	Revenue	Margin
---------	---------	--------

Unlike many microenterprises, which by necessity tend 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. The shoe manufacturer from Figure 1 in the introduction, for example, was able to run for four months with significantly negative operating margins (that is, with expenses far exceeding revenues). The other firms pictured here show variations on this theme: while the food preparation firm in Indonesia only briefly allowed expenses to peak above revenue, the Nigerian dairy production firm weathered a very difficult season from February to May.

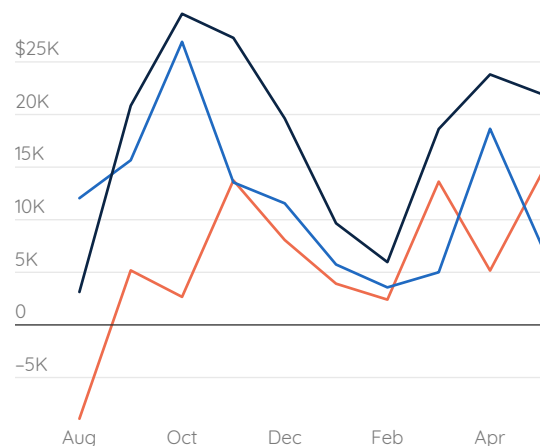
SEAMSTRESS IN KENYA



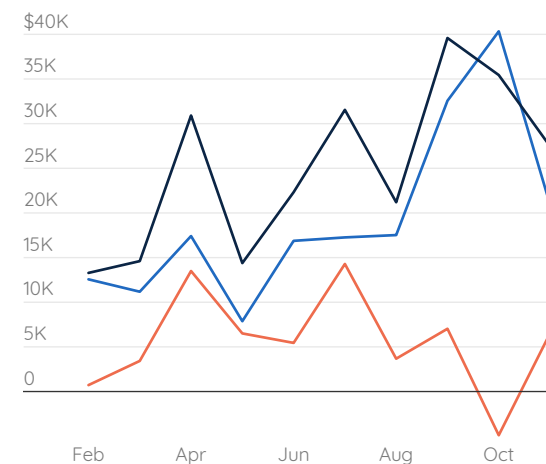
DAIRY PRODUCTION IN NIGERIA



HEALTH CLINIC IN COLOMBIA



FOOD PREPERATION IN INDONESIA



These cash flow patterns have implications for their capital needs: more so than micro firms, small firms need capital to bridge the gaps between earnings and expenses. But their profit margins are slim, and demand for their goods and services is often uncertain (after all, the small firms are by and large located in poor neighborhoods, serving clients whose fortunes are buffeted by the same forces), and so the firms are justly hesitant to take on loans that require steady, fixed payments while they know their revenues are far from steady and fixed. The small firms' lukewarm attitudes towards credit suggest that the loans they need—to sustain them through low-revenue periods and help them harness the high-revenue periods, while offering repayment plans sensitive to the uncertainty of their position and the variability of their income—are not the loans available to them in the marketplace.

SMALL FIRMS MIX FORMAL AND INFORMAL PRACTICES, MAKING CHOICES TO HELP THEM MANAGE COSTS AND VOLATILITY

(In)formality as a strategy

Another way small firms occupy a kind of middle ground is in their level of formality. For many years, policymakers and development experts pushed policies and programs that encouraged microenterprises and small firms to formalize, for two main reasons. One, that formalization would shore up the fiscal sustainability of governments by broadening the tax base (which might in some cases also yield better governance and more democracy). And two, that as microenterprises and small firms became more formal, and thus more “legible” to the formal financial sector, they would gain more access to formal credit.

The small firm owners we studied choose to formalize, often gradually, where they see clear pay-offs to the investment of time and money required, or where they see insupportable consequences for failing to formalize. Otherwise, they find strategic advantage in remaining informal. In this way, decisions about formality echo other domains of firm behavior: rather than a single yes-or-no choice, owners move incrementally along a spectrum, weighing costs against the need to remain flexible in volatile conditions.

In general, the small firm owners tend not to have any particular legal expertise, personnel, or budget dedicated to the often time- and resource-intensive process of managing the bureaucracy of formalization. As a result, they navigate a mixed portfolio of formal and informal relationships in their dealings with the institutions that confer formality. They choose to formalize, often gradually, where they see clear pay-offs to the investment of time and money required, or where they see insupportable consequences for failing to formalize. Otherwise, they find strategic advantage in remaining informal.

A furniture seller in Nairobi provides one example of how small firm owners straddle the line between formal and informal. Zera (not her real name) considered her firm semi-formal. She held an annual business permit because she was told it was required, but was not registered with the Kenyan tax authorities and had no other certificates, licenses, or memberships. Zera’s relationships with her workers, whom she paid piece-rate and in cash, were informal, as was her relationship with her main supplier (who is also her brother). Her financial services relationships were mixed—she had a bank account, a mobile wallet, and a cash till. She was wary of taking formal loans for her business and didn’t belong to any informal savings or credit groups, but did mention getting help (in cash or in kind) from family members. Finally, her record-keeping practices were informal, as she kept no written records nor did she employ anyone whose job it was to track or check her finances, but for her increasing use of mobile money apps that automatically record the majority of her business transactions.

When asked about the advantages of formalization, half of Kenyan firm owners who answered said the reason to formalize would be to avoid harassment from local officials—not really a benefit per se.³⁰ A quarter of respondents said formalization was good for business (customers preferred it; it conferred prestige; it allowed access to wider markets). Surprisingly, given that access to formal credit was the primary selling point for formalization for firms, less than one-fourth said they thought formal status allowed better access to loans or government benefits.

Even more revealing were Kenyan firm owners’ thoughts on disadvantages of formalization. Most firms (both with and without tax registrations and licenses) described the main downsides of formality as the cost

³⁰ Respondents told us that there are “no advantages to the business, we only do it to avoid harassment from the county government officials.” Also “I don’t have to run away when the authorities come.” Or, formalization “protects one from giving police bribes.”

“”

It's not just that paying taxes is costly, but that they have to pay taxes and renew business licenses, *even when business is bad.*

and the paperwork. But several articulated the dilemma of the small firm owner more precisely: It's not just that paying taxes is costly, but that they have to pay taxes and renew business licenses, even when business is bad. "The payable amount is constant per year irregardless [sic] of the state of business," commented one firm owner. "Money has to be paid even when we have no business," said another.³¹ As with workers and loans, the predicament facing small firms comes from the intersection of cost and volatility.

Another concern is that the assumed link between formalization and access to finance is weak. Formal status does not guarantee affordable credit, since lenders face high costs in making small loans and often pass these costs on as high interest rates. As a result, even when firms become formal, they may not find loan products designed on terms they want or can manage.³²

Other strains of recent and emerging literature further complicate a straightforward picture of formalization and its benefits. Some studies question whether formalization benefits small firms, failing to find a link between formalization and improved business performance.³³ Other studies expand the conception of formality to include multiple dimensions³⁴—to include not only a firm's relationships with government regulatory bodies and tax authorities, but also their connections to industry associations, private sector associations, suppliers, workers, and financial services providers. Still others explore the advantages of informality in its many dimensions, finding for instance that informal relationships with suppliers and financiers yield reliable working capital, while informal relationships with workers can promote business continuity and provide skills and training to marginalized groups with few employment opportunities.³⁵ Not surprisingly, our respondents chose to straddle informal and formal worlds.

31 Responses included: "Money has to be paid even when we have no business;" "It can be expensive mostly if the business is not doing well;" "I have to pay even when the business is not doing too well in terms of revenue;" "Tax remission and renewal of licenses which may vary and may not be favorable if there is little cash flow;" "Money has to be paid even when we have no business;" "It's expensive especially if business is slow;" "The payable amount is constant per year irregardless of the state of business;" "You have to pay on time even with no business."

32 Jonathan Morduch, Timothy Ogden, What win-win lost: rethinking microfinance subsidy in the past and designing for the future, *Oxford Review of Economic Policy*, Volume 40, Issue 1, Spring 2024, Pages 44–53, <https://doi.org/10.1093/oxrep/grad056>

33 For a summary of the recent literature, see J-PAL Policy Note, "Encouraging micro and small enterprises to formalize," 2022, <https://www.povertyactionlab.org/policy-insight/encouraging-micro-and-small-enterprises-formalize>

34 See FSD Kenya, 71point4, and Gmaurich. What Is the Value of (In)formality for Kenyan MSMEs? Nairobi: FSD Kenya, 2021; and Juan José Díaz, Juan Chacaltana, Jamele Rigolini, Claudia Ruiz, Pathways to Formalization: Going beyond the Formality Dichotomy, *World Bank Policy Research Working Paper* 8551, 2018.

35 FSD Kenya, 71point4, and Gmaurich, "What is the value of (In)formality for Kenyan MSMEs?" 2021, <https://www.fsdkenya.org/wp-content/uploads/2021/03/Briefing-note.pdf>; and Kraemer-Mbula, Erika, ed, *The Informal Economy in Developing Nations*, Cambridge University Press, 2016.

UNLOCKING GROWTH FOR SMALL FIRMS STARTS WITH BUILDING STABILITY—THROUGH FINANCIAL TOOLS, LABOR PRACTICES, AND POLICY SUPPORTS THAT HELP THEM WEATHER VOLATILITY



The small firm balancing act

The businesses in the Small Firm Diaries sample were intentionally selected to be diverse by owner gender (33% of firms were owned by only women, and 47% had at least one woman owner), and sector (about evenly split among light manufacturing, agri-processing, and services). We chose firms that had at least one paid non-family worker, and—to make it logistically possible for researchers to travel to visit multiple firms each week—we selected firms within densely populated urban or peri-urban neighborhoods. Only a few of the firms we found serve clients more than a few miles from where they live and work—for the most part these are “local” businesses, employing workers and serving customers within their own low-income communities. Data collected from these businesses examine challenges and opportunities across several countries, shedding light on the vulnerabilities, obstacles, and opportunities common to this population of small firms serving poor neighborhoods.

The need to manage variable cash flows that spike and dip across the seasons, in ways both predictable and not—in an environment characterized by political and economic uncertainty, and with very little extra money to go around—is a tricky balancing act. What’s really going on can be hard to see without granular data that brings it into focus. And yet it’s hard to understand the decisions and behaviors of small firm owners without it.

Small firm owners’ choices follow some broadly similar patterns: they avoid binary decisions, privilege stability over risky expansion, and face their hardest tradeoffs where volatility, illiquidity, and limited resources collide.

The need to manage volatility spills into all aspects of running the business. It governs firm owners’ labor strategies, resulting in a flexible but transient workforce that limits both the firm’s growth potential and workers’ job security. It influences their cautious attitudes about growth and their evident disinterest in the formal credit products currently on offer, and shapes their need for short-term liquidity credit products with flexible repayment schedules. And it guides their strategic posture of balancing between formal and informal practices based on cost-effectiveness and practical necessity.

Thinking differently about small firms along the lines outlined in this report can spark ideas to support small firm owners and workers through policy and financial services product innovation.

1. The term MSME (Micro, Small, and Medium Enterprise) may hide more than it reveals, encompassing both informal micro entrepreneurs and professional businesses with more than 50 employees. Developing policies and financial products appropriate for the specific needs of segments within this larger umbrella will net larger gains. That said, there is a real challenge in designing support for different segments of the MSME population: the goal of fighting poverty is at odds with a narrow focus on the business owners who are most likely to succeed. The most disadvantaged business owners—who are disproportionately poor, rural, female, and less educated—are unlikely to pass screening tests that target only high-growth firms.
2. It’s not enough for employment strategies to be about creating jobs; they need to be about creating good, stable jobs that provide steady (or at least predictable) income, and other intangibles that people seek from their work life, like opportunities for advancement, flexibility, structure, and dignity. Firm owners

“”

Unlike large companies with management and financial acumen and access to liquidity, small firms rely on their limited flexibility to survive volatility. Unlocking growth within this operational landscape often means first achieving stability, a theme we'll return to in future publications.

and workers are in the same boat, but most often it's workers who are at a disadvantage when the boat hits choppy waters. But firms may also benefit from relationships with workers that are more stable and more trusting: high worker turnover and the mutual lack of trust that underlies it is a drag on the productivity of each single firm and the industry as a whole, as it hinders firms from reaching new levels of stability and growth.

3. Strategies for investing in small firms (whether capital investment or investing in skills and training programs) can't be just about maximizing growth but also must address volatility. Stability and resilience in the face of ups and downs are important and underrated qualities that firm owners value. Small firm owners need loans to sustain them through low-revenue periods and help them harness the high-revenue periods, while offering repayment plans sensitive to the uncertainty of their position and the variability of their income. And they need a skill set that helps them achieve stability and manage volatility.
4. Programs that seek to encourage formalization would do well to acknowledge that becoming formal along all possible dimensions may not be a desirable outcome for small firms. For most owners, the biggest downside is taxation: formal status brings fixed obligations that come due regardless of income. And it may be necessary to consider whether the primary theoretical gain to firms—increased uptake of formal credit—is a sufficient inducement in the near term. While many small firms observe that becoming formal reduces friction with local authorities, formality is a binding commitment, almost universally perceived as very costly. The more that flexibility can be worked into that commitment (whether with tax, labor, or local government authorities), the more formalization may be compatible with the small firm reality of constant volatility management.

Unlike large companies with management and financial acumen and access to liquidity, small firms rely on their limited flexibility to survive volatility. Unlocking growth within this operational landscape often means first achieving stability, a theme we'll return to in future publications.

Bibliography

Aga, Gemechu, David C. Francis, and Jorge Rodriguez Meza. *SMEs, Age, and Jobs: A Review of the Literature, Metrics, and Evidence*. World Bank Policy Research Working Paper 7493. Washington, DC: World Bank, 2015. <https://documents1.worldbank.org/curated/en/451231468000937192/pdf/WPS7493.pdf>

Banerjee, Abhijit V., Esther Duflo, Rachel Glennerster, and Cynthia Kinnan. “The Miracle of Microfinance? Evidence from a Randomized Evaluation.” *American Economic Journal: Applied Economics* 7, no. 1 (2015): 22–53. <https://doi.org/10.1257/app.20130533>

Banerjee, Abhijit V., Emily Breza, Esther Duflo, and Cynthia Kinnan. “Do Credit Constraints Limit Entrepreneurship? Heterogeneity in the Returns to Microfinance.” *Global Poverty Research Lab Working Paper* No. 17-104. Evanston, IL: Northwestern University, 2017. <https://ssrn.com/abstract=3126359>.

Bertanzetti, Marta, Shubhranka Mondal, Rania Nasir, and Matthieu Teachout. “Why Do SMEs Matter? The Impact of Small and Medium-Sized Enterprises (SMEs) in Developing Countries and Implications for Development Finance Institutions (DFIs) and Impact Investors.” London: International Growth Centre (IGC), January 2024. <https://www.theigc.org/publications/why-do-smes-matter>

Díaz, Juan José, Juan Chacaltana, Jamele Rigolini, and Claudia Ruiz. *Pathways to Formalization: Going Beyond the Formality Dichotomy*. World Bank Policy Research Working Paper 8551. Washington, DC: World Bank, 2018. <https://documents1.worldbank.org/curated/en/344041530532715427/pdf/WPS8551.pdf>

Fairlie, Robert W., Javier Miranda, Nikolas Zolas, and John Haltiwanger. *The Promise and Peril of Entrepreneurship*. Cambridge, MA: MIT Press, 2023.

FSD Kenya, 71point4, and Gmaurich. “What Is the Value of (In)formality for Kenyan MSMEs?” Nairobi: FSD Kenya, 2021. <https://www.fsdkenya.org/wp-content/uploads/2021/03/Briefing-note.pdf>

Freschi, Laura, and Timothy Ogden. *Methodology and Process: An Introduction to the Small Firm Diaries*. New York: Financial Access Initiative at NYU Wagner, February 2024. <https://www.smallfirmdiaries.org/global>

GEM (Global Entrepreneurship Monitor). *Global Entrepreneurship Monitor 2023/2024 Global Report: 25 Years and Growing*. London: GEM, 2023. <https://www.gemconsortium.org/file/open?fileId=51377>

IFC. *MSME Finance Factsheet*. Washington, DC: International Finance Corporation, World Bank Group, April 2025. <https://documents1.worldbank.org/curated/en/099903509132441713/pdf/IDU-c61827d6-725f-4fd9-8b81-dd6a1000c851.pdf>

ILO. *Resolution Concerning Small and Medium-Sized Enterprises and Decent and Productive Employment Creation*. Geneva: International Labour Organization, 2015. https://labordoc.ilo.org/discovery/fulldisplay/alma995320391602676/41ILO_INST:41ILO_V2

J-PAL. “Encouraging Micro and Small Enterprises to Formalize.” J-PAL Policy Note, 2022. <https://www.povertyactionlab.org/policy-insight/encouraging-micro-and-small-enterprises-formalize>

Khandker, Shahidur R. “Microfinance and Poverty: Evidence Using Panel Data from Bangladesh.” *The World Bank Economic Review* 19, no. 2 (2005): 263–286. <https://doi.org/10.1093/wber/lhi008>

Kraemer-Mbula, Erika, ed. *The Informal Economy in Developing Nations*. Cambridge: Cambridge University Press, 2016.

Bibliography, cont'd

- McKenzie, David, Suresh de Mel, and Chris Woodruff. "Labor Drops: Experimental Evidence on the Return to Additional Labor in Microenterprises." *American Economic Journal: Applied Economics* 11, no. 1 (2019): 202–235.
- McKenzie, David, and Anna Luisa Paffhausen. "Small Firm Death in Developing Countries." *The Review of Economics and Statistics* 101, no. 4 (2019): 645–657. https://doi.org/10.1162/rest_a_00788
- Morduch, Jonathan. "The Microfinance Promise." *Journal of Economic Literature* 37, no. 4 (1999): 1569–1614. <https://doi.org/10.1257/jel.37.4.1569>
- Morduch, Jonathan. "Rethinking Poverty, Household Finance, and Microfinance." In *Handbook of Microfinance, Financial Inclusion and Development*, edited by Valentina Hartarska and Robert Cull, 21–40. Cheltenham: Edward Elgar, 2023.
- Morduch, Jonathan, and Timothy Ogden. "What Win–Win Lost: Rethinking Microfinance Subsidy in the Past and Designing for the Future." *Oxford Review of Economic Policy* 40, no. 1 (Spring 2024): 44–53. <https://doi.org/10.1093/oxrep/grad056>
- Schoar, Antoinette. "The Divide between Subsistence and Transformational Entrepreneurship." In *Innovation Policy and the Economy*, vol. 10, edited by Josh Lerner and Scott Stern, 57–81. Chicago: University of Chicago Press, 2010.
- Totolo, Edoardo, Paul Gubbins, Lucciana Alvarez Ruiz, Anindita Chakraborty, Liz McGuinness, and Colin Rice. *Small Firms, Big Impact: Digitization, Financial Services, and Climate Resilience in Five Emerging Markets*. Washington, DC: Center for Financial Inclusion at Accion, April 2025. <https://www.centerforfinancialinclusion.org/small-firms-big-impact-digitization-financial-services-and-climate-resilience-in-five-emerging-markets/>
- World Bank Group. *Enterprise Surveys: Employment Indicators*. Washington, DC: World Bank Group. <https://www.enterprisesurveys.org/en/employment-indicators>
- Zollmann, Julie. *Kenya Financial Diaries: Shilingi kwa Shilingi—The Financial Lives of the Poor*. Nairobi: FSD Kenya, 2014. <https://fsdkenya.org/publication/kenya-financial-diaries-shilingi-kwa-shilingi-the-financial-lives-of-the-poor/>
- Zollmann, Julie. *Living on Little: Navigating Financial Scarcity in Modern Kenya*. (Warwickshire, UK: Practical Action Publishing, 2020).

 FUNDING

Funding for the global study was provided by the Mastercard Center for Inclusive Growth, the Bill & Melinda Gates Foundation and the Argidius Foundation.

www.mastercardcenter.org

www.gatesfoundation.org

www.argidius.com

 RECOMMENDED CITATION

Freschi, Laura, Timothy Ogden, and Jonathan Morduch. *Big Challenges for Small Firms: Small Firm Diaries Issue Brief*. New York: Financial Access Initiative at NYU Wagner, November 2025. <https://www.smallfirmdiaries.org>

The authors of this issue brief are Laura Freschi, Timothy Ogden, and Jonathan Morduch; Ogden and Morduch are the principal investigators for the Small Firm Diaries global project. We are grateful for the time and trust given to us by each firm owner and worker who participated in the study, and for the dedication of our field research teams in each country. The authors acknowledge the contributions of the FAI team—Rachael Eplee, Michelle Kempis, and David Pinedo De La Hoz and Shashank Sreedharan—as well as Meghan Greene, Laura Starita, and Gordon Schuit. Anne Marie van Swinderen of L-IFT and Guy Stuart of the Global Worker Diaries led the field research for this project.

Helpful inputs were provided by the SFD Global Advisory Board, and by in-country partners FSD Kenya (particularly Amrik Heyer), the Nigerian National Bureau of Statistics, the Lagos Business School Enterprise Development Centre (Olayinka David-West and Peter Bamkole), ANIF Center of Economic Studies in Bogotá (Luz Salas Bahamón), the Chambers of Commerce of Bogotá, Cali, and Barranquilla, Universidad del Norte, Universidad Javeriana, the Colombian National Planning Department, MSC Indonesia, Inke Maris, the Indonesian Coordinating Ministry for Economic Affairs, and the Indonesian Ministry of Cooperatives and SMEs.