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Foreword

In the aftermath of the pandemic, as we set out to launch Strive Mexico, we realized the need for a comprehensive framework that would drive resilience among micro and small enterprises (MSEs). It was clear that we needed a data-driven approach to inform any recommendations or strategies. As the famous adage goes, "If you can't measure it, you can't manage it"; and we recognized the importance of consulting a diverse set of local stakeholders in developing any such framework.

We worked closely with organizations serving MSEs throughout Mexico to develop a framework that reflected their feedback. Our goal is for this framework to serve as a starting point in better understanding the resilience of MSEs, particularly those owned by women. Upon analysis, it became evident that there is a significant gender divide, with women-owned MSEs being less likely to access financial services during an emergency, for example. Only 18% of women-owned MSEs have access compared to 28% of men-owned MSEs, making them more vulnerable to shocks. Now that we have a framework in place, our focus is on catalyzing action and building pathways to increased resilience. This will require targeted interventions and specialized solutions to strengthen Mexico's micro and small enterprises. We believe there is a clear business case for this work—a more resilient business is a better client. We may not have all the answers, but we invite you to join us in better understanding how to build back with more resilience. Let us work together to create a more resilient Mexican business ecosystem

Luz Gomez

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Executive summary

This brief emphasizes the growing need to focus on the resilience of micro and small enterprises (MSEs) in the face of various challenges, such as economic downturns, inflation and sickness. The primary objective is to present a framework for assessing MSE resilience, particularly in the Mexican context, and to present the findings of the survey conducted to understand the drivers of resilience levels and to validate the framework's accuracy.

This initiative is part of the Strive Mexico program, supported by the Mastercard Center for Inclusive Growth. The brief defines resilience as **the ability of MSEs to withstand and recover from shocks like economic downturns and health crises**. It underlines the multi-dimensional nature of resilience and the importance of measuring it for multiple stakeholders, from the private sector to development organizations.

Resilience is a complex and multidimensional construct that is difficult to measure. The need for comprehensive and multisource approaches for accurate assessment is emphasized. We conduct a literature review that examines existing frameworks for assessing resilience and financial health, underscoring the difference between individual-oriented and MSE-oriented frameworks. We highlighted the methodological diversity and suggested that a mix of development outcomes and behaviors, and multiple dimensions should be considered for a more comprehensive assessment. We also mapped out the main risks and coping strategies of MSEs in Mexico.

A multi-layered approach towards resilience is imperative, involving personal, social, market, and national/international layers. Strategies vary from rudimentary "savings under the mattress" at the household level to sophisticated public insurance schemes at the national level. MSEs in Mexico adopt a variety of mechanisms, ranging from diversifying product offerings to buying insurance, to mitigate risks. While some are multi-purpose strategies, others are shock-specific. Access to digital and financial services is crucial to overcome shocks and moreover, social networks also serve as vital coping mechanisms. The proposed framework to measure MSE resilience focuses on measuring financial, operational, digital, entrepreneurial, and psychosocial capabilities. Financial capabilities are assessed through financial inclusion and savings behavior; digital and operational capabilities are measured via digital tools and supply chain management; entrepreneurial capabilities are analyzed through record-keeping and the use of heuristics for running businesses, and psychosocial capabilities are evaluated through access to business networks, grit, and agency. Ultimately, the framework aims to catalyze action among multiple stakeholders, driving focused interventions and specialized solutions that can fortify the resilience of Mexico's micro and small enterprises.

We conducted 400 in-person surveys to calibrate the framework in different municipalities in Hidalgo, Mexico, in collaboration with Plaza Noahui. We established a sample that allows us to conduct a disaggregated analysis by gender. We surveyed eight types of MSEs: retail, beauty salons, artisans, restaurants, food preparation, pharmacies, clothing stores, and hardware stores. These sectors concentrated the vast majority of MSEs in the country.

We found that the MSEs surveyed obtained better psychosocial capabilities results than financial, digital, operational, and entrepreneurial aspects. Facing crises and emergencies is endemic and is usually severe. All the MSEs surveyed responded that they had at least one moment of reduced profits in the last 12 months. Unexpected expenses and emergencies are acute for most MSEs. Savings are the most common mechanism to deal with unexpected expenses or emergencies of different magnitudes, however surveyed MSEs use it more frequently to deal with shock less impactful. According to econometric estimates, access to savings in case of emergency is associated with greater resilience of MSEs.

Being young, having a higher level of formal education, managing larger MSEs, and having more profits are positively associated with greater resilience. According to econometric estimates, MSEs that use at least three digital tools showed greater resilience, measured by those that recovered faster from a crisis. The agency is positively associated with faster overcoming unexpected expenses or emergencies; However, four in 10 mentioned having little or no control over the fate of their businesses.

Introduction

In an era characterized by unforeseen challenges and growing economic complexities, focusing on MSE resilience cannot be overstated. The Covid-19 pandemic, which struck the global economy with unparalleled force, laid bare the vulnerabilities inherent within many sectors, particularly within the realm of MSEs. The lessons drawn from this crisis have accentuated the need to strengthen the adaptive capacity of these enterprises. Whether in the face of global pandemics, economic fluctuations, increases in food prices, or changing market dynamics, building MSE resilience not only serves as a buffer against immediate shocks but fosters long-term sustainability and contributes to the overall economic development.

On that note, this brief discusses the concept of MSE resilience measurement, proposes a framework to assess it and delve into the results of a survey conducted to understand how the framework could explain resilience mechanisms employ by MSEs. To reach that goal, we divided this brief into five sections. The first section will define MSE resilience, delve into the value proposition for measuring resilience and surface some of the most influential frameworks for assessing resilience and financial health among individuals and MSEs. The second section will propose a framework for measuring MSE resilience, highlighting its components and the questions to assess them. The third section provide the main highlights of a survey conducted in Hidalgo, Mexico to MSE based on the framework presented in the last section. Lastly, we will summarize a hands-on workshop conducted in Mexico City with academics, practitioners, and policymakers, in which they charted out some of the coping mechanisms for four different MSEs typically owned by women.

This brief is part of the learning agenda of the Strive Mexico program, launched in November 2022. Strive Mexico is supported by the Mastercard Center for Inclusive Growth, with BFA Global and Fundación Capital as implementing partners. The program aims to reach 400,000

small businesses and female micro-entrepreneurs in Mexico over the next three years to enhance their resilience through the right digital tools and to strengthen their supporting ecosystem. Under Strive Mexico, BFA Global operates the Strive Mexico Learning Network, while Fundación Capital is scaling their proprietary digital tools..

The results from the survey try to shed light on many of the questions BFA Global has set up as part of the learning agenda of the program, such as:

- What is the level of resilience of a Mexican MSE?
- How does MSE resilience vary by the owner's demographics?
- What are the predominant shocks MSEs face?
- How long does it generally take for MSEs to recover from a significant profit-reduction event?
- What are the most common coping mechanisms employed by MSEs when confronted by shocks?
- How effective is savings to promote a faster recovery compared to other mechanisms?
- To what extent do household coping mechanisms correlate with business coping strategies?
- What are the critical differences in resilience between men-owned and women-owned MSEs?
- Is there a correlation between adopting digital tools and the level of resilience?
- What attributes of an MSEserving institution make its offerings more conducive to MSE resilience?
- How can MSE resilience measurement become an element of a feedback loop that returns value to an institution and its customers?
- How can resilience measurement best inform product design?

Defining and measuring MSE resilience

Definition of MSE resilience

We define MSE resilience as the capacity of a micro or small business to withstand and recover from external shocks or stressors, such as economic downturns, natural disasters, health-related problems, and to maintain its business operations and support the livelihoods of its owners and employees.

We chose this definition because it echoes commonalities in the most prominent definitions of resilience from the OECD, UKAID, and USAID.¹These definitions refer to resilience as an ability or a capacity to absorb, prepare, and recover from a shock. They explicitly or implicitly appreciate the need for risk management measures to mitigate or prevent disturbances. They understand vulnerability or resilience's dynamic and multi-dimensional nature and focus on building capacities or assets to deal with disturbance.

Value proposition for stakeholders

Measuring resilience holds significant value across multiple sectors, including the private industry, governmental agencies, development organizations, and academic institutions. For the private sector, resilience measurement offers a nuanced perspective to understand

¹ OECD: "The ability of individuals, communities and states and their institutions to absorb and recover from shocks, while positively adapting and transforming their structures and means for living in the face of long-term changes and uncertainty".

USAID: "The capacity of communities, households, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth".

UKAID (formerly DFID): "The capacity over time of a person, household, or other aggregate unit to avoid poverty in the face of various stressors and in the wake of various shocks. If and only if that capacity is and remains high over time, the unit is resilient."

the unique needs of microenterprise clients. This understanding carries commercial and social advantages. It facilitates crafting services that empower customers, thus encouraging them to consume more products, save responsibly, and manage risks more effectively. Government agencies can benefit by incorporating resilience metrics into their economic development strategies. These metrics can serve as an invaluable guide for decision-making, particularly in designing capacity-building programs focusing on business continuity planning, risk management, and access to financing.

Development organizations should aim beyond merely creating knowledge or promoting digital products; they should assess the real-world impacts of these initiatives. This can be achieved through comprehensive support programs that include capacity-building initiatives, mentorship, and access to critical resources such as business training, technology adoption, and market intelligence. Similarly, academic and research institutions are pivotal in advancing the understanding of resilience in microenterprises. Empirical research can uncover the key drivers of resilience and thus inform targeted support programs and policies.

In terms of application, resilience measurement serves three critical functions: diagnostic, evaluation, and planning. Diagnostic assessment helps identify the current resilience level and its underlying components. The evaluation focuses on the effectiveness of resilience-based initiatives, providing insights into their impact. Finally, planning uses these measurements to articulate intended outcomes and ensure that the proposed interventions align effectively with the specific contexts in which they will be implemented.

Existing frameworks for measuring financial health and MSE resilience

In the following paragraphs, we provide an overview of frameworks crafted by various organizations, each with a unique research focus on financial resilience, as well as the associated concepts of financial health, financial well-being, and financial literacy. Prominent organizations like the Financial Health Network, BFA Global, and CFPB primarily focus on individual financial health and well-being. Entities like CFI-PACT and 60 Decibels have also developed complementary MSE-oriented frameworks.

The unit of analysis thus differs, bifurcating the frameworks into those designed for individuals and those intended for MSEs. This distinction is vital as it directs each framework's metrics and dimensions and is necessary to acknowledge because the walls separating the financial state of the individual from the enterprise are weak to non-existent.

The frameworks exhibit consistency regarding the number of components, mostly oscillating between three and four dimensions. These dimensions encapsulate the multifaceted nature of financial health or resilience, enabling a nuanced understanding of the subject. Most frameworks incorporate up to four dimensions—resilience. The criteria for measuring development outcomes and behaviors add another layer of complexity. Most of the frameworks, except those developed by the OECD, measure development outcomes, implying a keen interest in understanding the tangible impacts on the unit of analysis. However, the measure of behaviors is only sometimes adopted. Frameworks like those by BFA Global, the OECD, and CFI-MSE consider behaviors,

reflecting an interest in understanding the actions contributing to or undermining financial well-being. On the other hand, many frameworks aimed at MSEs do not incorporate behavior metrics, perhaps signaling a focus on more immediate, quantifiable outcomes.

Lastly, the use of questionnaires and the provision of scores or results vary among the frameworks. Those aimed at individuals—like the frameworks from the Financial Health Network, BFA Global, and CFPB—commonly include a questionnaire and provide scores indicative of an intent to derive more individualized insights. MSE-focused frameworks generally eschew this approach, neither incorporating questionnaires nor providing scores, perhaps because of the operational complexities of applying such methods. Overall, the table illustrates a landscape rich in methodological diversity, tailored to suit specific research goals and target audiences in financial health and resilience.

Organization	Research topic	Unit analysis	Number of dimensions	Measures outcomes	Measures behaviors	Includes questionnaire	Provides score
Financial Health Network	Financial health	Individuals	4	•			•
BFA Global	Financial health	Individuals	4	•	•	•	•
<u>CFPB</u>	Financial wellbeing	Individuals	4	•		•	•
UNSGSA	Financial health	Individuals	4				
OECD	Financial literacy	Individuals	3		•	•	
OECD	Financial literacy	MSMEs	3		•	•	•
<u>CFI-PACT</u>	Financial resilience	MSEs (Fintech)	4	•			
<u>CFI-MSE</u>	Financial resilience	MSMEs	3	•	•		
60 Decibels	Climate resilience	MSEs	3		•		
COSA	Resilience and ESG	MSEs	3		•		

2. A framework to measure MSE resilience

The four dimensions of an MSE resilience framework

Resilience is a complex concept that defies easy categorization. It is not a mere outcome but rather a capacity to actively influence those outcomes. This capacity is not easily quantifiable as it is multidimensional and not directly observable. Furthermore, resilience exists not as a binary state but along a continuum. Moreover, resilience may require an extended period to manifest itselffully, and as such, researchers or project managers must incorporate subjective states and personal experiences into its evaluation. Nonetheless, we propose a framework that addresses this complexity by relying on a multidimensional approach that measures resilience indirectly through MSEs assets, behaviors, and strategies, that is, capabilities. Our framework adopts a practical lens as we encapsulate resilience in four dimensions.

The theory of change of the resilience framework starts with the context in which MSEs operate (See Diagram 1), taking into account exogenous factors in terms of the type of industry, business size, and overall economic context, on the one hand, and business owners' sociodemographics, such as age, gender, and school attainment, on the other. Two additional elements that help to understand the pathways to resilience are the shock, in terms of its magnitude and nature, and the risk exposure of a particular business. Endogenous factors are more intrinsic to the enterprises themselves and include financial assets, physical assets, and human capital.

Recover but worse

Collapse



(Demographics)

The proposed framework focuses on assessing the enabling capabilities, which we cluster into four verticals: (1) financial, (2) digital and operational, (3) entrepreneurial, and (4) psychosocial. These four capabilities are critical determinants of the enterprise's ability to navigate challenges effectively and sustain growth. MSEs with these capabilities are better positioned to follow a pathway to resilience and bounce back better when a shock hits them. The expected outcome is that they keep running their business operations with the same or even higher revenue.

Psychosocial



We define **financial capabilities** as competencies and practices that enable MSEs to create a savings buffer and access financial services in case of emergencies, integrated into two key components: financial access and savings behavior.

• **Financial access** focuses on the business's ability to source funds quickly in emergencies. This concept tries to understand how well-integrated the business is within the broader financial sector and whether it can tap into various financial sources when needed.

• **Savings behavior** aims to identify how proactive the business is in setting aside a financial buffer to deal with unexpected events. The responses can indicate the business's long-term financial resilience and preparedness for downturns or emergencies.

Digital and operational capabilities refer to the amalgamation of digital and logistical competencies that contribute to the effective functioning and resilience of MSEs. These components bifurcate into two core concepts: digital adoption and supply chain management.

- **Digital adoption** measures the extent to which the business utilizes digital tools for its operations, such as accepting digital payments, using social media for marketing and sales, using apps for managing inventory and issuing invoices, providing customer support via social media, and paying suppliers electronically, among others. It can indicate the business's adaptability to modern practices, efficiency, and preparedness for future market changes.
- **Supply chain management** evaluates the business's vulnerability to supply chain disruptions. It assesses how easily a business can replace major suppliers, which can be a critical factor in its resilience against external shocks.

Entrepreneurial capabilities encompass the dual abilities of sound operational governance through record-keeping and strategic agility through following business heuristics.

- **Record keeping** assesses the business's diligence in maintaining accurate and immediate records of its financial transactions. Proper record-keeping is vital for business planning, risk assessment, and regulatory compliance.
- Follow business heuristics under uncertainty aims to understand the decision-making process when the business faces difficulties. Whether the owner relies on instincts, follows tried-and-true rules, or seeks external advice can give insights into their strategic planning skills.

Psychosocial capabilities in MSEs refer to the composite of cognitive, emotional, and social attributes that collectively influence their resilience. This comprises three components: social network, grit, and agency.

- **Business social network** aims to gauge the extent of the business owner's network of similar businesses. A more extensive network could mean better support and resources for problem-solving and indicate social capital that can be leveraged during crises.
- **Grit** assesses how business owners react when faced with significant obstacles, providing insight into their resilience and adaptability.
- **Agency** assesses the business owner's perception of their control over the state and future of their enterprise. A strong sense of agency typically correlates with increased motivation, better decision-making, and overall resilience. Business owners who feel that they have a high degree of control are likely to be more proactive in tackling challenges, and this proactive approach could be an essential factor in the overall resilience of the business.

3. Resilience of MSEs

Capabilities and resilience

In a comprehensive study conducted across various municipalities in Hidalgo, Mexico, we collaborated with Plaza Noahui to administer 400 in-person surveys. Our sample was meticulously designed to allow for a disaggregated analysis based on gender. We targeted eight primary categories of micro and small enterprises (MSEs), including retail, beauty salons, artisans, restaurants, food preparation, pharmacies, clothing stores, and hardware stores. These sectors encompass the vast majority of MSEs in the national landscape.

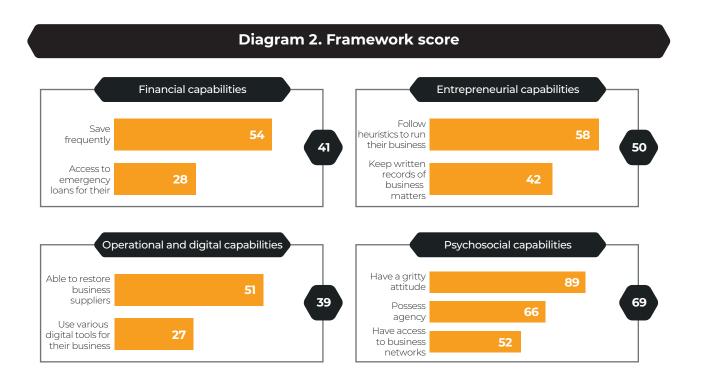
Utilizing an evaluative index ranging from zero to one hundred, we assessed multiple pillars and components to ascertain the resilience capabilities of the surveyed MSEs. The findings indicate a noteworthy strength in psychosocial capabilities, as opposed to financial, operational, digital, and entrepreneurial dimensions (refer to Diagram 2 below). This is congruent with the resilience displayed by most MSEs during the Covid pandemic. In the financial capabilities pillar, MSE owners exhibited greater proficiency in savings behavior, scoring 54, compared to a lower score of 28 in accessing emergency funds from financial service providers within a week.

For the operational and digital capabilities assessment, we incorporated two key elements. First, we examined the extent of digital tool adoption, ranging from social media marketing to inventory management and payment acceptance. This domain yielded the lowest score of 27. Second, we probed into the vulnerability of businesses to supply chain disruptions by inquiring about the difficulty in restoring material and inventory supply if primary suppliers were lost; the composite score in this domain was 39.

Entrepreneurial capabilities were assessed through a framework that evaluates adherence to proven business heuristics. We sought to understand the extent to which MSEs employ

prudent business practices, such as meticulous record-keeping in ledgers or notebooks, covering aspects like sales, debts, bill payments, and net take-home earnings. The aggregate score in this domain was a moderate 50.

Lastly, psychosocial capabilities were evaluated using metrics for grit, agency, and business social networks, with an overall score of 69. In the examination of grit, survey respondents indicated a high propensity to persist and adopt various approaches to overcome challenges, even in the face of potential failure, yielding the highest score of 89. Agency was gauged through a statement assessing MSE owners' perceived control over their businesses' present and future states, resulting in a score of 66. Regarding the strength of social networks within the business community, which can significantly impact knowledge sharing, collaboration, and peer support, MSEs obtained a comparatively lower score of 52.

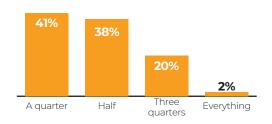


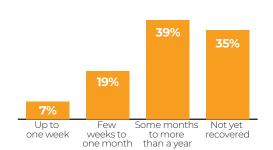
Shocks and coping mechanisms

We found four aspects regarding shocks. First, facing shocks and emergencies is endemic to running MSEs, as all surveyed MSEs responded to having at least one moment of profit reduction in the last 12 months. As the pandemic ceased, the primary sources of shocks came from economic and health issues. The top three reasons for a reduction in profit were low demand, sickness, and price increases. Those shocks tend to be acute for most of the MSE, as 60% reported a reduction of at least half on their profit (more than a fifth saw a reduction of 3¼ or more). Recovering from those shocks is difficult, as a third of MSE reported not recovering. For another third, the shock recovery lasted months (between 1 and 6).



Graph 2. Time to recover from the stock

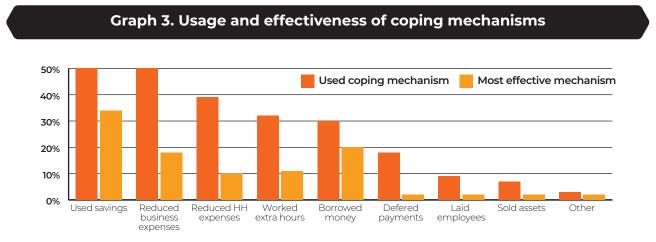




Transitioning to coping mechanisms, our findings reveal that micro and small enterprises (MSEs) generally employ a multifaceted approach to risk mitigation. On average, MSEs utilize more than two coping strategies to navigate economic shocks. It is worth noting that the number of mechanisms employed is contingent upon the gravity of the shock experienced. A mere 20% of MSEs that required a week for recovery deployed more than two coping strategies, in contrast to 60% of those necessitating months for recovery. The predominant five strategies identified were using savings, curtailment of business expenses, reduced household expenditures, extension of working hours, and recourse to borrowing.

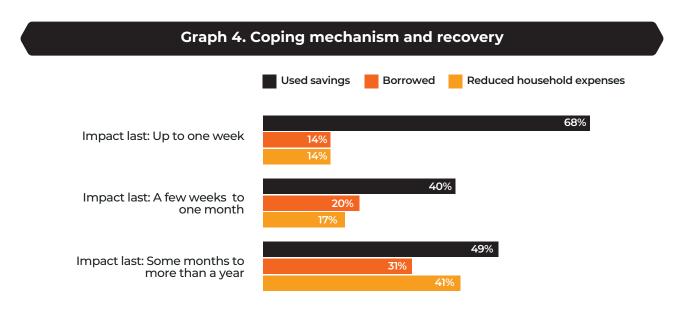
It is essential to underscore that specific coping mechanisms manifest superior efficacy relative to others and are thus deployed in response to shocks that exert varying impacts. Our analysis indicates that resorting to savings constitutes the most ubiquitous coping mechanism, irrespective of the magnitude of the shock.

The data shows divergent patterns between the usage and effectiveness of various coping mechanisms mentioned by survey respondents. Using savings and reducing business expenses are the most commonly employed strategies, with a 50% usage rate each, but their effectiveness varies considerably at 34% and 18%, respectively. Mechanisms like reducing household (HH) expenses and working extra hours show moderate usage and low effectiveness, falling below 12%. Borrowing money stands out for its relatively high effectiveness of 20% despite a 30% usage rate. Strategies with low usage rates, such as deferring payments. Laying off employees, and selling assets, also exhibit low effectiveness, falling below 5%.



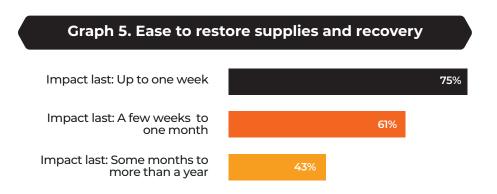
The importance of savings as a defensive measure becomes especially pronounced for shocks that wield a transitory impact on profits. On the other hand, mechanisms such as borrowing money or attenuating household expenses are more prevalently used for severe shocks.

Furthermore, we observed a significant overlap between coping strategies at the household and enterprise levels. Nearly 40% of MSE proprietors reported reducing household expenditures as a mitigative measure, highlighting the interconnected nature of business and household financial management in coping with shocks. Lastly, the harshness of a shock is negatively associated with the time needed to recover from it. Most MSEs that saw a minimal reduction in profit need a week to recover, whereas those with a greater impact need more time to recover.



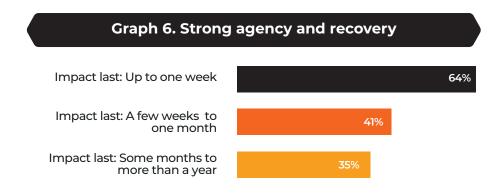
Financial capabilities. Savings and borrowing are frequently cited as the most effective coping strategies, however, it is noteworthy that a limited number of MSEs can readily access institutional financial service providers during times of financial stress. Less than 20% reported the ability to secure emergency funds from banks, and a mere 10% from microfinance institutions. On average, MSEs could leverage only to oneout of nine potential sources for emergency funding within one week. Furthermore, concerning saving behavior, most MSE owners only save sporadically or not at all. Econometric estimations indicate a positive correlation between access to emergency savings and heightened resilience among MSEs.

Digital and operational capabilities. Our findings suggest that adopting digital tools varies significantly depending on their specific utility and is predominantly limited to social networking platforms. At least half of the MSEs employ digital tools for marketing and client communications. Yet, fewer than a quarter utilize them for tasks such as payment acceptance, order management, inventory oversight, invoicing, or accounting. Importantly, econometric analysis reveals that MSEs adopting at least three digital tools exhibit greater resilience. On the other hand, 50% of surveyed MSEs reported that finding alternative suppliers would be either impossible or exceedingly difficult in the event of losing their primary supplier. This finding aligns with the observation that MSEs capable of swiftly securing alternative suppliers are also those that recover more rapidly from financial shocks.



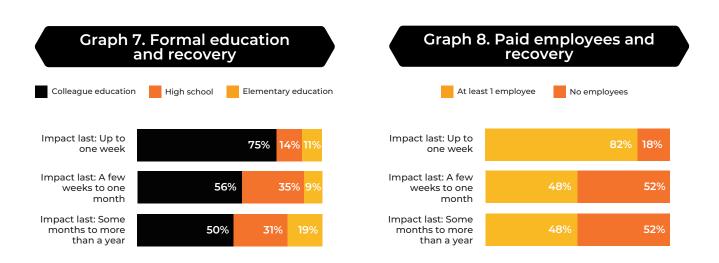
Entrepreneurial Capabilities. The adoption of business practices considered conducive to enhanced performance is heterogeneous among MSE owners. Approximately two-thirds maintain records of sales volumes, yet only one-third track their take-home earnings. Moreover, 44% of MSEs adhere to a set of business rules that are deemed to be consistently effective.

Psychosocial Capabilities: Our study uncovered three primary aspects. Firstly, agency, or the perceived level of control over one's business, is positively correlated with quicker recovery from financial shocks. This may indicate a greater propensity to adapt swiftly and explore new revenue streams. Nonetheless, 40% of MSE owners reported having minimal or no control over their business operations. Secondly, a considerable portion of MSEs have demonstrated resilience, as 60% have been running their businesses before the Covid pandemic; unsurprisingly, 75% manifested a 'grit-type' response to challenges. Lastly, opportunities for peer learning appear limited, with half of MSE owners reporting little or no engagement with peers operating similar businesses.



Business characteristics and gender aspects

We dig into the sociodemographic and business characteristics conducive to a faster recovery. We found that business owner school attainment is positively associated with more rapid recovery from shocks. Employees. Having at least one paid employee is positively associated with faster shock recovery. Age and profit are also positively correlated with a quicker recovery. We conducted a sex-disaggregated analysis to explore gender inequality. We found four aspects—first, women-owned MSEs are less likely to tap into financial service providers in an emergency, as 18% would have access to it, compared to 28% of men—second, women-run businesses are younger, as the mean of years operating is four, compared to seven for men—a third, women-owned MSEs are less likely to use digital tools, as they use, on average, two whereas menowned enterprises use three—fourth, women run smaller MSEs: 42% have at least one paid employee, compared to 57% of men-owned MSEs.



Explorations on strategies to overcome shocks

On June 13th, 2023, BFA Global convened a diverse group of stakeholders to discuss MSE resilience. Stakeholders included a mix of practitioners and consultants (Mercado Libre, Solliv, Noahui Soluciones), government officials (Nafin and Banco de México), Strive Mexico implementing partners (Fundación Capital), and other MCIG grantees (Micromentor, FAIR Center, Fundes Catalyst, Common Cents Lab), academics (CIDE), NGOs, and philanthropic agencies (Nacional Monte de Piedad, Fundación ProEmpleo, Better Than Cash Alliance).

Based on their work, attendees discussed their reflections on the resilience of MSEs. Main takeaways include:

- 1. Risks and adaptation strategies change as MSEs grow (e.g., start paying taxes, employee rotation, etc.)
- 2. Entrepreneurial skills matter more for smaller MSEs.
- **3.** MSEs deploy an array of responses to overcome adversity.
- **4.**Collective action is needed to support MSEs better (e.g., consolidated purchases and peer learning).
- 5. Crime and extortion have become a main risk for MSEs.
- 6. Access to financial services remains a crucial variable for the resilience of MSEs.
- **7.** Income diversification, digital marketing, and acceptance of digital payments were cited as valuable strategies for MSEs.

This session included a hands-on exercise to explore resilience pathways for four distinct MSE segments dominated by women micro-entrepreneurs: shopkeepers, beauty salons, handicrafts, and small restaurants. Teams role-played as different service providers, addressing specific risks and coping strategies relevant to each MSE segment. Overall, risks ranged from tax issues and organized crime to supply interruptions and market challenges. Coping and mitigation strategies varied widely, including debt negotiation, digital training, supplier diversification, and various forms of financial support. The exercise highlighted the need for specialized solutions across different microenterprise segments.

Scenario 1.

Role: technology or digital provider | **MSE segment:** Women shop-owner microentrepreneurs (grocery store, stationery shop, etc.)

1. Risk

- Presentation before the tax authority
- Presence of organized crime
- Lack of connectivity and digitalization

2. Coping strategies

- Tap on credit or loans
- Prevent business growth
- Increase prices
- Migrate to another state or country
- Debt deferral

3. Mitigation strategies

- Increase marketing channels
- Grant promotions
- Receive training

4. Supporting services

- Offer commercial theft insurance
- Provide support against cybersecurity attacks
- Set up an emergency fund
- Give access to credits
- Provide financial services

Scenario 2.

Role: E-commerce platform

MSE segment: Women microentrepreneurs who sell handicrafts or beauty items

1. Risk

- Disruption of input supply
- Lack of quality standards
- Distance from demand
- Low sales volume
- Selling at high prices
- Limited time
- Non-compliance with regulations
- Business informality

2. Coping strategies

- Diversify input suppliers
- Formalize the business
- Incorporate delivery services

3. Mitigation strategies

- Turn to women's support networks
- Attend training on digital issues

4.Supporting services

- Help with product distribution
- Increase network outreach
- Provide financing
- Provide ongoing training
- Offer tools for management

Scenario 3.

Role: Financial Service Provider

MSE segment: Women

microentrepreneurs running restaurants

1. Risk

- Increased labor and input costs
- Increased competition
- Dependence on a one-person leadership
- Business informality
- Intermittent input supply
- Presence of organized crime
- Seasonality of demand

2. Coping strategies

- Use savings accounts or "savings under the mattress"
- Request a loan from support networks
- Seek training
- Ask family members and the government for help

3. Mitigation strategies

- Diversify products and suppliers
- Diversify sales channels
- Access financial services
- Incorporate delivery services
- Use social networks
- Take continuous training
- Create new leaderships

4. Supporting services

- Offer insurance against theft
- Provide point of sale terminals
- Give access to microcredits
- Give renewable lines of credit
- Generate solutions for inventory management
- Offer investment services
- Support cash flow management

Scenario 4.

Role: Government or NGO

MSE segment: Women microentrepreneurs with beauty salons

1. Risk

- Cash flow problems
- Increase in input prices
- Presence of diseases
- Need for home care

2. Coping strategies

- Buy lower priced products
- Lean on family members
- Apply for a family loan
- Request advances to suppliers

3. Mitigation strategies

- Take business administration courses
- Obtain renewable lines of credit
- Make consolidated or wholesale purchases
- Save on consolidated purchases

4. Supporting services

- Offer group insurance
- Establish wholesale clubs
- Generate a working capital financing program
- Give loans in kind

5. The way forward

As we look toward the future, we must continue refining our MSE resilience framework in the quest for MSE resilience. Given the comprehensive nature of the existing framework, our next phase will aim to deploy it in a more streamlined format in collaboration with partnering organizations. The refinement will involve reducing the number of questions in the survey while maintaining the rigor and multi-dimensionality of the assessment. This step is crucial for facilitating more extensive adoption and scalability, making it easier for stakeholders to implement the framework efficiently.

We aspire that this framework serves not only as a diagnostic tool but also as a compass that informs the ecosystem about the strengths and weaknesses of the MSEs they serve. We hope that this comprehensive approach will shed light on the unique challenges and opportunities each enterprise faces, thereby enabling stakeholders to design and implement targeted interventions.

Furthermore, the insights gleaned from this framework are expected to inform initiatives focused on MSEs, driven by various stakeholders from the private sector, development organizations, and governmental bodies.

Through this journey, we are committed to shaping an ecosystem better equipped to identify, measure, and enhance the resilience of MSEs, thereby creating a more inclusive and sustainable economic landscape for all.



Section 1. Shocks

In the past 12 months, have you suffered any kind of shock that reduced your business' revenue?

- 1. Yes
- 2. No

(If Yes) By how much was your business revenue reduced during that time?

- 1. A quarter
- 2. Half
- 3. Three-quarters
- 4. All of it.

What was the nature of the shock?

- 1. Crime or extortion
- 2. Increasing supply prices
- 3. Market competition
- 4. Supply chain disruption
- 5. Sickness or death
- 6. Economic downturn
- 7. Employee turnover
- 8. Other

How long did the shock last?

- 1. A day or less
- 2. A few days
- 3. A week
- 4. A few weeks
- 5. A month
- 6 A few months
- 7. Half a year to a year
- 8. More than a year

(If Yes to above). How long did the impact of the shock last?

- 1. A day or less
- 2. A few days
- 3. A week
- 4. A few weeks
- 5. A month
- 6. A few months
- 7. Half a year to a year
- 8. More than a year
- 9. Haven't recovered yet

Section 2. Coping mechanisms

[Coping mechanisms] What measures did you use to cope with the shock?

- 1. Used my savings
- 2. Borrowed money
- 3. Deferred payments to a later date
- 4. Laid off employees
- 5. Reduced business expenditures
- 6. Worked extra hours
- 7. Sold assets
- 8. Reduced household expenditures
- 9. Other

[Effectiveness of coping mechanisms] What measure helped you cope the most with this shock?

- 1. Used my savings
- 2. Borrowed money
- 3. Deferred payments to a later date
- 4. Laid off employees
- 5. Reduced business expenditures
- 6. Worked extra hours
- 7. Sold assets
- 8. Reduced household expenditures
- 9. Other

(If "Borrowed money chosen above) Who did you borrow money from?

- 1. Family or friends
- 2. Bank
- 3. MFI or co-op
- 3. Money lender
- 4. Pawn shop
- 5. Supplier
- 6. Other

Section 3. Financial capabilities

[Financial access] Which sources will you be able to source funds from for your business within a week in case an urgent financial need arises?

- 1. Bank
- 2. MFI or Co-op
- 3. Supplier
- 4. Money lender
- 5. Friends and family
- 6. Savings
- 7. Selling assets
- 8. Other

[Savings behavior] How regularly does your business set aside funds or resources as a buffer to cope with unexpected expenses or downturns?

- a) Very frequently Almost every week
- b) Frequently Multiple times per month
- c) Occasionally Once or twice per month
- d) Rarely Once every few months
- e) Never I never have any money left to set aside
- f) Never Unexpected expenses or downturns are infrequent or have never occurred

Section 4. Digital and operational capabilities

[Digital adoption] Select all the following digital tools that are used for your business:

- 1. Receiving payments from customers
- 2. Receiving orders from customers
- 3. Paying suppliers
- 4. Sending orders to suppliers
- 5. Social media for marketing
- 6. Social media for sales
- 7. Inventory management

- 8. Accounting
- 9. Invoicing
- 10. WhatsApp for marketing
- 11. WhatsApp for reminders/collections
- 12. Providing customer support
- 13. Other: _____

[Supply chain management] Think of all the major suppliers your business has. If it lost any of them, how easily could you restore the supply of that product?

- 1. Without any difficulty
- 2. With some difficulty
- 3. With major difficulties
- 4. Impossible to restore

Section 5. Entrepreneurial capabilities

[Record keeping] Which of the following does your business track meticulously? (i.e., there is a ledger or a notebook where transactionss are noted down soon after they happen)

- 1. Who owes you money
- 2. Who do you owe money to
- 3. Record of purchases from supplier
- 4. Record of sales to customers
- 5. Amount you take home
- 6. Bill payments
- 7. Other

[Business heuristics]. When your business faces difficulties, which do you do more of?

- 1. Trust your instincts
- 2. Use time-tested rules that almost always work
- 3. Ask a person I trust for advice

Section 6. Psychosocial capabilities

[Social network]. How many of the people you know run a business similar to yours?

- 1. Many of them
- 2. Some of them
- 3. Few of them
- 4. None of them

[Grit]. If you encounter a significant obstacle while pursuing a goal, what is your most likely response?

- 1. I usually switch to a goal that is more achievable because the destination is more important than the journey.
- 2. I sometimes try new approaches to reach the same goal, but if they don't work, I tend to modify the goal to make it more achievable.
- 3. I persist and try various approaches until I overcome the obstacle to reach my original goal, even if there is a chance it still won't work out.
- 4. I give up on the goal.

[Agency]. How strongly do you agree with the following statement: "I have a large degree of control over the current state of my business and expect to have the same in the future."

- 1. I strongly agree
- 2. I agree somewhat
- 3. Neither agree nor disagree
- 4. I disagree somewhat
- 5. I strongly disagree

Section 7. Sociodemographics

What year were you born?

What is your gender?

- 1. Female
- 2. Male
- 3. Other
- 4. Prefer not to say

What is the highest level of education you have completed?

- 1. Didn't complete primary
- 2. Primary
- 2. Lower secondary
- 3. Upper secondary
- 4. Undergraduate or postgraduate

Section 8. Business details

For how many years have you been continually operating this business?

How many people are you paying to help you to carry out your business?

What industry does your business primarily fall into?

- 1. Provision shop
- 2. Pharmacy
- 3. Fashion & accessories
- 4. Hair, beauty & cosmetics
- 5. Electronics & hardware
- 6. Café & restaurant
- 7. Food preparation
- 8. Handicrafts
- 9. Other

How many days a week do you run your business?

What is the average amount of sales per day?

From that amount, how much revenue do you make?

How much money do you usually take home from your business daily?

