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WOMEN ENTREPRENEURS FINANCE INITIATIVE

Supporting Women Entrepreneurs in Developing Countries:

WHAT WORKS?

Revisiting the Evidence Base

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A note on this paper

This paper summarizes the evidence base on women's entrepreneurship and serves as an update to the 2022 version, *Supporting Women Entrepreneurs in Developing Countries: What Works? A Review of the Evidence Base & We-Fi's Theory of Change.* It revisits the literature and reassesses the accuracy of previous ratings in light of new evidence published since 2022, with the goal of understanding how the field is evolving and where evidence gaps remain. The update follows the same methodology and structure as the original, with improvements in readability, accessibility, and transparency. A total of 185 new studies published between 2022 and 2025 were reviewed, 78 of which were assessed and included in the evidence gap maps. The paper's main contribution lies in conceptualizing and providing a dynamic overview of the literature on women's entrepreneurship, including evidence from We-Fi programs and beyond. It maps studies based on the strength and direction of their findings across various interventions and is intended as a resource for both researchers and policymakers/practitioners.

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Table of Contents

6 Acronyms and Abbreviations
7 Executive Summary

17 Introduction
Context and Case
We-Fi's Theory of Change
Purpose and Objectives
Methodology
Main Updates from 2022 Version

25 Evidence on Constraints For Women-Led Businesses
Access to Finance
Access to Skills and Networks
Access to Markets and Technology
Enabling Environment

45 Evidence on Access to Finance
Impact Pathways
Findings
Access to Finance Reference Materials

77 Evidence on Access to Skills and Networks
Impact Pathways
Findings
Access to Skills and Networks Reference Materials

99 Evidence on Access to Markets and Technology
Impact Pathways
Findings
Access to Markets and Technology Reference Materials

112 Evidence on the Enabling Environment
Impact Pathways
Findings
Enabling Environment Reference Materials

122 Summary on "What Works" and Evidence Gap Maps

131 Evidence Gaps and Research Opportunities

144 Annexes

Acronyms and Abbreviations

ADB	Asian Development Bank
AfDB	African Development Bank
EBRD	European Bank for Reconstruction and Development
FBS	Future of Business Survey
FI	Financial intermediary
GEM	Global Entrepre neurship Monitor
GIL	World Bank Gender Innovation Lab
IFC	International Finance Corporation
IDBG	Inter-American Development Bank
ILO	International Labour Organization
IsDB	Islamic Development Bank
MDB	Multilateral Development Bank
NGO	Non-Governmental Organization
PE	Private equity
SME	Small and medium enterprise
STEM	Science, technology, engineering, mathematics
ToC	Theory of change
VC	Venture capital
WBG	World Bank Group
WBES	World Bank Enterprise Survey Data
We-Fi	Women Entrepreneurs Finance Initiative
WEOF	Women Entrepreneur Opportunity Fund
WSME	Women-owned and led small and medium enterprise

Executive Summary

Women entrepreneurs drive economic growth, creating businesses that generate jobs, foster human capital development, and increase female labor force participation. Women entrepreneurs contribute to broader prosperity and innovation in their communities. Yet, they face considerable challenges in starting and growing their businesses. While the benefits of women's entrepreneurship and constraints facing individuals are well-understood, much less is known about which interventions are most effective to support women entrepreneurs. Understanding what works and what doesn't is critical to design evidence-based support programs and policies for women entrepreneurs.

This paper presents findings from a comprehensive literature review focused on women-owned and led small and medium enterprises (WSMEs). Structured around the Women Entrepreneurs Finance Initiative's Theory of Change, it synthesizes evidence across four key areas—finance, skills and networks, markets and technology, and the enabling environment—highlighting both what we know and where evidence gaps remain. Its main contribution is a conceptual and dynamic mapping of the literature, classifying the strength and direction of evidence across interventions. *Revisiting the Evidence Base* updates the original 2022 version, reassessing the accuracy of previous ratings in light of new evidence and highlighting shifts in the literature over the past three years. The updated review incorporates 185 newly published studies (2022–2025), with 78 of them rated and added to the evidence gap maps.

The most evidence exists in Access to Finance (40% of all rated papers) and Access to Skills (30% of all rated papers). A scale based on the number and quality of studies was used to classify the strength of evidence for specific interventions as strong, emerging, or limited. In areas with the strongest evidence, we observe the following:

- Financial products and services that address biases in investment and lending—such as alternative credit risk assessment methods like cashflow-based lending and psychometric testing—have proven effective in some contexts for overcoming the collateral constraints commonly faced by women entrepreneurs (see studies on pages 49-51).

- Digital financial services, such as mobile money, are emerging as promising delivery channels that can improve women's access to finance and business performance by overcoming time, mobility, and safety constraints (see studies on pages 58-59). Initial evidence also suggests they may enhance women's empowerment by increasing financial control and household decision-making power (see studies on page 63).

- Skills training is most effective when well-targeted, matching the type of training with the type of enterprise. While classroom-based, heuristics, and personal initiative trainings have proven to be effective for micro-enterprises in some contexts, tailored support like coaching, consulting, or mentoring show greater promise for enhancing the performance of larger firms (see studies on pages 80-87).

Moreover, digital training is the area where the highest number of new studies published between 2022 and 2025 could be identified. While digital technologies can reduce logistical barriers for women entrepreneurs to participate in training programs, evidence on their effectiveness remains mixed due to challenges with participation, scalability, and cost-effectiveness. Although technical barriers are lower than expected, ensuring highly relevant content is essential to ensure sustained participation and engagement.

Figure 1 highlights gaps in the evidence base and shows where evidence is limited (red), emerging (yellow) or strong (green). Researchers can use this to guide future studies, while policymakers can leverage it to identify targeted policy interventions.

Figure 1: Overview of evidence ratings[1]

Area	Intervention	Ratings (2022 vs. 2025)			
		Outputs	*Outcomes*	*Impacts*	*Notes*
A2F	Credit				*Mainly micro – with mixed evidence*
	Equity				
	Insurance				
	Timing: Early-stage financing				
	Delivery: Digital finance				
	Blended finance				*New research question added*
A2S	Business training				*Mainly micro – with mixed evidence*
	Personal initiative training				*Mainly micro – with mixed evidence*
	Consulting / Coaching				
	Mentoring				*With mixed evidence*
	Acceleration /incubation / STEM				
	Networking & P2P interactions				
	Delivery: Digital channels				*With mixed evidence*
A2M	Corporate value chains				
	Public procurement				
	Digital platforms				
	Sector access				
EE	Laws and policies				*Analysis focused on impact level*
	Social norms				*Analysis focused on impact level*
	Sex-disaggregated data				*Analysis focused on impact level*

Strong evidence
At least two sources of high quality and one of medium quality, or four sources of medium quality

Limited evidence
Only low quality sources; or insufficient medium/quality evidence to qualify for the previous categories

→ Shifted rating from 2022 to 2025

Emerging evidence
At least two sources of medium quality, or one source of high quality and two of low quality

No Evidence found
No sources found (may include cases where related evidence is provided)

1 We-Fi focuses on a wide range of interventions to increase the level of financing going to WSMEs, while also increasing their access to trainings, networks, markets, and technology (outputs). We-Fi aims to achieve sustainable capital flows from financial intermediaries to WSMEs, boost WSMEs business performance and growth, and establish a more data-driven approach to policy, intervention, and product design to support WSMEs (outcomes). In the long term, We-Fi intends to boost job opportunities, enhance business creation among women, and promote women's empowerment (impacts).

Where do Evidence Gaps Persist?

Although there is a growing body of literature on WSMEs, evidence on what works and what does not work to support WSMEs in developing countries is still limited, highlighting the need to strengthen the evidence base across the field. Most studies still focus on women's micro-entrepreneurship[2] or SMEs generally, without sex-disaggregated analysis of business outcomes— leaving women-owned and led SMEs underrepresented in the research.

Most studies are still in the area of Access to Finance (i.e. credit) and Access to Skills (i.e. business training), while Access to Markets, and the Enabling Environment are the focus areas with the least available evidence.

- **Access to Finance:** Key evidence gaps remain, including the effectiveness of larger SME loans on women's business performance and job growth—an important area, as many SMEs need financing beyond micro-level amounts to expand operations, upgrade technology, or enter new markets. Evidence is also limited on equity funding (e.g., venture capital, private equity) and alternative financing options such as angel investing, crowdfunding, and revenue-based financing. While initial non-experimental findings on blended finance are emerging, more research is needed to understand its role in driving institutional change and expanding resources for women's entrepreneurship.

- **Access to Skills and Networks:** Most research focuses on traditional classroom-based business training, with limited evidence on alternative approaches—such as specialized SME training—and the effectiveness of combining training with coaching, mentoring, and networking, particularly regarding design, delivery, cost-effectiveness, and targeting.

- **Access to Markets and Technology:** Most studies on corporate value chains, public procurement, and digital platforms are descriptive or comparative (mainly industry reports) highlighting the need for more rigorous academic research.

- **Enabling Environment:** Evidence on laws and policies is relatively strong, and emerging for social norms, but further research is needed to establish causality.

Evidence gaps on **long-term impacts** persist across all focus areas. It remains unclear how interventions affect job growth, women's business creation, and broader women's empowerment—likely due to studies lacking sufficient time frames to capture lasting effects.

2 Although the needs, growth, and dynamics differ between micro-enterprises and SMEs, studies on micro-entrepreneurship (always marked as such) should be acknowledged to derive lessons learned and identify interventions that can be tested with WSMEs.

More rigorous impact evaluations are needed, as are other types of data and methodologies, including non/quasi-experimental quantitative methods and qualitative methods, like ethnography and case studies —to build a richer understanding of what works to support WSMEs in developing countries. For specific evidence gaps and future research opportunities by intervention area, see Chapter 8. We-Fi collaborates with implementing partners, researchers, and other stakeholders to coordinate future research and strengthen the WSME evidence base.

How is the Literature Evolving?

Recent literature shows a growing focus on digital approaches, incl. on digital finance and digital training, reflecting increased interest in technology's role in supporting women's entrepreneurship. Evidence is also growing on financial product design (credit and equity), networks, mentoring, and the influence of social norms. In contrast, research on access to markets remains relatively stagnant, highlighting a persistent gap in understanding effective interventions in this area.

The following ratings were revised:

- **Credit**: From *emerging* to *strong* on outputs-level (design) based on several new studies on credit risk assessment, incl. cashflow-based and psychometric-based lending (see Chioda et al. 2024; Gruver et al. 2024; Buehren et al. 2024; Alibhai et al. 2022).

- **Early-stage financing**: From *limited* to *emerging* on outputs-level (design) based on new studies on acceleration and alternative financing options (see IDB Lab 2024; Cordaro et al. 2023; ANDE 2022), although these include mostly non-experimental studies.

- **Digital finance**: From *no research identified* to *emerging* on outcomes-level (business performance) and impacts level (women's empowerment) based on new studies on digital delivery channels (see Riley 2024; Lemma and Mlilo 2024; Heath and Riley 2024; Arraiz 2023).

- **Mentoring**: From *emerging* to *strong* on outcomes-level (business performance) based on new experimental studies in this area (see Germann et al. 2023; Lang and Seither 2022; Bakhtiar et al. 2022).

- **Networks**: From *limited* to *emerging* on outcomes-level based on new evidence on the effects of networks on women's business performance, though most remain non-experimental (Münch et al. 2023; Howell and Nanda 2023).

- **Digital training:** From *limited to strong* on outcomes-level (business performance) based on new experimental studies on the effectiveness of online trainings (see Cassidy et al. 2024; Asiedu et al. 2023; Estefan et al. 2023; Davies et al. 2023).

- **Social norms:** From *limited to emerging* on impacts-level (women's business creation) based on new—mostly non-experimental—studies on how social norms affect women's time use, entrepreneurship, and access to resources (see Görg and Jäkel 2024; Bento et al. 2023; Barsoum et al. 2022).

Where do we See Emerging Patterns of What Works?

The review identifies preliminary patterns on potentially effective interventions for supporting WSMEs, though evidence varies in strength and quantity and remains insufficient to draw firm conclusions. These early findings do not imply that other interventions are ineffective, as impacts may hide among evidence gaps where large-scale data gathering and impact evaluations have been hampered.

It is also important to note that in several areas, the evidence base remains mixed, with a number of studies reporting null or neutral effects. For example, research on microcredit and traditional classroom-based business training—mainly targeting micro-enterprises—shows inconsistent impacts on business performance. The long-term effects of business training on job growth, business creation, and women's empowerment also remain unclear, with limited positive outcomes observed in the medium term. Similarly, evidence on personal initiative training is inconclusive, with long-term effects appearing neutral for women. Also, while mentorship can have benefits for women-led startups and larger firms, evidence for its effectiveness among micro-enterprises is mixed, with some studies showing improvements in business practices but not necessarily in profits or growth. In the case of digital or remote training, although some studies show positive effects on women's business performance, they do not appear to significantly reduce costs and are challenging to scale without compromising quality and participation.

ACCESS TO FINANCE:

Credit: Alternative credit assessments that address bias in loan approval processes have shown promise in improving access to finance for women entrepreneurs. Flexible repayment terms and asset-based financing may further ease barriers, though more sex-disaggregated evidence is needed, particularly for SMEs.

Digital finance: Digital technologies can expand women's access to finance through direct transfers, greater privacy, and reduced pressure to share funds. While digital credit may boost women's business performance, its role in accessing traditional credit is unclear and carries risks like over-indebtedness or digital exclusion.

Blended finance: Blended finance, such as performance-based incentives, can help financial intermediaries exceed targets focused on women, justify resource allocation, and—when combined with technical assistance—build capacity, align stakeholder interests, and mobilize additional funding.

Female leadership: Greater female representation (i.e. more female investors, fund managers, and loan officers) can increase financing for WSMEs and help reduce the gender financing gap, though evidence is mixed and underlying dynamics need to be explored further.

Inclusive practices: Emerging evidence shows that systematized investment processes at funds and unconscious bias training at banks can help address biases and increase financing to women entrepreneurs. However, underlying social norms must also be considered.

Equity and Early-stage Financing: Mitigating investor biases, exploring alternative equity funding mechanisms (e.g., angel investing, crowdfunding, and revenue-based financing), and improving access to networks may contribute to narrowing the gender gap in equity funding, although further sex-disaggregated research is needed to better understand their effectiveness.

ACCESS TO SKILLS AND NETWORKS:

Targeting: Training programs vary widely, underscoring the need for segmented approaches in both design and evidence gathering. Strategies like self-selection, pricing, and funneling can help select the right participants. While traditional business training, heuristics and personal initiative training have shown effectiveness for micro-enterprises—albeit with mixed results—coaching, consulting, and mentoring may be more effective in enhancing the performance of larger firms. However, more sex-disaggregated studies are needed to better understand these impacts.

Digital training: Digital training can help women overcome logistical challenges—such as mobility constraints and caregiving responsibilities—to participate in skills development programs. However, evidence on its overall impact remains mixed, with ongoing challenges related to participation, cost-effectiveness, and scalability. Ensuring content relevance and sustained engagement is essential to realizing its full potential.

Training content: Emerging evidence shows that training programs that integrate content relevant to women's experiences (e.g., gender stereotypes, family responsibilities, or work-life balance) alongside SME-specific content (e.g., on public procurement or corporate value chains) impacts WSMEs' business performance positively.

Training delivery: Innovative delivery mechanisms of training programs (e.g., wraparound services like childcare services, peer and spousal support, and transportation) can make training programs more accessible to women entrepreneurs.

Networks: Networks are likely to play a central role for entrepreneurs, particularly for high-growth entrepreneurs, as networks may enable better access to finance and markets, but more sex-disaggregated research is needed.

Bundled interventions: Interventions that combine finance and training tend to be more effective in supporting WSMEs' business performance than finance or training alone.

ACCESS TO MARKETS AND TECHNOLOGY:

Sector access: Strong evidence shows that supporting women to enter more profitable, male-dominated sectors can reduce the gender earnings gap, with mentorship, spousal support, and role models increasing crossover likelihood.

Corporate and public procurement: Emerging (mostly non-experimental) evidence suggests that inclusive value chain programs can improve WSME business performance by expanding access to corporate and public procurement.

Digital platforms: E-commerce and digital platforms have shown promise in supporting WSMEs accessing regional and international markets and improving business performance, though more sex-disaggregated research is needed.

Digitalization: Access to technology and digital platforms can unlock business growth for women entrepreneurs by offering greater flexibility and autonomy—particularly in navigating time, mobility, and caregiving constraints.

ENABLING ENVIRONMENT:

Laws and policies: Strong evidence links gender-equal laws and policies to increased women's employment and entrepreneurship by both removing barriers and creating enabling environments (e.g., care services, parental leave, flexible work).

Social norms: Findings across diverse contexts show that social norms often limit women entrepreneurs from fully leveraging support programs for business growth. Access to mentors, role models, networks, and engaging family members in interventions has shown promise in helping navigate these norms and support WSME growth.

Sex-disaggregated data: Sex-disaggregated data is essential for understanding women entrepreneurs' challenges, building the business case, and informing support programs and policies. Effective strategies to address challenges to data collection and use still need to be explored (through initiatives like the WE Finance Code).

GENERAL INSIGHTS:

- **Segmentation and targeting**: Many studies report low average treatment effects with large standard errors, indicating considerable heterogeneity in outcomes within the same sample. This suggests that average effects may mask important subgroup differences, where an intervention could significantly benefit some participants while having little or even negative effects on others. The importance of segmentation and targeted approaches was already emphasized in the 2022 paper. In response, We-Fi, in collaboration with the Argidius Foundation, the Dutch Good Growth Fund, and ConsumerCentriX, has developed a segmentation framework specifically focused on WSMEs (forthcoming 2025). Effective segmentation also depends on the availability of sex-disaggregated data, as more granular approaches—including intersectional analysis—are only possible when sufficient and reliable data is accessible.

- **Contextual constraints**: The effectiveness of interventions often depends on underlying contextual constraints (e.g., intra-household norms). Engaging men in the dialogue and interventions may be essential to creating an enabling environment for women entrepreneurs.

- **Multi-faceted interventions**: Since WSMEs often face multiple constraints, addressing a single barrier is unlikely to be transformative. Combining complementary interventions (e.g., access to finance with training, or market linkages with digital tools) shows promise for improving women's business performance. However, optimal combinations and sequencing remain unclear, as testing multiple interventions and their interactions requires large sample sizes to detect differential effects.

1 Introduction

1.1 Context and Case

The Women Entrepreneurs Finance Initiative (We-Fi) was established in 2017 based on the idea that women-owned and led small and medium businesses (WSMEs) make substantial contributions to economic growth, and societal and environmental wellbeing—a notion backed up by a body of evidence that continues to grow.

The Global Entrepreneurship Monitor (GEM) 2020 survey[3] indicates that in low and middle-income countries, 17 percent of women are entrepreneurs, and another 35 percent aspire to become entrepreneurs. This means that over half of women in developing countries are existing or aspiring entrepreneurs, highlighting the economic growth potential and the essential role of entrepreneurship for women's economic empowerment (Elam et al. 2021; Mastercard 2022).

Women's economic empowerment not only promotes equity but also contributes to positive economic and societal outcomes. Growing evidence shows that supporting women-led businesses yields economic, social, and environmental benefits (Duflo 2012; Sajjad et al. 2020; Pal et al. 2022).

Women's entrepreneurship is critical for **economic growth**. A 2022 analysis by Citigroup estimates that, globally, over $2 trillion could be added to GDP if women started and scaled new businesses at the same rate as men do (Qin et al. 2022). We-Fi estimates potential economic gains between $5-6 trillion. The We-Fi analysis builds on the methodology used in the influential Rose Review, which found that, in the United Kingdom alone, £250 billion could be added to the national economy if UK women matched UK men in starting and scaling businesses (Rose 2020). A groundbreaking model by Chiplunkar and Goldberg (2023) illustrates that when gender-based distortions and barriers are removed, women entrepreneurs are able to start and grow more businesses. This highlights the potential economic growth driven by women entrepreneurs, not only through an increased number of women-led firms in the economy but primarily by boosting women's participation in the labor force. Data shows that women entrepreneurs tend to employ more women employees (Cirera and Qasim

3 The GEM questionnaire does not ask about formalization and includes micro-entrepreneurs and unemployed 'pushed' into self-employment, who might have different objectives than growth.

2014). Compared to men entrepreneurs, they hire on average 2.5 times more women in the early stages of their businesses and up to six times more as they become more established (Kauffman Fellows 2020).

Women-led businesses are also important for **human capital development and equity**. For example, a mixed-method evaluation of British International Investment's 2X challenge investments found that companies with active female founders or women in senior leadership roles, including boards or investment committees, show greater potential for positive impacts (e.g., on women employees, consumers, and supply chains) (British International Investment 2024). Moreover, a study by Delis et al. (2022) finds that female decision makers (such as small business owners and board directors in larger companies) lower within-firm wage disparity (difference between what decision-makers and average employees earn). Similarly, a study using Finnish data shows that female-owned firms have a 2-3 percentage point smaller gender pay gap than male-owned firms, although there are significant notable differences across industries. In ICT and business services, female-owned firms either eliminate or greatly reduce the gender pay gap, while male-owned businesses in these industries maintain a pay gap of about 10 percent (Kritikos et al. 2024).

Evidence also suggests that economically empowering women unlocks substantial **societal benefits** for the wellbeing and health of children, families, and communities, as women tend to spend a greater share of their income on education and health (Schiff et al. 2013; Sajjad et al. 2020). Women entrepreneurs are a critical source of knowledge, perspective, and innovation. They commonly operate businesses with social impact, as reflected in their strong presence in sectors such as healthcare, education, and services (GIL 2019). Women can play a crucial role in achieving the UN Sustainable Development Goals by providing innovative solutions to global challenges. Evidence shows that when female CEOs manage women-owned firms, their firms are more likely to engage in innovation activities (Prabowo and Setiawan 2021). Moreover, evidence suggests that the combination of female owners and female top managers promotes innovation, which in turn enhances a firm's value-added productivity (Azeem et al. 2021). Another analysis, based on data from 29 emerging markets, indicates that SMEs with higher gender diversity in firm ownership are more likely to exhibit higher firm innovativeness (Tonoyan and Boudreaux 2023).

Lastly, growing research shows that women play a critical role in driving **environmental benefits** and contributing to climate change mitigation and adaptation—in their homes, businesses, and communities. For example, companies with women in leadership positions are more likely to adopt sustainability practices and reduce carbon emissions based on data from

40 countries (Rjiba and Thavaharan 2022). GEM data suggests that in high- and middle-income countries, women entrepreneurs are more likely than men to adopt and prioritize sustainability strategies, while in low-income countries, they tend to be less aware of sustainability practices and the SDGs compared to their male counterparts (GEM 2025).

1.2 We-Fi's Theory of Change

We-Fi, as a collaborative partnership among governments, multilateral development banks (MDBs), and other stakeholders, has been designed to address the financial and non-financial constraints that WSMEs face in developing countries, including in the most challenging environments. We-Fi follows an ecosystem approach that links policy, legal, and regulatory reforms with private sector investments. We-Fi's Theory of Change (ToC) seeks to stimulate synergies across four focus areas:

- Access to finance
- Access to skills and networks
- Access to markets and technology
- Enabling environment

We-Fi's ToC hypothesizes how different interventions in the four focus areas (e.g., financing, training, technical assistance, policy reforms etc.) are intended to stimulate short-term outputs (e.g., higher number of women who received financing / were trained / participated in value chains etc.), medium-term business outcomes (e.g., business performance), and long-term welfare impacts (e.g., job growth, women's business creation, women's empowerment).[4] This four-pillared approach is designed to build an enabling entrepreneurship ecosystem for WSMEs, with activities aiming to reach WSMEs directly and support them indirectly by fostering behavior changes within financial intermediaries, governments, corporations, and non-governmental organizations (NGOs). It calls for a unique mix of funding, technical assistance, network-building activities, and policy dialogue to achieve these goals. We-Fi's ToC is holistic and offers many pathways to impact.

4 See Annex 1 for We-Fi's Theory of Change Diagram

1.3 Purpose and Objectives

To unlock opportunities for women through entrepreneurship and maximize the impact of interventions, it is important to regularly review existing evidence and understand knowledge gaps.

The first We-Fi evidence review was conducted and published in 2022. The purpose of this paper is to revisit the existing evidence on what works—and what does not—in supporting women entrepreneurs in developing countries, and to update the analysis based on new studies published between 2022 and 2025. The specific objectives and contributions of this paper include:

1. **Mapping new evidence and identifying key knowledge gaps** by using We-Fi's ToC as a framework

2. **Identifying promising interventions** that can maximize understanding and impact

3. **Providing a dynamic overview to track progress in literature** by analyzing the direction and strength of evidence

1.4 Methodology

The following three-step process is used to assess and map the evidence on the effectiveness of different interventions: 1) define hypotheses and research questions, 2) review and map evidence (incl. identification, screening, and rating of evidence), and 3) identify promising interventions and knowledge gaps.

Define hypotheses and research questions

To guide the research on existing evidence and ensure meaningful connection to We-Fi's ToC, six hypotheses were developed based on We-Fi's four focus areas specified in its ToC (H1–H6, see annex 2). The hypotheses either focus on direct impacts (H1, H3, H4, H6) on WSMEs or on indirect impacts through financial intermediaries (H2) or corporates (H5). Each hypothesis is then broken down into a set of research questions to explore linkages connecting various activities to outputs, outcomes, and impacts (R1.1–R6.4[5]).

5 In this paper, one additional research question (R2.0) was added to the list.

Review and map evidence

Identification: The search included academic as well as grey literature, including journal articles, briefs, industry reports, working papers etc. published in English. A total of 462 records were identified related to entrepreneurship, women, and low- and middle-income countries (not necessarily related to a specific research question). Sources included academic databases, targeted keyword searches on Google Scholar, snowballing from the bibliographies of key papers, and input from peer reviewers and expert consultations. The records reflect a range of methodological approaches and publication types. Some studies based in non-gender or non-low- and middle-income country contexts were also included if they were considered potentially relevant or applicable. A full list of records is available in the We-Fi Knowledge Portal.

Screening: All records were screened to determine whether they addressed a specific hypothesis and research question, and whether they aligned with the target population (women), segment (SMEs, MSMEs, micro-enterprises, startups), and geography (emerging markets). Records were also assessed based on their study design, as only robust empirical evidence was included in the evidence gap maps. In total, 189 studies were included in the evidence gap maps (78 of them added in 2025 update).[6] This includes experimental studies [67] incl. RCTs [54], quasi-experimental [13], as well as non-experimental studies [122] incl. systematic reviews, comparative and correlational studies[7]. Although the evidence gap maps heavily focus on quantitative studies, exploring if interventions work, they also include some qualitative studies to map the evidence on how and why interventions work.

Evidence related to each hypothesis and research question was then mapped to the impact pathways defined in We-Fi's ToC and information extracted focused on the type of intervention and the outputs, outcomes, and impacts. Data was also extracted about the publication type (e.g., journal, working paper, brief, report), year, study design (e.g., RCT, quasi-experimental, systematic review, comparative study), region/country, and target population (e.g., SMEs, MSMEs, micro, startups, financial intermediaries). Studies were categorized into four focus areas: 1) Access to finance; 2) Access to skills and networks; 3) Access to markets and technology; 4) Enabling environment. Within each of these focus areas, interventions were subsequently categorized into different types of interventions.

6 Data/information from excluded studies (e.g., non-gender-specific studies; policy briefs etc.) may be included in the general narrative of this report, as they can provide valuable insights into where more sex-disaggregated data or research is needed.

7 And non-experimental descriptive studies for research questions where other type of evidence is missing.

Rating: Each source of evidence on intervention effectiveness is systematically rated following the rating methodology developed by Dalberg Advisors and used in the MASSIF evidence mapping by FMO.[8] An overall confidence rating based on the relevance and quality variables led to a high, medium, or low score for each source. These scores were then integrated for all studies related to a specific research question to determine the overall strength of evidence (no evidence found, limited, emerging, strong) and direction of evidence (positive, mixed, negative) for each hypothesis and research question. This is then synthesized into evidence gap maps (see chapter 7).

Identification of promising interventions and knowledge gaps

Using the evidence mapping, preliminary patterns on interventions that may be effective in supporting WSMEs were highlighted (where evidence is positive). In addition, evidence gaps were identified, along with possible research opportunities and questions (where evidence is absent, limited, or emerging).

8 See Annex 3

Figure 2: PRISMA diagram (adapted)

Process steps	Number of studies	Updates	Criteria
Identification	Records from databases/registers and grey literature (n=462)	2022 review included 277 records 2025 review included additional 185 records	Relevance for gender / entrepreneurship / emerging market context (not necessarily related to one of the RQs) Variety of methodological approaches and publication types
Screening ◇ Intervention ◇ Population ◇ Segment ◇ Geography ◇ Study design	Studies excluded due to missing criteria (e.g., intervention) or study design (n=331) Total studies included in evidence gap maps (n=189)	2022 review included 107 studies (2010 – 2021) 2025 review included additional 78 studies (2022 – 2025)	Intervention match (respective research question) + population match (gender), segment match, and geography match Focus on robust empirical evidence; experimental studies (n=80) incl. RCTs, quasi-experimental and non-experimental studies (n=115) incl. systematic reviews, comparative and correlational studies
Rating and coding ◇ Publication quality ◇ Quality of method ◇ Impact	Total studies rated (n=189)	2022 review rated 107 studies (2010 – 2021) 2025 review rated additional 78 studies (2022 – 2025)	Overall confidence score for each study based on unweighted averages Rating synthesis for each RQ based on the direction and weight of evidence

Main Updates from 2022 Version

- **New studies**: 78 additional studies, published between 2022 and 2025 have been reviewed and rated (including academic as well as grey literature).

- **Methodology**: The same methodology has been used for the 2022 and 2025 version. For transparency and accessibility, an overview of the studies included in the evidence gap maps have been added in annex 4.

- **Structure**: Although a similar structure is used, some research questions have been grouped for better readability and one new research question (R2.0) has been added. The chapter previously titled "COVID-19" has been renamed and integrated into a new chapter on "Macro-related Constraints," which now also includes evidence on other crises such as conflicts, economic downturns, and climate change. The chapter on access to finance has been restructured based on interventions and financial products (or types of financial institutions for indirect impacts). Similarly, the chapter on the enabling environment has been restructured and reordered to improve clarity and flow. Furthermore, where non-sex-disaggregated studies have been included (to highlight potential learnings and evidence gaps for women), these are clearly marked as such.

- **Segmented analysis**: All evidence is intended to be clearly marked and analyzed depending on the type of enterprise (e.g., micro-enterprises, SMEs, high-growth startups).

2 Evidence on constraints for Women-Led Businesses

This chapter outlines the evidence on the many constraints that women entrepreneurs are facing. It gives an overview of the well-evidenced financial, human capital, and contextual constraints that hamper WSMEs' entry and growth potential. Generally, there is strong evidence on these multifaceted constraints based on local or regional studies[9] and global evidence reviews.[10]

2.1 Access to Finance

A myriad of studies suggests that access to finance is one of the main challenges women entrepreneurs face.[11] On average, women entrepreneurs have less access than men entrepreneurs to financial services, including debt and equity financing. Accessing finance is particularly difficult for women entrepreneurs in the "missing middle," where businesses are too big for microfinance institutions and informal investors but too small and risky for banks and venture capital (VC) and private equity (PE) firms. WSMEs receive a disproportionately small percentage of the already limited financing available for SMEs (Schiff et al. 2013). The World Bank's International Finance Corporation (IFC) estimates that 70 percent of WSMEs in developing countries are unserved or underserved by financial institutions (IFC 2017), resulting in a total MSME[12] financing gap for women of $1.9 trillion (IFC 2025).

9 See MEDA 2020 (SSA); UN Women 2023 (Georgia); Care Ignite and Center for Inclusive Growth 2023 (Pakistan, Peru, and Vietnam); ADB and We-Fi 2023 (Pacific Region)
10 See Carranza et al. 2018; GIL 2019; Ubfal 2024
11 Country assessments: IFC and We-Fi 2020 (India); Bialus et al. 2022 (Vietnam), Kempis et al. 2023 (Kenya); Rose 2023 (UK); Rodríguez 2024 (Colombia); and many other global reports (see: https://We-Fi.org/evidence-base/)
12 Including micro enterprises

LOANS, CREDIT, AND OTHER BANKING SERVICES

Strong evidence shows that WSMEs have limited access to loans, credit, and other banking services. Globally, only 65 percent of women benefit from financial services (compared to 72 percent of men) and of the women who receive financial services, 73 percent are dissatisfied with them (Demirguc-Kunt et al. 2018). The gender gap in account ownership across developing economies has narrowed to six percentage points, down from nine percentage points, a gap that had remained consistent for many years (Global Findex Database 2021). However, a quarter billion women with an account report not having used it in the past year—on average, account inactivity rates are equal for women and men (Global Findex Database 2021). Pre-pandemic data shows that 16 percent of WSMEs worldwide reported dependence on bank loans, compared to 22 percent of SMEs owned by men (Skonieczna and Castellano 2020). Women entrepreneurs' limited access to loans is also seen in value chain or trade finance, which supports 80 to 90 percent of international trade.[13] SMEs, in particular WSMEs, face the greatest hurdles in accessing trade finance, often due to collateral requirements and knowledge gaps in trade finance instruments (DiCaprio et al. 2017). In developing countries, up to a third of SMEs face challenges in accessing trade finance (World Trade Organization 2016). Results of the Asian Development Bank's Trade Finance Gap, Growth, and Job Survey show that 45 percent of trade finance applications of surveyed SMEs are rejected by banks, compared to 39 percent for mid- and larger-sized firms. Women entrepreneurs face a rejection rate of 44 percent, notably higher than the 38 percent for male-owned businesses (ADB 2021).

Women face challenges in accessing (sufficient) credit due to traditional lenders' reliance on credit history, financial statements, and legal status. Collateral requirements, subjective credit assessments and biases, limited financial education, potential risk aversion, and lower confidence in applying for loans or trusting financial institutions further hinder women's access to financing.

- **Collateral:** One of the main constraints women-led businesses face in accessing finance is the gender disparity in asset ownership, restricting their ability to provide collateral[14], with a study in Bangladesh (Jaim 2020) showing that many women entrepreneurs must rely on their husbands to apply for loans on their behalf.

- **Biases and stereotypes:** Biases in credit assessments also contribute to the financing gap, as shown by an experiment in Turkey where 35 percent of 77 loan officers awarded women $14,000 less on average than men, although the study does not control for industry sector or other business characteristics (Alibhai et al. 2019). A lab-in-the-field experiment in Uganda found that loan officers from a large bank exhibited

13 Data from World Trade Organization, https://www.wto.org/english/thewto_e/coher_e/tr_finance_e.htm

14 See GPFI and IFC 2011; IFC 2014; We-Fi and World Bank 2021; ADB 2023

discrimination against individual women entrepreneurs but showed no gender bias when evaluating entrepreneurial teams (Barto et al. 2023). The authors argue that the bias against women entrepreneurs can be attributed to how loan officers assess implementation constraints (e.g., childcare, risk of gender-based violence) rather than business ideas. The bias was primarily driven by loan officers who preferred male borrowers. Even when presented with data showing that women were more reliable, these officers continued to discriminate—highlighting the influence of deep-rooted personal bias rather than misinformation (Montoya et al. 2024). A study of SMEs in 47 developing countries found that improved credit supply increases the likelihood of having a woman as a top manager—especially in finance-dependent industries and in countries with weak credit bureau coverage and low bank competition—suggesting that both statistical and taste-based discrimination against women borrowers contribute to the gap (Amin and Gomez 2024).

- **Risk aversion, self-selection, and self-judgment:** A study using World Bank Enterprise Survey data found that risk aversion reduced women's likelihood of applying for credit by approximately 20–30 percent (Morsy et al. 2019). Another study suggests that during times of financial uncertainty, women's greater risk aversion may lead to more cautious loan applications, potentially increasing their chances of approval (Cowling et al. 2020). Women may also experience heightened self-assessment and anticipatory self-exclusion, refraining from applying for credit due to expectations of rejection or perceptions that the process would be futile given anticipated unfavorable loan terms or perceived lack of creditworthiness (Elam 2018). Analyzing data from over 80,000 Spanish firms, de Andrés et al. (2021) found that women entrepreneurs were less likely to apply for credit and faced lower approval rates in the founding year. However, this gap narrowed as firms built financial histories

As a result, women who secure funding often receive smaller loan amounts and face higher interest rates, likely due to perceived higher risk. For example, global data from PitchBook and the Global Banking Alliance for Women shows that loans to women are, on average, one-third lower than those to men (GBA 2015).

Digital financial services, delivered by banks or fintech companies, have the potential to promote women's financial inclusion and increase financing to WSMEs. COVID-19 accelerated the use of digital financial services in developing economies with around 40 percent of adults who made digital merchant payments and over a third who paid utility bills directly from an account did so for the first time after the pandemic began (Global Findex Database 2021). However, there is a substantial 'fintech gender gap,' with 29 percent of men and only 21 percent of women utilizing

fintech services (Chen et al. 2023). Survey data from 114 fintech companies across 17 countries shows that women make up less than 25 percent of customers at many firms, with even lower representation among business clients and lending-focused fintechs (IFC and We-Fi 2024).

- **Digital infrastructure and connectivity:** Women have limited access to digital infrastructure, like mobile phones or the Internet, due to affordability, safety, and security concerns. According to estimates by Groupe Speciale Mobile Association (GSMA), there is a 10 percent gender gap in mobile phone ownership and a 26 percent gap in mobile internet access in low and middle-income countries, with gaps of up to 70 percent in South Asia (GSMA 2019).

- **Digital literacy and skills:** There is also a lack of awareness or perceived relevance of available technologies and digital financial services technologies, and a lack of digital financial literacy and skills (GSMA 2023). According to GEM data, 47 percent of women entrepreneurs in 2023 reported that digital tools were not necessary for their businesses (GEM 2024).

EQUITY FINANCING

The gender financing gap is especially apparent in the equity financing space. In emerging markets, only 11 percent of seed venture capital goes to women-owned startups (IFC, Oliver Wyman and Rock Creek 2019). PitchBook data shows that in 2024, only 2 percent of global venture capital went into all women-founded companies in the US.[15] In Europe, the 2023 European All In: Female Founders in the VC Ecosystem report highlights that the share of venture capital deals for women-only founded startups in Europe has increased from 2.7 percent in 2008 to 5 percent in 2024. Some of the funding differences in venture capital can be attributed to the types of businesses and markets women tend to enter, but evidence shows that women still face bias even when leading businesses in high-growth sectors that typically attract strong interest from venture capital and private equity investors.

- **Investor biases:** Research using experimental and observational data finds strong evidence that investor biases and stereotypes contribute to the systematic underfunding of women entrepreneurs—often driven by perceptions that WSMEs are riskier or that entrepreneurship is inherently male (IFC, Oliver Wyman and Rock Creek 2019; Fackelmann and De Concini 2020). A quantitative study using administrative data from France found that the gender gap in high-growth entrepreneurship widens along the entrepreneurial pipeline, driven in part by sectoral self-selection and context-dependent investor stereotypes (Hebert 2023).

15 See https://pitchbook.com/news/articles/the-vc-female-founders-dashboard

Brush and Elam (2024) found that the gender of a CEO does not predict the amount of funding raised or firm performance, whereas legitimacy markers such as elite education, external endorsements, and high-status investors do — suggesting that investors who underestimate women CEOs in VC-funded firms risk overlooking strong investment opportunities.

The gender financing gap in debt and equity may be partly linked to the underrepresentation of women in senior roles across banks, fintechs, venture capital, private equity, and angel investing. Only 8 percent[16] of senior positions in emerging market venture capital and private equity firms are held by women (IFC 2019). Only 3 percent of venture capital and private equity flows to female fund managers (GenderSmart 2021). Moreover, early-stage funds in emerging markets are a relatively new phenomenon, and raising capital presents significant challenges, particularly for women-led funds (Women in African Investments 2024; 2X Global and Sagana 2024). Also in angel investing there is a continuing low proportion of female angel investors, with women making up only 14 percent of angels in the UK (UK Business Angels Association 2022). Female leadership in banks and fintechs also remains low in most of the world. In 2019, the proportion of women in leadership roles in financial services firms stood at 22 percent (Rogish et al. 2019). The Fintech Diversity Radar for Growth (2022) found that of the 1,032 fintech firms analyzed, only 16 were funded solely by women, which received just one percent of total fintech venture funding. Less than six percent of CEOs are women, as are less than four percent of CIOs or CTOs (Fintech Diversity Radar 2022). Ceccarelli et al. (2023) examined the "glass ceiling" effect among high-earning senior bankers and found that, despite outperforming their male peers, women faced barriers to promotion due to slower advancement rates.

16 Excluding China

2.2 Access to skills and networks

Another factor that holds women entrepreneurs back is their limited access to knowledge, skills, and networks. Evidence shows that, compared to women, men entrepreneurs tend to have higher **technical, financial, and management skills** and are also more likely to demonstrate confidence in their abilities (GIL 2019). Women only make up about 35 percent of STEM (science, technology, engineering, and mathematics) students in higher education worldwide. However, there are significant variations across regions and disciplines. For instance, in computer science and engineering, women's representation is even lower, typically around 16 to 25 percent (UNESCO 2017). In the domain of business-related socio-emotional / soft skills (e.g., leadership, negotiation, critical thinking etc.), women may also face disadvantages. A study using data from 41,873 individuals across 17 African countries found that men had significantly higher socio-emotional skills—by 0.151 standard deviations—especially among those with higher education. While these skills are linked to higher earnings for both sexes, interpersonal skills are more strongly associated with earnings for women (Ajayi et al. 2022).

Moreover, women are less likely to participate in **entrepreneurship support programs,** such as incubators, accelerators, or specialized trainings (e.g., in STEM). For example, a Global Accelerator Learning Initiative (GALI) study analyzing data from over 300 accelerator programs (2013–2018)—75 percent of which were from emerging markets—found that 52 percent of founding teams were all male, 35 percent were mixed-gender, and only 13 percent were composed entirely of women entrepreneurs (GALI 2020). Growing evidence shows that this imbalance may be due to the time-intensive and demanding nature of entrepreneurship support programs, which can be problematic for women entrepreneurs with family obligations (Armitage and Feldman 2017). Academic research also suggests that the key on-ramps into startup support programs may materialize long before a founder considers applying, namely during college and graduate school as these are settings where early networks are formed (AbdelAzim and Barto 2020).

Growing evidence also indicates that women tend to have smaller and less diverse networks than men (Loscocco et al. 2009), mostly comprised of other women (Klyver and Terjesen 2007). Women usually rely on networks with "strong ties" such as family, friends, or colleagues when starting a business. Data also shows that women entrepreneurs are less likely than their male counterparts to know at least one entrepreneur—a factor that doubles the likelihood to start a business (Rose 2020).

2.3 Access to markets and technology

Another barrier blocking women from starting and growing a business is limited access to markets through **corporate value chains and public procurement.** WSMEs are heavily underrepresented in regional and global value chains as well as public procurement (Chin 2017). According to WEConnect International, globally, women-owned businesses earn less than 2 percent of the money spent on products and services by large corporations and governments (Vazquez and Frankel 2017). Public procurement accounts for around one-fifth of the GDP in developed countries and 40 percent of the GDP in least developed countries, yet it is estimated that women entrepreneurs supply only 1 percent (International Trade Centre 2020). Companies find it challenging to obtain data and identify procurement-ready women entrepreneurs, while WSMEs face multiple barriers to procurement opportunities. Several reports state that the lack of contacts, information, and networks of women entrepreneurs is a major impediment to becoming suppliers in corporate and public value chains (International Trade Centre 2020; We-Fi, WEConnect, and World Bank 2020; We-Fi and IFC 2021). The time-consuming application process can be particularly challenging for women with time limitations due to competing family and childcare responsibilities. Moreover, enterprises in supply chains are often in need of working capital to bridge payment gaps, but bank requirements make it hard for WSMEs to receive working capital loans (Chin 2017, We-Fi and World Bank 2020).

Women entrepreneurs face significant barriers when entering and growing businesses in **male-dominated sectors,** such as STEM, construction, or climate-related industries. These challenges are shaped by persistent social norms, structural biases, and limited institutional support. A study by Adikaram and Razik (2023) on STEM women entrepreneurs in Sri Lanka highlights how deep-rooted cultural expectations and stereotypes lead to limited access to networks, funding, and legitimacy, as well as challenges in balancing work and family responsibilities. Similarly, Campillay (2024) examines women-led STEM MSMEs in Chile and identifies key barriers to participating in global trade, including gender bias in business environments, inadequate financing, outdated regulatory frameworks, and difficulties harmonizing professional and domestic roles.

Women-led businesses generally participate less in **international trade** than men-led enterprises.[17] A 2024 study using Women, Business and the Law data identified 504 legal provisions across 145 economies that create unequal conditions for men and women to participate in international trade (Laperle-Forget and Cuneo 2024). Women face challenges in accessing trade finance—due to high capital and collateral requirements—and often have lower literacy levels, limited knowledge of cross-border trade procedures, and exclusion from distribution networks. Moreover, higher

17 Regional reports: Sekkel 2020 (Canada); Warren et al. 2021 (Brazil); OECD 2021 (OECD countries); Jean Clarisse et al. 2022 (Philippines)

trade costs impede smaller businesses' access to international markets more than large firms, which impacts women who tend to own and lead smaller businesses. Based on a qualitative study in OECD countries, women-owned firms are highly represented in services sectors, which are generally less involved in direct trade than manufacturing (OECD 2021). According to GEM data, the gender gap in leading high-export businesses is smallest in low-income countries, where women are approximately 15 percent less likely than men to export—though participation rates remain low overall, at just 3–4 percent for both women and men (GEM 2024).

Women entrepreneurs also experience barriers in **accessing digital technologies and platforms,** like e-commerce, due to limited access and use of digital infrastructure or limited digital literacy and skills. Survey data from 96 low- and middle-income countries show that while 92 percent of women own smartphones, 45 percent lack regular internet access—limiting their business and financial inclusion (Cherie Blair Foundation 2025). Women without smartphones are far less likely to use social media for business or have financial accounts. Safety concerns also hinder access, with 62 percent of those affected having faced online harassment (Cherie Blair Foundation 2025). Evidence shows that women and girls are 25 percent less likely than men to use digital technology for basic purposes, four times less likely to know how to program computers, and 13 times less likely to file for a technology patent (UNESCO and EQUALS 2019). Due to this digital gender gap, women entrepreneurs may encounter difficulties transitioning toward digital platforms, like e-commerce, or AI tools. Data from the Cherie Blair Foundation (2025) shows that women with consistent internet access are 2.5 times more likely to use AI tools, and while WhatsApp (88 percent) and Facebook (74 percent) are the most used platforms for business, yet e-commerce adoption remains low, with only 31 percent using platforms like Amazon, Alibaba, or Jumia. However, studies on the COVID-19 pandemic demonstrate that women do exhibit significant digital adaptability. Women-led businesses were more likely than men-led businesses to increase their use of digital platforms (Iacovone et al. 2021), with women business leaders 10 percent more likely to establish an online presence (Facebook, OECD, and World Bank Group 2020). GEM data shows that approximately 65 percent of women entrepreneurs in low-income countries planned to adopt more digital tools for their businesses, compared to a global average of 50 percent (GEM 2024).

2.3 Enabling environment

Contextual constraints—such as legal and regulatory barriers, restrictive social norms, care responsibilities, gender-based violence, and broader macro-level challenges like conflicts, pandemics, and natural disasters—can disproportionately disadvantage women entrepreneurs and limit their growth opportunities.

Globally, women have only two-thirds of the **legal rights** of men and nowhere in the world do women have the same legal rights as men in all of the indicators measured by World Bank's Women, Business and the Law (2024). Although countries across the world have made progress in enacting laws to provide equal opportunity for women, half of humanity—3.9 billion women worldwide—face legal barriers affecting their economic participation (Women, Business and the Law 2024). In many countries in the developing world, women do not have equal rights to travel outside the home, own property, prove their identity, register a business, sign a contract, or open a bank account.[18] A number of countries have banking laws discriminating against women's ability to apply for loans or credit without a signature from a male family member or legislation that prevents women from building up capital or owning assets (e.g., unequal divorce laws, inheritance laws, and lack of land rights). To date, of the 190 economies studied in the Women, Business and the Law 96 economies still lack a law that explicitly prohibits discrimination in access to credit, while 76 still restrict a woman's property rights. 41 economies still differentiate inheritance rights between sons and daughters, and 43 economies still do not grant equal inheritance rights to male and female surviving spouses (Women, Business and the Law 2024). Moreover, customary laws such as restrictions imposed on interacting with men who are not family members can also pose significant barriers for business registration and licensing (Nesbitt-Ahmed and MacLean 2017).

Findings across numerous studies show that **social norms** often influence perceptions about women's and men's suitability and ability to successfully run a business (Jayachandran 2020; Irene et al. 2021; Onoshakpor et al. 2024; Marcus and Somji 2024). A 2023 survey of 700 women entrepreneurs from more than 70 low- and middle-income countries indicated that nearly half of women entrepreneurs (49 percent) reported that they had faced discrimination and over a quarter (26.1 percent) of respondents said they are not taken seriously or they are not seen as good entrepreneurs because they are women (Cherie Blair Foundation 2023). A study by Bursztyn et al. (2020) found that young married men in Saudi Arabia largely supported women working outside the home but significantly underestimated peer support for this view. Correcting this boosted support for wives' job searches and increased women's job applications and interviews. Similar effects were seen when women learned about broader

18 Although restrictions remain high, significant progress has been made over the past five decades in areas such as registering a business, signing contracts, and opening a bank account.

social support. Another study across 27 countries in Central and Eastern Europe and Central Asia found that women and men entrepreneurs respond differently to regulations. Women benefit from rule-following but face negative effects when engaging with regulators—unlike men, who tend to benefit from such interactions—highlighting how regulations can unintentionally reinforce gender bias in business (Vershinina 2022). Moreover, also cultural norms such as religion can affect the gender gap in entrepreneurship (Avnimelech and Zelekha 2023). Social norms likely play a role in limiting women's access to finance. For instance, a study using World Bank Enterprise Surveys data from 61 countries shows that while women-led businesses are as likely as men-led firms to apply for and receive credit, they typically receive smaller loan amounts—despite similar risk, profitability, and productivity—indicating gender-based financial constraints, particularly in countries with stricter social norms (Grover and Viollaz 2025).

Women's ability to start and grow a business can also be restricted by **care responsibilities and domestic work** (e.g., childcare and elderly care) for which women spend nearly three times the amount of time as men (ILO 2018; Taylor et al. 2023). More than three-quarters of all unpaid care work globally is carried out by women (DCED 2022). In many countries, women entrepreneurs face additional challenges as they are often excluded from childcare leave policies and have difficulty accessing affordable, high-quality childcare services (ILO 2022). This limits the amount of time women can dedicate to their businesses and often requires them to stay home or operate their business from home. The COVID-19 pandemic further increased the domestic burden on women due to school closures and family illness (GEM and We-Fi 2023). For example, a World Bank study showed that women with children were more affected by school closures, taking on more domestic and caregiving responsibilities (Goldstein et al. 2022). Similarly, data from a survey by the Cherie Blair Foundation shows that nearly half of the women entrepreneurs surveyed faced increased unpaid care work during the pandemic, with 19 percent reporting that it negatively affected their business performance or limited its growth (Cherie Blair Foundation 2023).

Another major constraint to women's ability to effectively run a business is **gender-based violence** (GBV). It can affect determinants of profits like women's choice of sector, business location, and networking. Legal protection against GBV is limited and the prevalence of GBV remains high worldwide. The World Health Organization (WHO) estimates that about one in three women worldwide has experienced either physical and/or sexual intimate partner violence or non-partner sexual violence in their lifetime (World Health Organization 2017). More than one in three countries lack legal protections against sexual violence (World Bank Group 2018). The potential risks of increased intimate partner violence (IPV) linked to

women's economic empowerment should not be overlooked. A recent study in Sub-Saharan Africa confirms established patterns, showing that women's employment and earning more than their partners are associated with a higher likelihood of IPV (Stöckl et al. 2021). GBV is also prevalent online. Survey data from the Cherie Blair Foundation (2023) found that 67.4% of respondents witnessed or experienced online GBV in the past year, with nearly half (45.4%) reporting some business impact, and 9.3% stating it significantly affected their operations.

Macro-related constraints, such as conflicts, pandemics, and natural disasters, can significantly impact entrepreneurs broadly, though these effects may be disproportionately more severe for women (IMF 2024). For example, **political unrest** universally impacts business owners, but women face unique challenges within patriarchal contexts. A study from Bangladesh shows that women's mobility is further restricted during periods of political instability due to heightened risks of GBV and harassment (Jaim 2022). This limits their ability to access customers or attend business events, negatively affecting business performance. Political turbulence also weakens their loan repayment capacity, as limited social networks reduce access to financial support. Additionally, gender stereotypes among bank managers—linked to other women's default histories—can further hinder their ability to secure loans (Jaim 2022).

Also **economic crises** seem to have a greater impact on women. An analysis of firm-level data from six Eastern European and Central Asian countries after the 2008 financial crisis revealed that firms with female top managers had higher exit rates and, although initially similarly impacted, faced greater long-term challenges compared to their male-managed counterparts (Ahmed et al. 2021).

There are several academic studies[19] and industry reports[20] that explored the impacts of the **COVID-19 pandemic** on women-owned and led firms in low- and middle-income countries and documented more severe consequences of COVID-19 for women entrepreneurs, whose younger and smaller firms were concentrated in the hardest-hit sectors. Various studies indicate that COVID-19 intensified credit and liquidity constraints for women-led businesses.[21] Hyland et al. (2021) found that women-owned firms were more likely to apply for loans during the pandemic but faced rejection rates over twice as high as male-owned firms. A study by Amin and Viganola (2021) shows that access to finance before the COVID-19 pandemic reduced the likelihood of sales declines, though the effect was weaker in firms with a higher share of female employees—especially in societies that emphasize women's caregiving roles over their professional contributions. One-third of women entrepreneurs reported during COVID-19 that increased care responsibilities hindered their focus on

19 See Apedo-Amah et al. 2020; Manolova et al. 2020; Ugaz et al. 2020; Goldstein et al. 2020; Hyland et al. 2021; Liu et al. 2021; Torres et al. 2021; O'Donnell et al. 2021; Elam et al. 2022; Campos et al. 2023

20 See ILO 2020; OECD and World Bank Group 2020; IFC 2021; Cherie Blair Foundation 2023

21 See Apedo-Amah et al. 2020; Hyland et al. 2021; Torres et al. 2021

business, affecting income generation (Facebook, OECD and World Bank Group 2020). Increased domestic responsibilities may also have contributed to greater mental health challenges for women entrepreneurs, as shown in a 2021 study from King's College London (Stephan et al. 2021). Despite these challenges, studies show that women-led businesses were less likely to receive public support compared to their male counterparts, often due to stringent eligibility criteria focused on revenue and collateral (Torres et al. 2021).

A growing body of evidence shows that the impacts of **climate change** and natural disasters (e.g., droughts, floods, hurricanes, extreme rainfall events, and rising sea levels) disproportionately affect the poorest and most marginalized groups, including women and girls.[22] Various studies underline that women entrepreneurs face a "triple differential vulnerability" to climate change: (1) they are disproportionately concentrated in sectors highly susceptible to climate impacts, such as agriculture and tourism; (2) they encounter systemic barriers to adaptation and mitigation, including limited access to finance, technology, climate-related information, and supportive policies; and (3) they often bear primary responsibility for managing climate risks at the household level. Climate change can have direct impacts on women entrepreneurs and the markets they operate in as well as indirect impacts on women's health, livelihoods, and time poverty, resulting in productivity losses. For example, in many regions, women bear the responsibility for care-related or household chores like securing food, water, and fuel. The depletion of natural resources due to deforestation, land degradation or drought may force women and girls to travel further from their homes in search of water or cooking fuel and provide for their families (UKAID 2021). Due to longer journeys, women have less time to work on their businesses or income-generation activities and are increasingly exposed to GBV outside the home (IUCN 2020; ICRW 2019; ILO 2017).

2.4 Performance measures

These constraints hinder equal representation of women in entrepreneurship (in particular in high-growth entrepreneurship and male-dominated sectors) and contribute to women being over-represented among the most vulnerable and smallest businesses. Recent data from the Global Entrepreneurship Monitor (GEM) shows that, globally, one-third of all entrepreneurs are women. In developing countries, women represent half of all entrepreneurs and one in three growth-oriented entrepreneurs (Elam et al. 2022). Also other studies document a gender gap in business ownership in many economies around the world (Meunier et al. 2017).

22 See UNDESA 2020; UNFCCC 2022; IPCC 2022; Gannon et al. 2022; Deiniger et al. 2023

FIRM CHARACTERISTICS (INCL. SIZE AND SECTOR)

Women entrepreneurs are more often found in the informal sector and operate less growth-oriented firms in **low-margin industries** such as retail, education, social services, and tourism, while men tend to dominate manufacturing sectors (World Bank Group 2021; Carranza et al. 2018). These sectorial segregations seem to be similar across countries.[23] Due to lower start-up costs and human capital requirements, female-dominated sectors tend to be more crowded and competitive, hence with lower profits and growth potential. As a result, women business owners are inherently constrained by the market conditions of their chosen sectors, alongside other constraints they face.

Various studies find that women tend to run smaller businesses in terms of sales, assets, and employment. On average, women-owned firms make up 20 percent of small businesses (with 10 or fewer employees) in the formal economy, but their representation drops to 10 percent among firms with 100 to 500 employees and to just 7 percent for businesses with over 500 employees (World Bank Group 2019). An important reason for **small size** could be related to sectoral choice, but also other reasons such as limited access to resources (Carranza et al. 2018).

Additionally, women's businesses are often **home-based** due to caregiving responsibilities or restrictive social norms, which can limit visibility and networking opportunities, potentially impacting firm performance. For example, a non-causal study of micro-entrepreneurs in Uganda found that 37 percent of female business owners brought children to work, compared to 0 percent of male owners. Businesses with children present earned 48 percent lower profits than other women-owned businesses without children (Delecourt and Fitzpatrick 2021). A study from the Netherlands indicated that childbirth reduced the business revenue of self-employed women by about 60 percent in the quarter of birth and 25 percent subsequently (Core and Karpati 2024). Similarly, a study from Canada found that childbirth significantly lowered women's business founding rates and start-up performance, contributing to the gender gap in entrepreneurship (Rutigliano 2024).

23 See Bardasi et al. 2011; Hallward-Driemeier 2013; Campos et al. 2014; World Bank Group 2021

DIFFERENCES IN ECONOMIC OUTCOMES

Many studies find that women-owned enterprises report lower average **profits and productivity** than enterprises owned by men.[24] Firms run by women have, on average, 34 percent lower profits than firms run by men (World Bank Group 2019). World Bank Enterprise Survey (WBES) data from 2006–2017, covering 130,000 firms in 130 countries, shows that women-led businesses are associated with 17.6% lower labor productivity and 1.7% lower employee growth, on average (Allison et al. 2021). Similarly, a 2020 study covering 128 developing countries found that labor productivity was about 11 percent lower among women-led than men-led firms (Islam et al. 2020). As stated above, some of the differences in performance can be explained by the type of firms women operate; the size and sector of the firm often explain a large portion of the differences in performance. The clustering of women entrepreneurs in low-margin industries means that profits and productivity hover around 50 percent that of men. In developing countries, men in male-dominated sectors, men in female-concentrated sectors, and women cross-overs have 134, 130, and 50 percent higher profits, respectively and on average, than women who have not crossed over into male-dominated sectors (Goldstein et al. 2019). However, many studies find that even after controlling for firm characteristics, there are still differences in performance. For example, a 2018 study on the Ghanian garment industry documented that, even within the same industry, men-owned micro-enterprises earned nearly twice as much profit as women-owned firms (Hardy and Kagy 2018).

Evidence shows slower **employment growth** (in terms of employment growth) and lower **survival rates** for women-owned businesses in both developed and developing countries. Business exit rates may also be influenced by personal factors like family responsibilities, experiences of GBV[25], or the decision of highly skilled women to pursue wage employment rather than entrepreneurship.

24 See Bardasi et al. 2011; Campos and Gassier 2017; McKenzie 2017; Carranza et al. 2018; Hardy and Kagy 2020; Okumu et al. 2024

25 Forthcoming paper by Delecourt, Papineni, Buehren, and Alibhai

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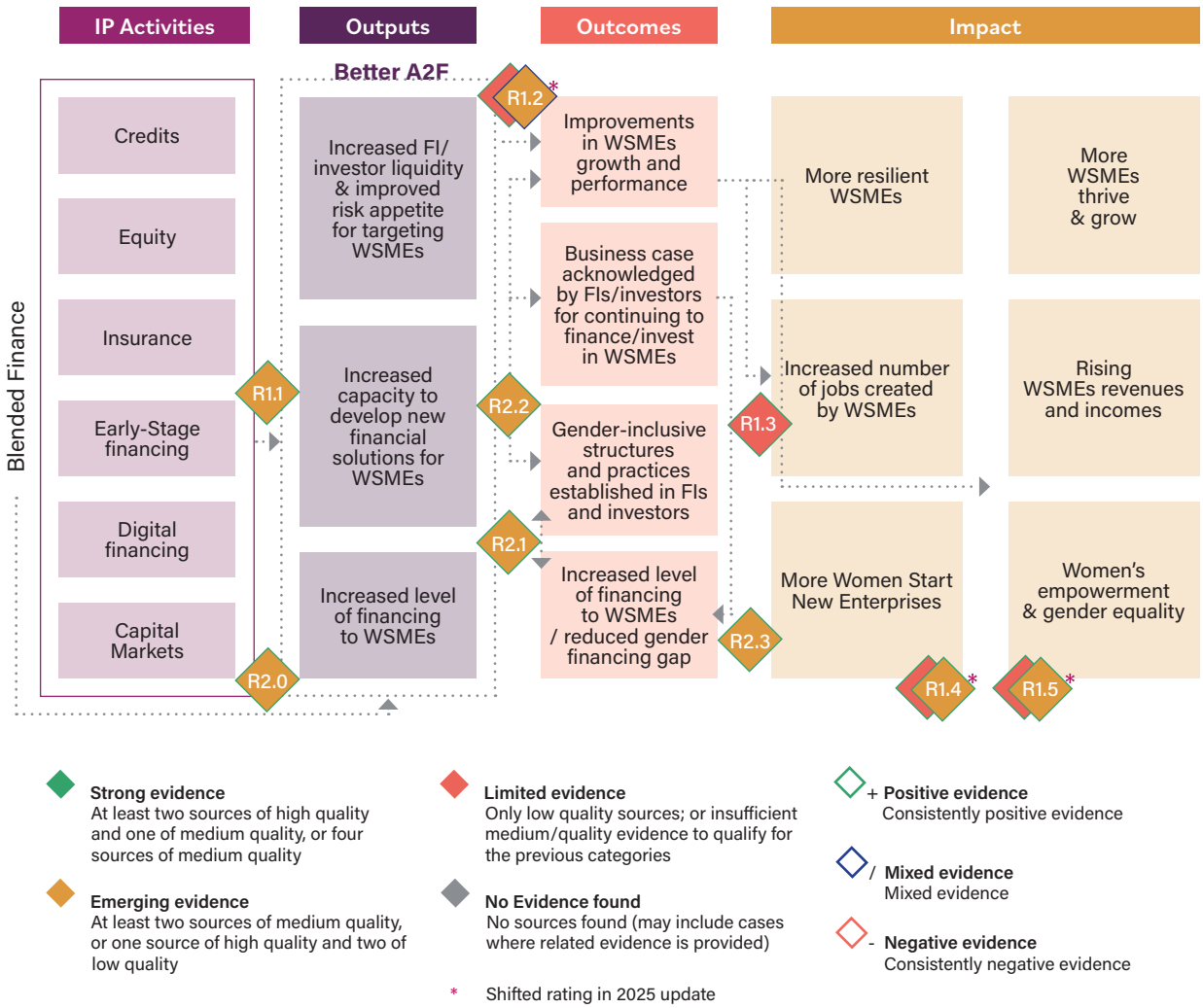
3 Evidence on access to finance

3.1 Impact pathways

This chapter summarizes evidence on what works to improve WSMEs' access to finance, using We-Fi's Theory of Change to map research questions (R1.1-R1.6 for direct outcomes and R2.0-R2.3 for indirect outcomes) to different impact pathways. It outlines the strength (strong, emerging, limited, no evidence found) and direction (positive, mixed, negative) of evidence for each research question, along with supporting sources.

Figure 3: Impact Pathways for Access to Finance



3.2 FINDINGS

DIRECT IMPACTS ON WSMES

H1	Improved access to finance for WSMEs (through more financing/ investment going to WSMEs and increased capacity of financial intermediaries to serve WSMEs) leads to increased business performance, job creation and women's empowerment			
R1.1	**Outputs: Does the availability of (tailored) financial products and services lead to better access to finance for WSMEs?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Credit	+		
	Equity	?		
	Insurance	+		
	Timing: Early-stage financing	+		
	Delivery channel: Digital finance	+		

R1.2	Outcomes: Does improved access to finance lead to increased business investment and growth for WSMEs?	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Credit (i.e., micro-credit, grants)	/		
	Equity	+		
	Insurance	+		
	Timing: Early-stage financing	?		
	Delivery channel: Digital finance	+		

CREDIT

There is ***strong (previously emerging) evidence*** that credit products designed based on the needs of women-led businesses increase their access to finance, although most of the existing evidence is focused on micro-credit for micro or small enterprises. Evidence on the effectiveness of **micro-credit** on women's access to finance and improved business performance remains ***mixed***. Only ***limited evidence*** could be found on **larger loans**[26] and lines of credit. New evidence shows that innovative credit products and services customized to the needs of WSMEs can enhance access to credit for women-led businesses, who tend to have lower default rates—highlighting that traditional risk profiles, often based on a less reliable male norm, could be improved through more inclusive models of credit assessment and loan design. For example, alternative credit assessment methods to collateral have been tested increasingly, showing that cashflow-based or psychometrics-based lending can be successful in enabling more WSMEs access more financing. Alternative financing models (e.g., asset-based lending, factoring) may be effective in increasing access to finance for SMEs, although no sex-disaggregated studies could be found.

Micro-credit

The traditional micro-credit lending model provides very small loans to micro-entrepreneurs based on group lending schemes. There is only ***limited evidence*** on whether micro-loans improve **access to formal financing** for women-led enterprises.

- For example, a large-scale micro-credit program in Rwanda, supported by a credit bureau, helped unbanked borrowers (many of them women) build credit histories, enabling many to transition to commercial banks and to access credit with better loan term (Agarwal et al. 2021).

Non-sex-disaggregated research: Academic research around different features of micro-credit has shown that the incentives given to borrowers to encourage on-time repayment, the timing and flexibility of repayments, and the flexibility of borrowers' contracts (e.g., loan size or interest rates) all have an impact on both business outcomes and loan default rates (and therefore, the possibility to access more loans). A J-PAL systematic review discovered that more flexible repayment terms—such as the option to defer repayments once or twice and extended grace periods—allowed firms (men- and women-led) to invest more effectively and better align their repayments with their cash flows, while default did not increase in three out of five evaluations of flexible microcredit products (Hou 2023).[27] A study

26 On average, over $100,000 for medium-sized enterprises, although the average loan size for an SME in emerging markets varies widely depending on the country, size, sector, and the lending institution.

27 Although this may not be appropriate for first-time borrowers (see Brune et al. 2022).

from a randomized controlled trial in India where borrowers could choose between a standard loan and a more flexible but slightly more expensive option also showed that offering both choices helped businesses grow without increasing loan defaults (Barboni and Agarwal 2023).

Much of the existing evidence and systematic reviews on micro-credit suggests that access to micro-credit does not translate into increases in *business performance and growth* (Bandiera et al. 2013; ILO 2014; Cai et al. 2023). While some studies indicate a positive relationship between access to micro-credit and improved business performance of women-led businesses, other studies indicate a lack of returns. For example:

- An econometric study in Bangladesh found that improved credit access and larger loan sizes significantly increased monthly turnover, with relaxed credit constraints boosting revenue by 6%—suggesting that easing financial barriers can enhance women's entrepreneurial performance (Khaleque 2018).

- A randomized controlled trial in the Philippines found that access to microcredit reduced the number of business activities and employees in both women- and men-led micro-enterprises, but improved household risk management and community ties (Karlan and Zinman 2011). This suggests a potential market failure in consumer credit, as business loans may be used for consumption smoothing.

Although there is little evidence on the impacts of micro-credit on the average borrower, several studies argue that the impacts vary depending on the type of borrower (Banerjee et al. 2019; Bryan et al. 2024). A randomized controlled trial by Crépon et al. (2024) in Egypt showed that the variability in effects of the same instrument among different entrepreneurs were more significant than the differences in outcomes between various types of instruments (such as in-kind or cash grants, or loans). Similarly, Cai et al. (2023) found that micro-credit typically did not impact business profits if the entrepreneur did not have any previous business experience. This shows that understanding *heterogeneous effects* of credit and segmenting female borrowers are key to improving the overall impact of lending. For example, using data from experiments in India, Sri Lanka, and Ghana, Bernhardt et al. (2019) showed important effect heterogeneity among female respondents, comparing those in single-enterprise households with those in multiple-enterprise households. The absence of a profit response for women-led enterprises in multiple-enterprise households reflected the fact that women's capital was usually invested into their husband's enterprise.

Lines of credit and larger loans

Evidence on the impact of lines of credit specifically focused on women entrepreneurs and larger loans is ***limited***.

- In Ethiopia, the World Bank's Women Entrepreneurship Development Project (WEDP) introduced a line of credit for growth-oriented women-owned enterprises. Among borrowers, 66% were first-time clients, yet repayment rates remained high at 99.1% (Alibhai et al. 2020). Firms receiving WEDP loans earned roughly 30% higher profits and employed 50% more workers than non-recipient firms (Alibhai et al. 2018). Additionally, firms that borrowed repeatedly tended to receive progressively larger loans (Buehren et al. 2024).

Trade Finance

Trade finance is distinct from traditional credit/loans in that it is directly tied to the movement of goods and services across borders and involves tools designed to mitigate risks like non-payment or delayed payment.[28] ***No studies could be found*** on the effectiveness of trade finance products on access to finance and business performance of WSMEs, although there is some evidence highlighting the gaps and importance of trade finance for WSMEs. The high number of rejected trade finance applications of WSMEs by banks indicates that alternative products and services are needed to provide WSMEs with trade or value chain financing (IFC 2024, World Trade Organization 2016). WSMEs are increasingly looking at fintech or development institutions as alternatives to traditional bank-facilitated trade finance. In Canada, for example, Export Development Canada (EDC) works specifically with WSMEs to provide them with not only trade knowledge and insights but also export credit and guarantees to secure international transactions, as well as credit insurance for exporting business owners to cover the losses associated with unpaid invoices.

Alternative credit scoring models

Standard lending practices and credit scoring models, which fail to account for factors such as limited borrowing history or disparities in property rights that disproportionately affect women, play a significant role in their struggle to access credit (Graney and Perlik 2024). ***Emerging evidence*** shows that using alternative data—such as mobile phone records or psychometrics—to assess creditworthiness can help financial institutions expand credit access to underserved groups, including women, while managing or even reducing risk.

28 E.g., Letters of Credit; Trade Credit; Factoring; Supply Chain Financing

Cashflow-based lending uses alternative data from bank account transactions, mobile phone usage patterns, or purchase habits to make credit decisions. It has shown effectiveness in overcoming collateral constraints and helping WSMEs access loans.

- In Nigeria, a We-Fi project with Access Bank introduced a cashflow-based lending product for SMEs, using business bank account transaction data to offer collateral-free loans to both male and female entrepreneurs (We-Fi and World Bank 2021). While more men received cashflow loans than women, those women who did receive cashflow loans received higher average loan sizes than men. A pilot RCT showed that women-led firms receiving a cashflow-based loan were 20 percentage points more likely to borrow from a formal source two years later—an effect not observed among men—suggesting the loan helps alleviate credit constraints for women (Gruver et al. 2024). The study also found that women-led firms receiving the loan had higher capital investment and inventory stock. Moreover, banks using alternative data were able to reduce or eliminate collateral requirements without affecting repayment rates or increasing non-performing loans.

- Similarly, an impact evaluation of a project by Kenya Commercial Bank (KCB) and Women's World Banking to increase lending to WMSMEs yielded comparable results. The impact on *business growth* is evident, with 70 percent of larger businesses, those with an annual turnover of KSH 6 million[29] and above, experiencing growth at an annualized average rate of 10 percent. Over the course of the project, lending to women-led businesses grew from 22 percent to over 50 percent of the MSME loan portfolio, without increasing the risks for the bank. The cashflow-based lending product has supported a more accurate evaluation of credit worthiness with non-performing loans (NPL) of 1.5 percent indicating that the methodology has enabled KCB branch staff to identify borrowers with strong repayment capacity while also expanding access (KCB Group and Women's World Banking 2020).

Psychometric lending, using psychometric credit tests to predict the likelihood that a business owner will repay a loan as an alternative to traditional loan assessments has also proven positive results.

- The World Bank 'Women Entrepreneurship Development Project' (WEDP) in Ethiopia tested psychometric credit scoring in a randomized controlled trial with Wasasa Microfinance and found that assignment to the treatment group (women who scored high enough on the test and were offered an uncollateralized loan) doubled the likelihood that a woman had accessed a formal loan (from 42 percent to 90 percent) (Alibhai et al. 2022). Women assigned to the control group were often

29 Approx. US$ 46,000

unable to access financing from other sources, despite having the same creditworthiness as those women randomly assigned to the loan offer. There was no evidence of an impact of the loans on profits. After the successful pilot in Ethiopia, the technology is now introduced in Zimbabwe, Madagascar, and Indonesia (GIL 2020).

- *Non-sex-disaggregated research:* An experimental study from Peru found that the use of psychometrics for SME lending increased loan use by up to 59 percentage points for applicants without a credit history (Arraiz et al. 2017). Moreover, an experimental study from Egypt showed that SMEs that received larger loans generally saw only modest increases in profits. However, when researchers utilized psychological survey data to categorize firms based on predicted performance (based on machine learning methods), the top-performing group experienced a 55 percent increase in profits, whereas the lowest-performing group saw their profits halve (Bryan et al. 2024). This suggests that better credit allocation, guided by psychometric data, could boost economic outcomes by focusing on the right type of borrower, not just the right type of business.

Moreover, other approaches can include other *transaction data* (e.g., mobile money, bill payments, rent, utilities), supplier and buyer transaction data, or social media analysis.

- Using data from a large FinTech lender in Mexico, Chioda et al. (2024) found that alternative digital transaction data effectively predicted creditworthiness for borrowers without credit histories. Segmenting the machine learning model by sex improved fairness in credit allocation without reducing accuracy. Notably, the sex-segmented model approved 2.6 times more women than the pooled model, highlighting the potential of tailored assessments to enhance financial inclusion.

Alternative financing models

Alternative financing options, combining debt elements with alternative financing models that provide a greater sharing of risk and reward could be particularly relevant for SMEs, including WSMEs. However, ***sex-disaggregated evidence is still largely missing.*** Findings from a field experiment in Pakistan, which did not disaggregate results by sex, indicated that *asset-based lending*[30], providing microcredit clients with the opportunity to finance a high-value business asset, significantly boosted business size, profits, and household consumption (Bari et al. 2024). Similarly, a market assessment of movable asset-based lending in Zambia showed that movable asset-based lending can enhance access

30 Based on a 'hire-purchase' agreement, in which the client's ownership share in the asset increases as repayments are made

to finance for SMEs but has yet failed to cover key segments like women-owned businesses (World Bank and We-Fi 2021). *Factoring*, a financial transaction in which a business sells its accounts receivable (invoices) to a third party at a discount, may offer a practical and accessible solution for women-owned businesses to bypass the requirements of traditional bank loans. However, no studies could be found on the impacts of factoring on access to finance and business performance of women-led enterprises.

GRANTS

Limited evidence could be found on whether grants (as a form of non-repayable credit) improve WSMEs' **access to finance.**

- Experimental evidence from Tunisia found that while cash grants had limited effects on the income generating activities of vulnerable women, they improved access to and use of financial services. Women in the treatment group were 8.5 percentage points more likely to have a bank account, had higher levels of savings, and were more likely to borrow and repay loans (Ferrah et al. 2021).

Similar to micro-credit, there is ***mixed evidence*** whether grants lead to **improved business performance** for WSMEs. While several meta-analyses summarize that access to grants may not lead to sustained increases in revenues or profits of women's micro-enterprises (Bandiera et al. 2013, ILO 2014), some evidence suggests that grants can improve women's business performance if certain conditions are met (e.g., in-kind grants or larger cash grants to be used for business investment). For example:

- Evidence from a randomized experiment focusing on women micro-enterprises in Ghana showed that in-kind grants (e.g., assistance in buying inventory or machinery) led to remarkable profit impacts for larger enterprises (Fafchamps et al. 2011).

- Other evidence suggests that while small cash grants are often used for household expenses, larger grants can significantly improve women's business performance. For men, no significant difference was found between the effects of cash and in-kind grants (Campos and Gassier 2017).

- Similarly, results from a non-sex-disaggregated experiment in Egypt where approved loan applicants either received a loan, an in-kind grant, a cash grant, or no support showed that in-kind grants performed best in increasing business profits (Crépon et al. 2020). Additionally, the study provides evidence that the individual heterogeneity of capital support provided, not the form, may be a larger determinant of impacts, indicating that advances in targeting are as important as adapting the design in financial products and services.

EQUITY AND EARLY-STAGE FINANCING

No evidence could be found whether access to **venture capital and private equity financing** (through gender-lens investing) helps WSMEs **access additional financing** (e.g., equity or loans). In emerging markets, early-stage funds are a relatively new phenomenon, resulting in limited data and research. Similarly, there is only ***limited evidence*** that **acceleration, angel investing, crowdfunding, or other alternative financing options** can help women entrepreneurs access financing and grow investment faster than non-participating entrepreneurs. Generally, evidence on the effectiveness of venture capital and private equity financing is lacking for both women and men in emerging markets.

Limited evidence and no ***rigorous studies could be found*** on the impact of equity financing finance on WSMEs' **business performance** compared to men-owned SMEs.

Ventures Capital (VC) and Private Equity (PE)

Available studies are mostly focused on African countries and are not generalizable due to small sample sizes and limited geographic coverage. Although there is no strong evidence, several sources indicate that funds might be better suited to serve SMEs in emerging markets than banks, as they often provide crucial managerial and entrepreneurial support to SMEs (FMO 2021). When looking at global trends, impact funds, gender-lens funds, and women-led funds are gaining traction, which may spur more and higher investments in WSMEs. Project Sage 4.0 indicated that the total capital raised for gender-lens funds by June 30, 2021 was around $6 billion—almost tripling the $2.2 billion figure reported in 2019 (Biegel and Hunt 2020). Additionally, new data suggests that the total number of funds could increase the market's size to an estimated $13.6 billion (2X Global and Sagana 2024). A report by 'Women in African Investments' addresses how local capital mobilization can support the emergence of women-led funds. It also discusses how alternative funding mechanisms, such as angel networks and crowdfunding, or alternative fund structures, such as evergreen funds or blended funds, can provide patient risk capital to SMEs with features like local currency, flexible instruments, and smaller investment sizes - options typically unavailable through banks or traditional funds (Women in African Investments 2024). Blended and evergreen funds with impact-linked incentives focused on advancing women's economic participation can target companies with different growth trajectories than those financed by traditional closed-end funds or eliminate fixed exit timelines (2X Global and Sagana 2024).

Evidence on how VC and PE funds in emerging markets help SMEs accelerate business growth is largely lacking.

Acceleration[31]

Emerging descriptive evidence—mainly from development institutions—explores whether and how accelerators help WSMEs **access additional financing,** but rigorous studies remain limited. Initial results on whether acceleration closes the gender financing gap are ***mixed***.

- Survey data from an IDB Lab study shows that women STEMpreneurs in Latin America who participated in entrepreneurship programs were significantly more likely to raise capital (78 percent vs. 58 percent) and raised up to 30 times more than those who did not (IDB 2024).

- Evidence from ANDE's Advancing Women's Empowerment Fund (AWEF) cohorts in Africa and Asia shows increased investment in women-led small and growing businesses compared to baseline levels. Moreover, acceleration may not prompt women to seek immediate financing but instead supports better investment decisions and helps them choose financing options aligned with their business needs (ANDE 2022).

- Survey data from the SHE Cambodia Entrepreneurship Incubator reveals that the most notable impact for women entrepreneurs was increased self-confidence, especially in seeking future financing. Notably, 22 percent of participants secured funding; a significant achievement compared to the 3 percent of Cambodian women entrepreneurs who typically access formal credit (Dutch Good Growth Fund 2023).

- A *non-sex-disaggregated* study conducted by GALI looked across 43 accelerator programs to show that entrepreneurs who participated in accelerators may be able to raise a higher amount of equity and debt than rejected ventures in emerging markets (equity +13 percent, debt +43 percent) (GALI 2017). However, results from another GALI study showed that acceleration removed the disadvantage that women face when raising debt but actually widened the gender financing gap in equity financing. Women-led ventures that participated in accelerators raised, on average, nearly $100,000 less in equity than men-led ventures (GALI 2020). This aligns with findings of a We-Fi, IFC, and Village Capital study, which found that men-led ventures increased their equity financing considerably more (1.5 times) than non-accelerated ventures, while women-led ventures experienced the same increase regardless of acceleration (IFC, We-Fi and Village Capital 2020).

31 More evidence on acceleration can be found in the Access to Skills chapter.

Village Capital implemented an innovative design feature to reduce gender bias in investment processes and increase financing for WSMEs. Their peer-selected investment methodology gives groups of early-stage, high-growth entrepreneurs the power to make a collective decision on who should receive investment. Village Capital tested the methodology in more than 70 accelerator programs, resulting in more than 100 seed-stage investments. These investments are significantly more diverse (46 percent female-led companies) than the traditional VC portfolio (15 percent female-led companies). Moreover, results from the study showed that the peer selection model mitigated gender biases in the investment decision-making process and was more effective at identifying future revenue performance, especially for women-led companies (Village Capital 2019).

Angel investing

A significant source of external funding for early-stage startups is angel investment, as angels are more likely to invest in risky phases and bring not only vital funding, but also business experience, advice, support, and connections. Evidence on the effectiveness of angel investing in improving **business performance** is ***largely lacking***—not only for women-led businesses, but for businesses in general. One of the key challenges may be the continuing low proportion of female angel investors. Research by the UK Business Angels Association shows that growing the number of female angels will directly increase the level of investment in women entrepreneurs (UK Business Angels Association 2022). Research on the state of angel investing in Africa, conducted by the Dutch Good Growth Fund (2021), similarly indicates an increasing presence of female angel investors and greater capital allocation to women-led enterprises; however, the effects of these investments on business growth outcomes remain unclear.

Crowdfunding

Evidence on crowdfunding is ***very limited.*** Crowdfunding is gaining traction and women have proven to be more likely to set up successful crowdfunding campaigns than men; however, these dynamics must be better understood for emerging markets.

- An analysis of 492 equity crowdfunding campaigns launched between 2013 and 2017 in Brazil, Chile, and Mexico showed that the involvement of at least one woman on the board increased campaign success rates in terms of the investors' average pledge and the target amount reached (Cicchiello et al. 2021). It did not increase the likelihood of a campaign being financed by a greater number of investors.

Non-sex-disaggregated research: Although not disaggregating data by sex, a World Bank study on East African startups showed that crowdfunding led to increases in revenue and created employment, on average, by 2.2 new employees per year following a successful campaign (infoDev 2017). Based on a conceptual model approach, Alva et al. (2023) propose that crowdfunding can be a crucial financial tool for entrepreneurs, particularly during crises like the COVID-19 pandemic. The paper also highlights the importance of supportive policies and building trust to enhance the effectiveness of crowdfunding.

Other financing models

Non-sex-disaggregated research: There is ***growing (but still limited) evidence*** that alternative financing models are needed for SMEs that can be particularly effective for WSMEs. *Revenue-based financing*[32] offers more liquidity than equity and higher returns than debt. This structure, where capital is repaid through a share of the business's revenue, suits businesses that are too risky for debt but unlikely to achieve the high returns expected by venture capital (Baird et al. 2018). Cordaro et al. (2023) explored impacts of *microequity and mutuality* in a randomized controlled trial with small firms in Kenya's food value chain and found that a new contract blending elements of loans and investments was the most successful among alternatives. Additionally, financing options like convertible loans or SAFE (Simple Agreement for Future Equity) agreements can be critical sources of funding, though no studies on their impact were found. Although these products show potential, there is currently no causal evaluation assessing their impact on the performance of women-led businesses (Ubfal 2024). Furthermore, for climate-focused sectors (e.g., energy), it is essential to investigate financing instruments that are more effectively tailored to the needs of WSMEs operating in these fields (Africa Trust Group and Shell Foundation 2023).

32 In this model, investors provide capital to a business in exchange for a percentage of the company's future revenue, typically over a set period until a predetermined amount (often a multiple of the original investment) is repaid.

INSURANCE

Evidence in the insurance space is still ***limited***. Helping women entrepreneurs mitigate risk in their business and personal lives through tailored insurance products and services may lead to better access to financing and improvements in WSMEs performance and an increased level of financing going to WSMEs; however, ***no rigorous studies could be found*** that explores this relationship.

- A 2015 IFC, AXA, and Accenture market research and modelling study with specific focus on 10 emerging markets suggested that new insurance solutions for WSMEs can help them manage their risks and also *access financing.* It outlines how the financial sector has increasingly recognized the need for differentiated financial and insurance products and distribution strategies to serve women and WSMEs. For example, Kashf Foundation in Pakistan offers credit life insurance protection for microcredit loans to new women entrepreneurs by conducting pre-feasibility studies to assess their investment needs and earning potential. Intesa SanPaolo, an Italian bancassurer, recognized the need to provide business interruption and personal protection tailored for women entrepreneurs. It created the "Business Gemma" insurance policy and loan for which they received several innovation awards. Porto Seguro, one of the largest insurance companies in Brazil, added concierge services to its motor policy, "Auto Mulher", aimed at women. It includes 24-hour vehicle or home assistance and access to drivers who can pick up children from school. In India, Tata AIG developed the "Insurance Woman Policy," which offers women a helpline and discounts for health and wellness services. It also offers a family policy, which covers children's education in the event of the death or total disability of the policyholder. The same study argues that insurance provides WSMEs with a safety net that allows them to redirect their profits toward growth (e.g., technology investments, new employees) instead of using their savings to protect against business disruption (IFC, AXA and Accenture, 2015).

DIGITAL FINANCIAL SERVICES AND FINTECH

The rise of mobile money, digital banking, and fintech solutions promises to enhance financial inclusion (especially for women-led businesses in remote areas where traditional infrastructure may be limited), by simplifying loan applications, securing payments, and offering objective, data-driven credit assessments that bypass traditional gender biases. Most of the available literature focuses on women as individuals or on SMEs in general rather than WSMEs. ***Emerging evidence*** shows that digital technologies can offer new delivery channels to effectively deliver financial products and services (e.g., loans, grants, transfers) to women entrepreneurs. Digital credit[33] in the form of short-term, high-interest loans offered via mobile money has exploded in popularity across the world. Research from Nigeria reveals that 70 percent of WSMEs prefer to apply for loans via digital platforms such as mobile phones (We-Fi and World Bank 2021), while survey results among WSMEs from Zambia show that 71 percent use mobile platforms to receive payments and 61 percent to make payments (We-Fi and World Bank 2022).

Various studies illustrate how mobile money increases women's *access and use* of a range of financial products and services from which they were previously excluded.

- A study based on WBES data from 16 countries in Africa found that mobile money seemed to spur higher demand for more credit by women-owned firms, which was not observed for men-owned firms (Islam and Muzi 2020).

- A literature review of evidence from Indonesia and Bangladesh found that mobile banking helped women entrepreneurs access financial services by overcoming limitations in mobility, especially in Muslim countries (Nugroho and Chowdhury 2015). Similarly, a case study by TechnoServe Mozambique shows that digital financial services positively impact women by improving time management, mobility, and security. Specifically, 85 percent of women feel mobile money is safer than cash, and 73 percent believe using M-Pesa for loan repayments benefits their business by allowing them to avoid closing their business and missing sales for repayment meetings (Technoserve 2023).

- A synthesis paper by the Digital Credit Observatory reviewed the small but emerging evidence on the impacts of digital credit with studies from Africa, Asia, and Latin America and the Caribbean and documented very high rates of take-up compared to traditional micro-credit (Robinson et al. 2022).

33 Typically describes small, short-tenor loans delivered via mobile phone, but which can sometimes refer to any loan delivered through digital channels or credit services that leverage digital data loan decision-making (CGAP 2025).

There is new ***emerging evidence*** on how access to digital financial services impacts ***business outcomes*** of WSMEs and how digital loan disbursement can add elements of privacy and control over how women invest their money, resulting in higher business investments and profits.

- Results from an experiment in Uganda, in which female bank clients were randomly assigned to receive micro-credit in a mobile account versus in cash, showed that women who received the money in a mobile account had, on average, 15 percent higher profits and 11 percent more business capital (Riley 2024).

- A forthcoming study by Arraiz found that MSMEs in Mexico that received a loan from a fintech company experienced 19.4 percent higher sales growth after two years compared to similar businesses that were rejected. The impact was more pronounced among female clients, whose sales growth was 41.9 percent higher, likely due to the severe credit constraints faced by women in Mexico, which left those who were rejected with fewer alternative financing options (Arraiz 2023).

- Using firm-level data from Kenya, Tanzania, and Uganda, a *non-sex-disaggregated* study found a positive relationship between firm's mobile money use and purchase of fixed assets—a finding largely driven by SMEs (Islam et al. 2018). Using data from the World Bank Enterprise Survey on Kenya, Lemma and Mlilo (2024) found that women-owned businesses utilizing mobile money were able to significantly reduce their performance gap. Specifically, mobile money usage enabled them to overcome approximately 42.5 percent of the disadvantage associated with limited access to finance. In contrast, access to traditional financial services had no statistically significant impact on this relationship.

Lastly, it is important to highlight that digital loans also come with risks, as they do not require personal interactions and decisions are made by an algorithm (e.g., based on mobile money transaction history) instead of a loan officer. Evidence from Sub-Saharan Africa highlights the risks of entering into debt spirals via mobile credit due to low financial literacy and often opaque loan terms (Brailovskaya 2021).

Embedded finance

Although ***no rigorous evidence*** could be found, there is initial anecdotal evidence suggesting that when financial services like payment instruments or credit are integrated into the digital spaces like e-commerce or social media platforms, women entrepreneurs are more likely to take them up. A recent CGAP publication suggests that embedded finance in FMCG value chains may disproportionately benefit women micro-retailers by providing safer transactions and better access to financial services, though further research is needed to confirm these benefits (Kruijff et al. 2024).

CAPITAL MARKETS

Gender bonds[34] are a recent development in the gender-lens investing space and remain relatively rare even as the market for sustainable debt (including green and social bonds) grows at a high pace. Only a small fraction of the sustainable debt issued has been earmarked to advance gender equality—predominantly issued by financial institutions for on-lending to women entrepreneurs. Although ***no evidence could be found*** on their effectiveness, gender bonds are expected to lead to **improved access to finance** for WSMEs. Bonds that finance on-lending to WSMEs mostly measure impact by the number of loans made to women, but little is known about whether this impact is truly additional and how these loans impact women's livelihoods over the longer term (ICMA, UN Women and IFC 2021). As of March 2020, 13 gender-labelled bonds were issued by a variety of entities ranging from large commercial banks to NGOs to MDBs (fsd africa, UN Women and UKAID 2020). For example, Turkey's Garanti Bank, the first private sector bank in the world, expects to triple the number of loans to WSMEs over the next five years. Other examples include gender bonds issued by Bank OCBC NISP in Indonesia, the Bank of Ayudhya in Thailand, and Banistmo in Panama.

A forthcoming qualitative study of IDB Invest and EAFIT University, supported by We-Fi, takes a deep look at gender bonds' markets in Latin America and the Caribbean. Findings suggest that gender bonds have focused primarily on addressing women's limited access to finance. To further develop the market, gender bonds can evolve to address broader challenges beyond facilitating access to finance, such as improving women's access to housing ownership, rural property ownership, and formal employment, among others. As the market continues to expand, robust impact measurement through data collection and meaningful indicators is essential to enhance evaluation and strengthen investor credibility.

34 Gender-focused bonds include gender bonds but also social or sustainability bonds that integrate gender projects

R1.3 R1.4 R1.5	Impacts: Does improved business performance and growth (through better access to finance) lead to increased job growth, business creation, and women's empowerment?	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Job growth	+	◆	◆
	Business creation	+	◆	◆
	Women's empowerment	+	◆	◆

Research on the linkage between WSMEs' access to finance, business performance and **job growth *is limited.*** Most of the available studies do not sex-disaggregate their findings.

- An IMF paper based on a novel fintech dataset for 114 economies found that fintech adoption significantly improved female employment and reduced gender inequality by mitigating financial constraints of female-headed firms (Loko and Yang 2022).

Non-sex-disaggregated research: A report from IFC suggests a positive relationship between lending and job growth (IFC 2021). It examined the relationship between SME loan size and the jobs these enterprises create and provided a methodology for measuring job creation effects on SME finance initiatives. The report found that every $1 million loaned to SMEs in developing countries was associated with the creation of an average of 16.3 additional direct jobs over two years when compared to firms that did not have access to finance. The methodology built on previous papers that found a positive relationship between access to finance and job growth (Ayyagari et al. 2016). Moreover, a World Bank review of evidence on access to finance interventions and their impact on employment shows that increasing access to finance leads to job growth at the firm level. MSMEs with loans experience 1–4 percent higher employment growth compared to those without, and access to sales credit and external investment funds further increases employment by 2.6 percent and 4.2 percent, respectively. However, the lack of sex-disaggregated data highlights the need to understand these relationships for women-led businesses (Kumar 2017).

There is ***emerging (previously limited) evidence*** on the impact of better access to finance on **women's business creation,** although this evidence mainly focuses on micro-entrepreneurship. Studies support the notion that women entrepreneurs are considerably credit-constrained and that overcoming this barrier facilitates their business entry.

- Evidence focused on WSMEs in Nigeria suggests that business plan competitions support the creation of WSMEs by providing affordable finance. A study of the first cohort of the Youth Enterprise with Innovation in Nigeria (YouWiN!) program indicated that women winners were slightly more likely to start enterprises, although they were not more likely to increase employment and business survival (McKenzie and Sanone 2019).

- In the area of micro-entrepreneurship, findings from a randomized controlled trial in India indicated that access to microcredit increased the likelihood of women's business startup (Banerjee et al. 2014).

- Similarly, a study on Sub-Saharan African countries revealed that microfinance institutions in the region can boost female entrepreneurship if certain levels of female unemployment can be avoided (Asongu and Odhiambo 2023).

- Garg et al. (2022) explored how improved access to financial sources improve women's entrepreneurship in India and found that proximity to a banked-center within 5km of an unbanked village increased female entrepreneurship in the non-agricultural sector, driven by the uptake of institutional credit.

There is ***emerging (previously limited) evidence*** that *improved access to finance* leads to ***economic empowerment***[35] for women micro-entrepreneurs, with ***strong evidence*** focused on how digital financial services can empower women micro-entrepreneurs. ***No evidence could be found on WSMEs*** and no linkage between WSME business growth and women's empowerment could be found.

- General evidence on the impact of microfinance suggests that access to micro-credit has no or very small impacts on women's empowerment (EBRD 2015). However, when micro-credit is combined with additional support, such as business training, it can be more effective in empowering women micro-entrepreneurs economically (Hillesland et al. 2021). There is also no clear evidence of gains in social indicators, such as education and health (Cai et al. 2023). More research is needed to explore these relationships for SMEs.

- In a study focusing on micro-entrepreneurs in Uganda, grants and loans and training were cross-randomized. Although the study did not find complementarity for women-owned enterprises, it showed important effect heterogeneity by behavior in hiding money, as the only way for women to have control over resources (Fiala 2018).

35 "Women's empowerment" can here be defined as improved livelihoods for women, better control over assets, and increased decision-making power at home. Also see Morgan et al. 2023 for an approach to measuring WEE in the context of financial inclusion programs.

There is ***emerging evidence*** that *digital financial services* like mobile money accounts (digital payment mechanisms rather than loan itself) help close the gender gap and empower women micro-entrepreneurs through *rising incomes, better control over finances, and more decision-making power* at home. Directly providing funds to accounts controlled by women and digitizing loans can help ensure privacy and reduce the pressure to share resources and redirect credit or grants to their husbands' businesses.

- In Uganda the digital delivery of financial services has enabled greater control of accounts among women micro-entrepreneurs, who would have faced intra-household pressure to share capital when loans were delivered in cash (Riley 2024).

- Similarly, an experiment in Kenya found that free access to bank accounts had a significant effect on investment for women micro-entrepreneurs but not for men micro-entrepreneurs (Dupas and Robinson 2013).

- Another study from Kenya showed that when women-headed households adopted mobile money accounts, poverty decreased, savings increased, and 185,000 women left agricultural jobs for higher paying jobs in business or retail (Suri and Jack 2016).

- Heath and Riley (2024) conducted a randomized controlled trial with 152 female microfinance groups in Tanzania to explore whether women's use of digital financial services raises their empowerment. Treated groups were randomly switched to repay their loan using mobile money instead of cash. Results show that women's use of mobile money for loan repayment substantially increases their use for other types of transactions, their control over finances, and the levels of empowerment in the household.

IMPACTS ON FINANCIAL INTERMEDIARIES (INDIRECT IMPACTS ON WSMES)

H2 Strengthened capacity of financial intermediaries to serve WSMEs leads to sustainable capital flows to WSMEs (systemic change)

While it is still early days, the evidence base for gender-lens investing is growing (2X Global 2022). When implementing a gender-lens investing strategy at DFIs or in the private sector (incl. banks, funds, and fintechs), it's essential to understand what works and what does not in raising the awareness and capacity of financial intermediaries (FIs) to serve WSMEs. Numerous reports offer guidance on creating gender-lens strategies and highlight key factors for success.[36] These include securing internal buy-in, such as having gender champions within the organization; adjusting processes and systems; considering adjustments to product design based on needs and preferences of WSMEs; employing women (on sales teams, in senior positions etc.) and allocating dedicated resources, such as appointing gender investment officers; providing capacity-building support to portfolio companies; and consistently tracking sex-disaggregated data and metrics across the portfolio.

- **Blended finance:** This approach uses a mix of concessional (grant-based or low-interest) capital and commercial capital to de-risk investments and attract private investment into sectors or segments that may otherwise be considered too risky or unprofitable. Blended finance instruments, such as *credit lines, guarantees, first-loss risk cover (FLRC), catalytic equity investments, or performance-based incentives* can incentivize financial institutions to prioritize gender-lens investing, making it more attractive for them to invest in women-led businesses. Results from the 2020 round of the OECD Blended Finance Funds and Facilities Survey show that blended finance plays an important role in mobilizing more financial resources for gender equality. The most commonly cited reason among investors for focusing a blended finance vehicle on gender equality is the "potential for return enhancement." However, there remains significant room to strengthen the gender focus in blended finance projects, including in infrastructure and climate finance.

- **Technical assistance and advisory services:** Providing targeted support to FIs—such as training programs on gender-responsive marketing and communications or gender-sensitivity workshops—can

36 See Catalyst at Large, Sasakawa Peace Foundation and SAGANA 2019 (East & South East Asia); Buckland et al. 2019 (Latin America and the Caribbean); 2X Global and Sagana 2024; Villgro Philippines, Sasakawa Peace Foundation, Investing in Women 2024 (Philippines); IDB Invest and ESADE 2024; Acumen and Value for Women 2024; e-MFP 2024; FinEquity 2024

help them better understand and address the unique needs of WSMEs. Technical assistance can also include helping FIs (banks/funds) develop products and services that better meet the needs of women clients (incl. flexible collateral requirements, longer grace periods etc.) or systems to track and report on sex-disaggregated data.

- **Policy and Regulatory Support:** Advocacy for policies and regulations that promote gender-lens investing can create a more enabling environment for FIs to focus on WSMEs.

R2.0*	Does increased FI liquidity, risk appetite, and capacity to serve WSMEs (e.g., through blended finance / TA) lead to increased financing going to WSMEs?	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Blended Finance	+		◆

BLENDED FINANCE

There is ***emerging evidence*** on the effectiveness of blended finance instruments (incl. performance-based incentives and FLRC) on women's access to finance. ***No evidence could be found*** on guarantees or equity co-investments, and generally experimental evidence is mostly missing.

- Aydin et al. (2024) explored the impacts of a blended finance program for female entrepreneurs in Turkey through a quasi-experimental design. The We-Fi supported "Women in Business" program provided *credit lines* to commercial banks, coupled with risk mitigation in the form of a *first-loss risk cover* (FLRC) and technical assistance. The FLRC acted as a temporary incentive for banks to lend to an underserved borrower segment and only applied to first-time borrowers. Findings indicated that the program increased the share of credit to women by 22 percent, expanding bank lending to both existing and new female entrepreneurs without increasing default rates. The increase in credit did not just aid current borrowers but also helped previously underserved women entrepreneurs, highlighting the effectiveness of blended finance in enhancing financial inclusion and supporting women's entrepreneurship.

- A We-Fi sponsored qualitative assessment of gender-related *performance-based incentives* (PBIs) in IDB Invest's Blended Finance portfolio (based on a case study design) found that these incentives significantly improved access to finance for WSMEs and enhanced

women's employment opportunities. The study also revealed that PBIs helped surpass targets related to women's inclusion, justified resource allocation for related programs, and, when combined with technical assistance, built essential capacity and aligned stakeholder interests (IDB Invest, Dalberg and We-Fi 2023). Moreover, a follow up impact evaluation (forthcoming) quantifies the impacts of gender-related PBIs on the achievement or progress of gender outcomes in private companies, offering one of the first attempts at causally estimating the impacts of such incentives. Preliminary results show that incentives do not have a statistically significant association with the achievement of predefined targets. However, they are positively associated with progress toward gender outcomes over time, particularly in later periods following implementation. These findings suggest that PBIs may foster gradual shifts that translate into sustained improvements, including spillovers to other outcomes and areas beyond those initially incentivized.

- A case study on Mango Fund, a women-led impact investment fund in Uganda that received *technical assistance* from Value for Women, highlights its efforts to increase the number of women-led businesses in its portfolio, driven by the observation that women clients consistently exhibit lower rates of non-performing loans compared to their male counterparts. To further support women, Mango Fund introduced a lower loan threshold of $5,000 for those who could not meet the standard $10,000 minimum and shifted focus from collateral to psychometric-based assessments. Since 2019, the fund has increased its portfolio of women entrepreneurs from 16.5 percent to 22 percent, boosting lending to women by nearly 30 percent (USAID 2022).

- *Co-investments* in gender-smart funds / women-led funds can help increase the number of women-led companies that receive seed or growth stage funding. For example, several We-Fi and IFC equity investments in venture capital funds (e.g., Flat6Labs, L Catterton, Alta Semper Llera Fund, or Sarmayacar) aim to crowd in private investors and increase outreach and provision of finance to women-owned and led startups. Knowledge products on the effectiveness of these products are forthcoming.

R2.1	**Do gender-inclusive teams and practices (incl. more women in leadership) lead to increased financing going to WSME?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Banks	/	◆	◆
	Funds	/	◆	◆

BANKS

There is only ***limited (mixed) evidence*** on whether more **inclusive teams** (i.e. more female bank managers) result in more and higher loans to WSMEs, and how **inclusive practices** (i.e. unconscious bias training) can tackle gender biases at banks, leading to increased financing flows going to women. Dynamics must be explored further.

- Promoting female leadership (and female employment in general) in the financial sector may be effective in increasing the number and volume of loans going to WSMEs (Alliance for Financial Inclusion 2023).

- However, a study using 696 matched business owner/manager and bank manager pairs examined how the sex of both the business owner/manager and bank manager influences business owner/managers' perceptions about their banking relationships. Results showed that male-male pairs had the highest level of trust and satisfaction with credit access, while female-female pairs had the lowest levels (Saparito 2013).

- Employee trainings, such as unconscious bias or gender intelligence training, can be effective in sensitizing loan officers to the gender financing gap. A study from IFC and Habib Bank Limited (HBL) in Pakistan explored the differences between employees who have undergone trainings versus untrained employees. The study showed that trained managers outperformed untrained managers in terms of increased women's deposits (IFC 2017).

- A lab-in-the-field experiment with 334 Turkish loan officers found that both male and female officers exhibited implicit gender bias, with less experienced officers more likely to discriminate. Officers were 26% more likely to require a guarantor for identical loan applications when the applicant was presented as female. Discrimination was concentrated among young, inexperienced, and gender-biased officers, particularly against women in male-dominated sectors. Brock and De Haas (2023) concluded that banks should ensure that lending decisions are made by sufficiently trained and experienced loan officers.

FUNDS

There is ***emerging (mixed) evidence*** on whether more **inclusive fund structures** (i.e. more women investors) lead to more investments into women-owned and led businesses. Dynamics must be explored further.

Several studies illustrate that women investors are more likely to invest in women-founded startups than men investors, and that investing in women-led funds can substantially enhance the impact on female founders.

- Women are twice as likely to invest in companies with female founders and three times as likely in companies with female CEOs (PitchBook, AllRaise, Goldman Sachs and Microsoft for Startups 2019).

- This pattern is reinforced by a large investment simulation at the Wharton School, which found that increasing female representation among investors by just 1% reduced the gender gap in startup funding by 272% (Assenova and Mollick 2019).

- China also demonstrates this relationship, with a high number of women-led VC and PE firms, and five of the nine women-founded unicorns (startups valued at over $1 billion) since 2010. It is also the only emerging market economy with more than one women-led unicorn (IFC, Oliver Wyman, and Rock Creek 2019).

However, there is also evidence that suggests that encouraging women to invest in women-led businesses may not always yield the desired results.

- Snellman and Solal (2022) found that firms with female founders funded by female VCs were twice as likely to struggle in raising additional financing, based on a global dataset. This may be due to future investors unfairly questioning the entrepreneur's competence simply because a woman made the initial investment (Snellman and Solal 2022).

Moreover, emerging evidence shows that gender-balanced investment teams (i.e. an increased number of female partners) lead to higher fund returns and profits. According to a study in the Harvard Business Review (Gompers and Kovvali 2019), VC firms that increased the number of female partners by 10 percent experienced a 1.5 percent increase in fund returns each year, plus 9.7 percent more profitable exits. Furthermore, IFC, Oliver Wyman, and Rock Creek research based on data from over 700 funds operating in emerging markets found that, in 2019, VC and PE funds with gender-balanced senior investment teams generated up to 20 percent higher returns compared to other funds. While there is no single pathway to improving diversity in venture capital, a BII report shows that one key pathway is increasing diversity among top decision-makers to drive more investments in underserved founders (British Business Bank, 2023).

There is ***emerging evidence*** on how **inclusive practices** (i.e. systematized investment processes) can tackle gender biases at funds, leading to increased financing flows going to women.

- A field study conducted at TechCrunch Disrupt between 2010 and 2016 revealed that (often male) investors tended to ask men entrepreneurs promotion-focused questions and women entrepreneurs prevention-focused questions, resulting in divergent funding outcomes. Entrepreneurs asked promotion-focused questions raised significantly higher amount of funding than those asked prevention-focused questions. Prevention-focused questions may hinder an entrepreneur's ability to raise capital, fully mediating the impact of the entrepreneur's sex on funding outcomes (Kanze et al. 2018).

- Results from a global field experiment conducted by Miller et al. (2023), supported by Village Capital and We-Fi, show that systematizing the evaluation process with prompts on risk, reward, and progress led investors to assess startups more consistently, eliminating or reversing the gender gap in investment outcomes. These changes resulted in a statistically significant fivefold improvement in the scores of women-led startups.

R2.2	**Do (targeted) investments into WSMEs lead to performance benefits for financial intermediaries (business case)?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Banks	+	◆◆	◆◆
	Funds	+		

While ***emerging evidence*** (mostly descriptive studies) suggests positive financial returns for financial intermediaries from investing in women and WSMEs, there is still insufficient data to make a compelling **business case.** Building a strong business case requires collecting sex-disaggregated data, conducting targeted research, and demonstrating clear links between gender-lens investing and strong business and impact outcomes.

BANKS

There is ***emerging evidence*** that the women's market is a very profitable opportunity for banks and other financial institutions.

- Data shows that women have lower rates of non-performing loans, higher deposits relative to income, and greater loyalty and advocacy (Financial Alliance for Women 2014).

- A sample of 133 IFC client financial intermediaries shows that the average non-performing loan (NPL) ratio for loan portfolios of WSMEs (4.6 percent) is significantly lower than the average NPL ratio for total SME loan portfolios (5.3 percent) (IFC 2021). This evidence means banks can earn healthy profits from women's programs usually in less than two years. For example, BLC Bank's "We Initiative" in Lebanon was profitable within 18 months, while Banca Mujer at Banco Nacional de Costa Rica became profitable in its first year after a 60 percent growth in the number of women SME customers (Clempner et al. 2020).

- Descriptive evidence from TechnoServe Mozambique indicates that expanding financial services to women micro-entrepreneurs, combined with non-financial services, benefits financial service providers. Training reduced the default rate to 0%, compared to 0.5% without training. Additionally, more knowledgeable loan officers improved service quality, leading to increased use of financial services by customers (TechnoServe 2023).

- A study using World Bank Enterprise Surveys data from 61 countries found that women-led firms had a 15 percent higher average return on capital than those led by men, highlighting the benefits of greater credit access for women entrepreneurs (Grover and Viollaz 2025).

FUNDS

There is ***emerging evidence*** that the women's market is a very profitable opportunity for funds (incl. fintechs) as well.

- An analysis conducted by Boston Consulting Group based on MassChallenge data revealed that businesses founded by women ultimately delivered higher revenue than those founded by men (Abouzahr et al. 2018). For every dollar of funding, women-founded startups generated 78 cents, while men-founded startups generated less than half that: just 31 cents.

- IFC research found that gender-balanced leadership teams in portfolio companies of PE/VE firms were correlated with around 25 percent greater increases in valuation compared to gender-imbalanced teams (IFC and CDC 2020). The median gender-balanced portfolio company experienced a 64 percent increase in company valuation between two rounds of funding or liquidity events, which was about 10 percentage points greater than that of gender-imbalanced portfolio companies.

- PitchBook data shows that businesses with women on their founding teams are likely to exit at least one year faster compared to the rest of the market, and the number of exits for companies with at least one female founder is growing at a faster rate than for companies with only male founders (PitchBook, AllRaise, Goldman Sachs, and Microsoft for Startups 2019).

- Furthermore, initial evidence shows that gender-lens strategies help funds attract more capital. Survey data from 2X showed that 78 percent of surveyed funds reported that their gender lens strategy generally helped them attract LPs, using it as a key differentiator in the market (2X Global and Sagana 2024).

R2.3	**Do performance benefits for gender-inclusive financial intermediaries catalyze broader financing and investment to WSMEs?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
		+	◆	◆

- Fintechs: Evidence from fintechs that collect sex-disaggregated data shows a compelling business case for serving the women's market. Among them, 95 percent report that customer acquisition costs for women are lower than those for men and 86 percent state that the lifetime value of a woman customer is equal to or greater than a man's (Financial Alliance for Women 2020). Furthermore, data shows that banks offering digital services are able to lower their cost by 80 to 90 percent (McKinsey Global Institute 2016). However, limited research exists on what practices of fintech companies actually lead to success. There are some case studies demonstrating how digitally-informed approaches tailored to the needs of women have democratized financial access and driven sustainable growth for the financial institution (Financial Alliance for Women, 2021). Similarly, a We-Fi/IFC report finds that fintech companies can boost their bottom lines by intentionally targeting and designing products for women customers (We-Fi and IFC 2024).

Evidence from We-Fi and another large-scale fund, the Women Entrepreneur Opportunity Fund (WEOF), shows ***emerging positive evidence*** on the efficacy of their interventions in catalyzing broader financing and investment in WSMEs. No academic studies could be found, thus, there is a need for more evidence, including experimental studies to complement funder-provided data.

- **Mobilized funding:** We-Fi allocations of approximately $340 million have already mobilized nearly $5.5 billion, exceeding its initial mobilization target of $3.5 billion in external funding from implementing partners, the private sector, recipient governments, and bilateral agencies (We-Fi 2025). WEOF has also mobilized external funds to complement its investments at a ratio of 1:2 between 2015-2019 (IFC and Goldman Sachs 2019). Findings from the Women Entrepreneurship Development Project (WEDP) in Ethiopia show that the results of WEDP's line of credit demonstrated that growth-oriented women entrepreneurs are a high-value investment for financial institutions. WEDP's success led to an unexpected challenge: the depletion of funds two years earlier than planned. To address the declining balance, MFIs started disbursing from their own resources and continued doing so even after the line of credit was replenished through a revolving fund and external financiers (Alibhai et al. 2020).

- **Organizational change:** The We-Fi Mid-Term Review showed that We-Fi impacts the approaches of supported intermediaries, with 73 percent of partners indicating their strategic approach in regard to the WSME segment has changed (We-Fi 2021). Furthermore, the WEOF progress report stated increased lending to WSMEs among participating financial institutions (IFC and Goldman Sachs 2019). Participating financial intermediaries noted an 86 percent increase in the number of loans to WSMEs in comparison to a 41 percent increase in the overall IFC financial intermediary portfolio. Moreover, the WEOF report showed that financial institutions that received capacity building support tended to grow their WSME portfolios at a higher rate than those that did not receive any additional support.

- **Multiplier effect:** Although there is emerging evidence that supported financial intermediaries may create a competitive advantage by expanding their offering in the growing women's market, there is no evidence yet on a multiplier effect to other financial institutions.

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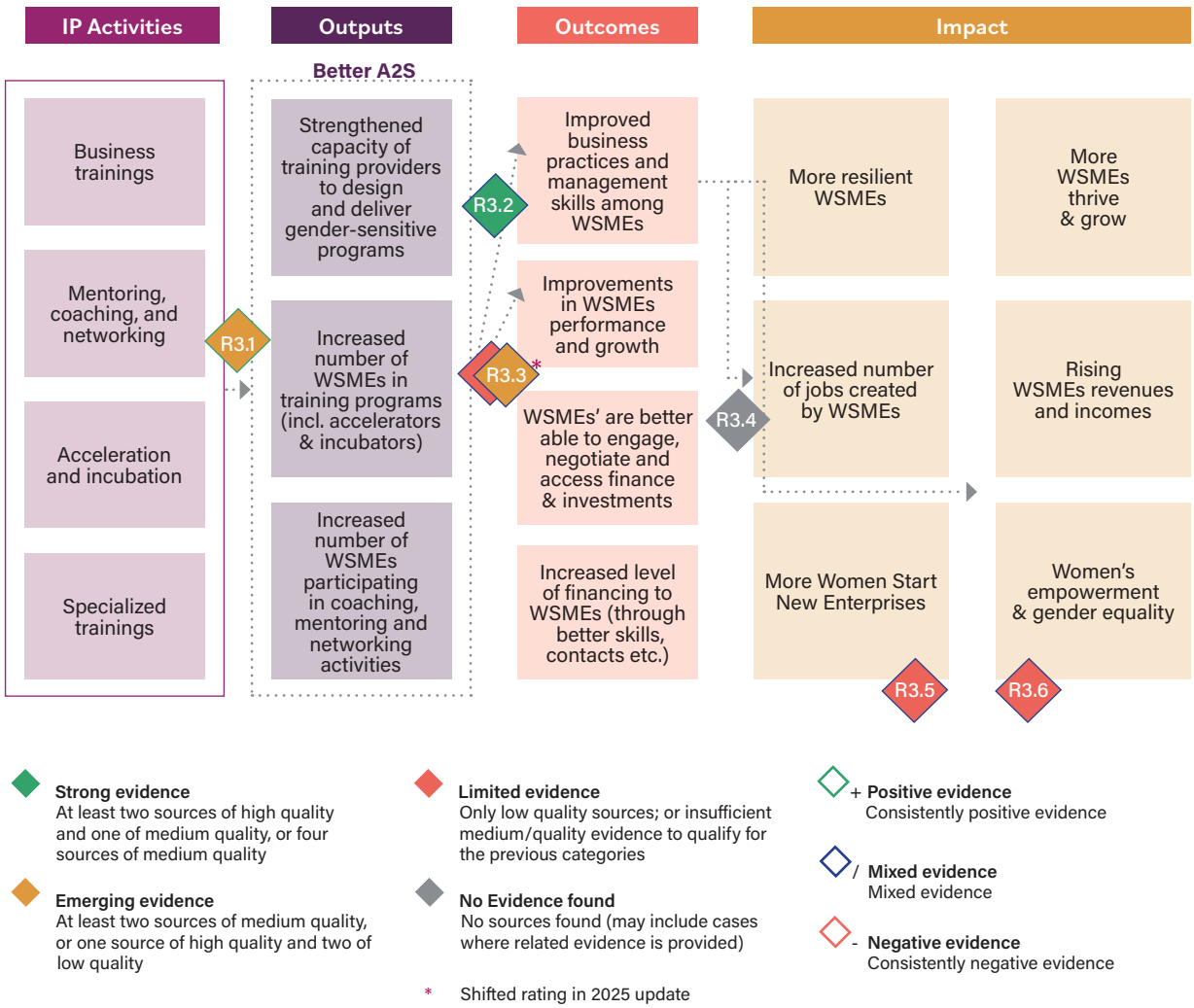
4 Evidence on access to skills and networks

4.1 Impact Pathways

This chapter summarizes evidence on what works to improve WSMEs' access to skills and networks, using We-Fi's Theory of Change to map research questions (R3.1-3.6) to different impact pathways. It outlines the strength (strong, emerging, limited, no evidence found) and direction (positive, mixed, negative) of evidence for each research question, along with supporting sources.

Figure 4: Impact Pathways for Access to Skills and Networks



H3	Improved access to skills and networks for women entrepreneurs (through gender-sensitive training programs and networking activities) leads to improved business performance, job creation, and women's empowerment			
R3.1	Outputs: Does a gender-sensitive design and delivery of training programs and networking activities lead to increased female participation?	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
		+	◆	◆

4.2 Findings

There has been a significant increase in the number of entrepreneurship training programs around the world, as well as more accelerator and incubator models focusing on women entrepreneurs, alongside a growing number of resources and toolkits designed to support more inclusive program development and delivery (for women-only programs as well as those engaging both women and men).[37] ***Emerging evidence*** suggests that training programs designed and delivered with consideration for women's specific needs and constraints may be more effective in engaging women entrepreneurs.

- *Training content* specifically designed for women entrepreneurs focused on topics like gender stereotypes, family responsibilities, or work-life-balance may help women overcome gender barriers to firm growth, enter different sectors, or better manage segregating household and business tasks (McKenzie 2021).

- A policy note drawing on rigorous evidence from impact evaluations, systematic reviews, meta-analyses, and mixed-methods identifies practical solutions for development practitioners to design and deliver skills training programs that improve outcomes for women in the jobs market (not focused primarily on entrepreneurship). Encouraging women to train in non-traditional occupations, incorporating mechanisms to prevent and address sexual harassment, and implementing *operational adjustments* like childcare and transportation support can help reduce barriers to women's participation in skills trainings (Beegle and Matulevich 2020). Similarly, results from a four-month training program for women entrepreneurs in Pakistan and Nigeria (World Bank 2018) support evidence suggesting that offering *wraparound services*—such

37 See Bullough 2015; IFC and The Institute for Performance and Learning 2020; Argidius Foundation 2021; IFC and CommDev 2021; GIZ 2021; Orser and Elliott 2022

as transportation, childcare support, or joint sessions with spouses—can increase WSME participation in training programs.

- A review of evaluation evidence on financial services and training interventions by Buvinic and O'Donnell (2019) suggests that certain design features—such as *stipends and other incentives* that address women's time burdens and childcare responsibilities—can yield more positive economic outcomes for women than for men.

- The shift to *online trainings* during the COVID-19 pandemic may have helped alleviate logistical barriers for women, potentially supporting greater participation (Cherie Blair Foundation 2021). However, there is currently no conclusive evidence. Moreover, challenges in accessing and using digital technologies need to be considered. A large-scale digital financial literacy project in Bangladesh for women micro and small businesses emphasized the importance of tailored approaches, such as partnering with women-focused NGOs and combining virtual and in-person learning for less-digitally-connected businesses, and dedicated online platforms for more digitally active users, with content based on real-world business needs (UNCDF 2022).

- Bullough et al. (2019) identified *"building networks"* as a fundamental element for increasing women's participation in high-growth entrepreneurship. Formal networks (e.g., lawyers, banks, trade associations, accountants) are particularly important for growth because they represent access to people that entrepreneurs do not already know. Furthermore, a qualitative study in Jordan examined how women founders operating digital technology-based businesses navigate gender and cultural influences in constructing network ties in Jordan. Formal, male-centric ties were seen as more impactful for business due to their useful information, and founders used formal communication, intermediaries, and industry events to build networks while adhering to gendered collectivist norms (Alakaleek et al. 2024).

R3.2	**Outcomes: Do business trainings for WSMEs lead to improved business knowledge and practices for WSMEs?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Business training	/	◆	◆

Outcomes: Do training programs lead to improved business performance and growth for WSMEs?	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
Business training	/	◆	◆
Heuristic training (micro)	/	-	◆
Personal initiative training (micro)	/	◆	◆
Consulting / Coaching	+	◆	◆
Mentoring	+	◆	◆
Acceleration / incubation	+	◆	◆
Networking & P2P interactions	+	◆	◆
Delivery: Digital channels	/	◆	◆
Combination: Bundled training	+	◆	◆

TRADITIONAL BUSINESS TRAINING

Most of the available evidence is focused on traditional classroom-based business training (teaching formal business skills like record-keeping, marketing, financial planning, operations management etc.) for **micro-entrepreneurs** where evidence on effectiveness is often ***mixed.*** With medium- and large-scale enterprises, classroom-based business training has been less used, as established business owners tend to look for a more customized approach.

While some evidence from randomized controlled trials indicates a positive relationship, other studies suggest neutral impact of traditional business trainings on **business knowledge and practices.** Similarly, some studies indicate that traditional business training positively affects the **business performance** (sales/profits) of women-led micro-enterprises, while others show that although such programs may improve business attitudes and practices, they are unlikely to impact enterprise performance or growth.

- Results from a randomized controlled trial with women micro-entrepreneurs in Ethiopia who received business training that addressed constraints in managerial capacity (marketing, record keeping, financial planning, and stock control) showed that business training improved business practices, sales, and profits (Bakhtiar et al. 2021).

- An impact evaluation of the Digital Opportunity Trust entrepreneurship training program in Ethiopia showed no conclusive evidence that

the trained entrepreneurs (men and women) have better business practices. However, it found a positive effect on proxies for confidence and motivation, which suggests a change in mindset among those who participated in the training. It also revealed that approximately one year after the training, participating entrepreneurs recorded 30 percent higher profits than the control group (Alibhai et al. 2016).

- Experimental evidence from women micro-entrepreneurs in Tanzania indicated that business training led to an increase in business practices. However, there was no significant evidence that these impacts translated into greater investment, sales, and profits (Bastian et al. 2018).

- A World Bank study comparing two types of business training programs targeting women entrepreneurs with established small businesses in Tanzania (in-class sessions focusing on managerial and technical skills versus tailored business coaching) found neither training program impacted business outcomes (Bardasi et al. 2017).

- A two-stage randomized experiment with women micro-entrepreneurs in Kenya showed that three years after training, women-led businesses in the treatment group sold more, earned higher profits, and their owners expressed greater wellbeing (McKenzie and Puerto 2017).

- An empirical analysis of SMEs in Swaziland found that business training was positively associated with sales performance of men entrepreneurs but had no effect on women (Brixiová and Kangoye 2015).

- Lang and Seither (2024) evaluated a rural Ugandan program that teaches entrepreneurial hard and soft skills for women microentrepreneurs. Women who participated were 17 percent more likely to earn income from profitable businesses 18 months after completing the program and demonstrated a strong tendency to reinvest in their businesses. Additionally, these women handled the economic challenges of the COVID-19 lockdown better than those who did not participate. The study also found positive spillover effects, where women in the control group benefited indirectly.

- The ILO's GET Ahead program, which integrates business skills with gender-focused topics, was evaluated in Vietnam (Bulte et al. 2016) and Kenya (McKenzie and Puerto 2021). While it improved business practices in both countries, only the Kenya study showed significant increases in profits and sales after three years.

Similarly, several meta-analyses show mixed results. Generally, there is a wide variety of classroom-based business training programs and approaches, and there is a lot of heterogeneity in both samples and results,

thus it's not clear which groups benefit most from traditional business training and more segmented approaches are needed (McKenzie and Woodruff 2023). A review of six meta-evaluations and 23 rigorous impact studies of women's entrepreneurship programs by the International Labour Organization (ILO) concluded that only two out of nine business trainings positively impacted the business performance of women-led businesses (ILO 2014). *Non-sex-disaggregated analyses* by McKenzie and Woodruff (2013, 2017, 2023) found that training programs had only modest effects on sales and profits, partly because business owners adopted very few new business practices after training. While a typical program might introduce 20-30 practices, participants usually adopt just one or two. This limited impact may be due to the short duration of the courses and the quality of training, as well as the participant selection process. More intensive programs with selective entry have shown greater improvements in both business practices and overall enterprise performance (e.g., Anderson et al. 2018). McKenzie (2021) estimates a random effects meta-analysis and finds that training has a significant positive average effect on both profits and sales, with an estimated 4.7 percent improvement in sales and 10.1 percent improvement in profits. The study indicates that incorporating gender, mentoring, and psychology into the training design can deliver improvements on training effectiveness.

Classroom-based training is rarely applied to **small and medium enterprises,** yet other forms of specialized business training focused on SME-specific topics (e.g., MBA-style training for executives or trainings focused on public procurement or corporate value chains) or on action-oriented / challenge-based training may have a role in helping WSMEs grow. However, ***evidence on sex-disaggregated impacts remains largely absent,*** and research on larger firms is also scarce—partly because such firms are fewer in number and require more intensive, and therefore more costly, training programs.

Non-sex-disaggregated research: In a randomized controlled trial, Custódio et al. (2020) tested an MBA-style training for executives by providing executive education in finance to managers of 93 medium and large firms in Mozambique and found this decreased the amount of working capital held and increased the return on assets. A study with medium-sized firms in Liberia demonstrated the positive impacts that a week-long training on public procurement can have on the business performance of small businesses. The non-sex-disaggregated results indicated that firms that participated won three times as many formal contracts (Hjort et al. 2020). Argidius Foundation's SCALE report, which brings together almost a decade of findings from across the sector, found that helping SMEs solve their problems (instead of teaching them what they "ought to know") through action-oriented / challenge-based training can promote business growth, and in group settings can deliver impact at lower costs by promoting peer-to-peer learning (Argidius Foundation 2021).

HEURISTIC TRAINING

There is ***emerging evidence*** from randomized controlled trials that heuristic training may work for women micro entrepreneurs. Providing simplified rules holds promise for helping the smallest businesses and least-educated entrepreneurs improve their businesses. For instance, instead of teaching detailed accounting practices and profit calculations, rule-of-thumb training emphasizes separating household and business finances by using a simple, physical method - like keeping money in two separate drawers.

- Results from a randomized controlled trial in Ecuador by Arraiz et al. (2019) showed that a heuristic-based training program for microentrepreneurs significantly increased sales and profits, with larger effects for women, while traditional training showed no significant impact.

- For entrepreneurs from vulnerable backgrounds, imagery techniques, which encourage participants to envision future scenarios or adopt the perspectives of others, combined with traditional business skills training proved effective in improving economic outcomes for vulnerable entrepreneurs in Colombia, with the strongest effects seen among women and those with high past trauma (Ashraf et al. 2022).

- A heuristics-based business training program for small-scale female retailers in Ethiopia, delivered by phone using prerecorded messages and interactive voice response technology achieved high engagement rates, with two-thirds of participants completing at least 14 out of 21 lessons (Abebe et al. 2023). Results from a randomized controlled trial are forthcoming.

- McKenzie and Woodruff (2023) highlight that it remains unclear whether these approaches have long-term effects (existing studies only follow firms for a year at most). Additionally, most examples of rule-of-thumb guidance focus on financing, with limited heuristics available for areas like marketing, stock control, and other essential aspects of business management.

SOFT SKILLS TRAINING

Emerging (previously limited) evidence from rigorous impact evaluations shows that training programs that focus on socio-emotional and non-cognitive skills (including self-confidence, leadership, creativity, risk propensity, and mental health) and teaching entrepreneurial mindsets (including encouraging owners to search continuously for new opportunities, learn from errors, and think of ways to differentiate their business from others) can have a positive impact on business performance for women-led businesses. However, findings are ***mixed***, and especially the long-term effects appear to be neutral for women entrepreneurs. Moreover, most of the existing evidence is concentrated on **micro-entrepreneurs.**

- Training programs addressing socio-emotional skills have proven effective for micro-entrepreneurs in numerous contexts in Africa. In Togo, a personal initiative training aimed at teaching micro-entrepreneurs about initiative, perseverance, and resilience helped micro-entrepreneurs be more future-oriented, anticipate problems, and create solutions to overcome them. Findings from a randomized controlled trial showed that after two years women micro-entrepreneurs increased their profits by an average of 40 percent compared to a 5 percent increase for entrepreneurs who only received traditional business training. Moreover, results showed that the personal initiative training enabled women to be more innovative, invest more in their business, and introduce more new products (Campos et al. 2017). Several years later, Campos et al. (2024) revisit the same cohort of entrepreneurs and find sustained average impacts of personal initiative training, with monthly profits increasing by $91—an effect size larger than that observed at the two-year mark. However, these long-term impacts differ markedly by sex: for men, the effects grow over time, driven by greater capital accumulation and increased self-efficacy, whereas for women, the impacts tend to diminish.

- Alibhai et al. (2019) conducted two randomized controlled trials to evaluate the effect of mindset-oriented business trainings on the performance of women-owned micro and small enterprises in Ethiopia. Impacts on business performance were mixed, since the delivery service and an identity match between trainer and participant seemed to matter, suggesting that psychological skills and mindset are better inspired by a trainer who previously founded a business.

- Another randomized controlled trial evaluated two programs focused on soft skills involving 945 entrepreneurs in Jamaica. The first program mainly focused on personal initiative, including the development of a proactive mindset and perseverance after setbacks, while the second program combined soft skills training on personal initiative with

traditional business training. The study found no effects for women or for the training combining soft skills and traditional business training (Ubfal et al. 2022).

- A study from Kenya tested the effects of an agency-based empowerment training on business sales of men and women entrepreneurs involved in improved cookstoves. It found that the empowerment training led to more than doubling of sales for both men and women. These results indicate that targeted, agency-based empowerment training not only has the potential to increase WSMEs business performance but can also significantly increase women's capacity to engage in male-dominated sectors (Shankar et al. 2015).

- McKenzie and Woodruff (2023) present a *non-sex-disaggregated* meta-analysis of these emerging studies on psychology-influenced and other form of mindset training, showing that on average, profits increased by 14 percent and sales by 10 percent, though impacts vary significantly across studies.

CONSULTING / COACHING

Growing evidence shows that offering bespoke support services like coaching or consulting services can be effective for **SMEs** in general, however, evidence on their differential impact by sex remains ***limited***. A typical consulting intervention starts with a diagnostic of current management practices, followed by consultants working intensively with the firm's management and staff to implement targeted improvements over several months. The cost of consulting programs varies with the number, type, and intensity of consultants, making large-scale implementation challenging due to high expenses (McKenzie and Woodruff 2024).

- A World Bank study of women entrepreneurs with small businesses in Tanzania found that participants in training programs that included tailored business coaching were more likely to adopt new practices, on average. Moreover, results showed that these effects were larger for entrepreneurs with more experience (Bardasi et al. 2017).

Non-sex-disaggregated research: A randomized evaluation of SMEs in Mexico found that access to management consulting improved firm performance, increasing return-on-assets, total factor productivity, and entrepreneurial spirit, while also leading to a significant rise in employees and wages over time, though the improvements varied widely among firms (sex-disaggregated effects couldn't be measured since sample was not large enough) (Bruhn et al. 2013). Another randomized experiment in Nigeria compared the effectiveness of business training, personalized

consulting, insourcing, and outsourcing tasks to professional specialists. Results showed that insourcing and outsourcing were more effective in improving business practices than business training and at least as effective as business consulting at one-half of the cost. The study did not measure sex-disaggregated effects, except for indicating that women entrepreneurs were more likely to choose a marketing specialist (rather than an accountant) than their male counterparts (Anderson and McKenzie 2020). For bigger firms, consulting tends to be focused on increasing productivity or exports. For example, a study by Cusolito et al. (2023) found that combining training and consulting helped innovative firms in the Western Balkans expand exports by increasing sales to existing customers, gaining market-specific knowledge, and building confidence to pursue new ideas.

MENTORING

There is ***strong (previously emerging) evidence*** on the effectiveness of mentoring on women's **business performance,** though findings are ***mixed***—particularly for micro-enterprises. Evidence indicates that mentorship can positively impact performance, especially for **larger, more advanced firms and startups,** by improving profitability and enhancing women's ability to scale their businesses and attract new investment. However, the effectiveness of mentorship often depends on factors such as the mentor's characteristics, including their gender.

- A World Bank study evaluating gender-informed training programs in India found that mentoring can enhance the impact of training programs (Field et al. 2016). The program gave women entrepreneurs the option to join the training with a mentor or friend. This turned out to be a successful strategy for increasing new investment and income.

- Mentorship may be more effective for *larger, more advanced* firms looking to innovate or expand into new markets. For example, a *non-sex-disaggregated* study in Uganda paired small businesses with remote mentors through biweekly meetings, resulting in a 28 percent sales increase over two years through adapted marketing strategies, with businesses mentored by marketing professionals achieving the highest gains-52 percent in sales and 36 percent in profits (Anderson et al. 2022). Germann et al. (2023) show that the women entrepreneurs in this study achieved greater sales and profit gains with female mentors, while male entrepreneurs performed similarly regardless of mentor gender.

- For *startups*, an Endeavor Insight Report based on data from the US highlighted that mentorship may be the main differentiator between women entrepreneurs who were able to scale their businesses to 50

or more employees and those who were not (AbdelAzim et al. 2020). Data showed that those who scaled were 10 percent more likely to have mentors who were successful entrepreneurs themselves.

- A randomized controlled trial in Kenya demonstrated that women *micro-enterprise* owners who benefitted from mentorship by an entrepreneur in the same community increased profits by 20 percent, on average, with initially large effects that vanish over time (Brooks et al. 2018). In contrast, no effect on profits could be found for the formal business training intervention.

- In a randomized controlled trial in Uganda, Lang and Seither (2022) found that intensive mentoring can sometimes disadvantage poor women compared to a lighter, opt-in mentoring approach.

- A two-stage experiment with women-owned micro-entrepreneurs in Ethiopia found that the overall impact of mentoring was limited—while it significantly improved the adoption of business practices among mentees, it did not lead to statistically significant gains in profits (Bakhtiar et al. 2022).

ACCELERATION, INCUBATION, AND STEM INITIATIVES

For potential **high-growth startups,** only ***limited evidence*** on the impact of **accelerator programs** and STEM initiatives could be found, and ***no evidence could be found*** on **incubator programs.** The evidence in this area remains mostly informal. Moreover, many startup support programs apply a rigorous selection of entrepreneurs into a cohort and provide grants or links to angel finance complementing the training. The combination of selection and the provision of a bundled services makes it difficult to measure the effectiveness of accelerators and other startup support programs.

- A study by Avnimelech and Rechter (2023) explored how accelerators support female entrepreneurship in Israel. It found that women participated in accelerators at twice the rate of their overall representation in the Israeli startup ecosystem. Importantly, the study revealed that female founders are often drawn to accelerators for different reasons than men—particularly valuing access to mentorship, networks, and a supportive environment—highlighting the distinct motivations and needs of women entrepreneurs in these programs.

- Five years of evidence from the Global Accelerator Learning Initiative (GALI) showed that on average, ventures that participate in accelerators increased revenues, number of employees, and outside investment by greater margins than those that applied but were rejected, but this

impact varies considerably program to program. An analysis of gender differences among teams in the GALI dataset showed a clear pattern of all-women teams benefitting significantly less from these programs than all-men teams, and no specific accelerator design elements consistently mitigate this gender gap (GALI 2021).

- A mid-term strategic review of the USAID PACE initiative showed that supported startups increased revenues by 68 percent and jobs by 77 percent in a one-year period (non-sex-disaggregated). Women-led startups significantly outperformed their peers, growing revenues 1.5 times faster and jobs twice as fast. Yet, women entrepreneurs do not raise significantly higher amounts of capital (USAID 2018).

- On STEM initiatives, initial results from qualitative studies show that such programs may help women gain or improve business and digital skills and support their business growth potential by connecting them to investors and networks (IDB Lab 2024).

Non-sex-disaggregated research: A study by Gonzalez-Uribe and Leatherbee (2018) found that ventures chosen for the Startup Chile program were more likely to secure funding, survive, and maintain a web presence, however, these outcomes were due to the selection of higher-quality ventures. The basic accelerator program (office space and capital grant) has no additional effect on these outcomes. Furthermore, the authors showed that non-monetary services provided by accelerators can affect performance when bundled with cash grants. Another study by Gonzalez-Uribe and Leatherbee (2024) provides first experimental evidence on the effectiveness of accelerator programs in Colombia and the importance of targeting. They find that managerial training led to 18 percent faster sales growth for the average entrepreneur, while entrepreneurial training (focused on product/service innovation) drove 43 percent faster growth and more full-time job creation in high-potential ventures. Yu (2020) found that accelerator-backed startups exhibited both higher survival and higher closure rates, suggesting that accelerators play a dual role in supporting the growth of viable ventures while facilitating the timely exit of less promising ones—thereby reducing uncertainty for both founders and investors. Cusolito et al. (2021) tested an investment-readiness program for 346 high-tech firms across five Balkan countries, focusing on financial planning, pitching, and market strategy. The program significantly increased the likelihood of smaller firms securing external financing by 15 percentage points, with effects strongest for those less likely to receive funding otherwise.

NETWORKING AND PEER-TO-PEER INTERACTIONS:

There is ***emerging (previously limited) evidence*** suggesting a positive effect of networks on women's **business performance,** as well as improved access to financing and markets. However, only few studies could be found to understand the effectiveness of networks and how networking programs and tools (including digital tools like WhatsApp-based peer networking groups) can be adapted to improve business performance of WSMEs.

- Results from an econometric study exploring how networks impact *access to financing* showed that men and women responded differently to networking opportunities with investors, with increased exposure helping women overcome more challenges in connecting with venture capital (Howell and Nanda 2023).

- A randomized controlled trial in Tunisia found that supporting women entrepreneurs to form export-focused consortia, a legally connected group of firms, and providing business consulting led to increased collaboration, confidence, improved management practices, and higher profits, though export readiness had not yet increased (Münch et al. 2023).

- An IFC evaluation report conducted with the Bank of Palestine showed that the Mini-MBA program helped women entrepreneurs expand their business networks in different ways (e.g., other women entrepreneurs, mentors, or technical advisors). Additionally, participants were able to sign up an average of 37 new customers each. Importantly, the report indicates that the effectiveness of access to networks may depend on contextual constraints, as networks have been more useful for women entrepreneurs in West Bank than in Gaza, since women in West Bank rely more on industry professionals or banks for advice, while women in Gaza rely more on family members and social networks (IFC 2017).

Non-sex-disaggregated research: In a randomized controlled trial, Cai and Szeidl (2018) studied the effect of networks on business performance of young Chinese firms. They found that regular small group meetings among managers increased revenues by 8 percent. Similarly, in a randomized control trial with potential entrepreneurs from 49 African countries, participants were randomly assigned to peer networks (online only or face to face) and invited to submit business proposals. The non-sex-disaggregated results showed that peer interactions had significant effects on the likelihood of submitting proposals (Vega-Redondo et al. 2019). Findings by McKenzie and Woodruff (2023) showed that peer interactions were most effective when firms are matched with similar, slightly more advanced, non-competing peers, but training may be

necessary to facilitate effective communication and peer learning. The Argidius Foundation (2019) explored the effectiveness of peer-to-peer networking interventions alongside training programs and developed a framework outlining six success factors for business networks supporting SMEs (i.e. diverse sources of income, proactive trust-building, continuous feedback and monitoring, selective membership, engaged support team, and needs-based programming).

DIGITAL TRAINING

There is ***strong (previously limited) evidence*** on the effectiveness of digital delivery methods of training programs on **business performance** of women-led businesses. Available evidence suggests that the impacts of digital/remote training have been *mixed*. Online classes have the potential to expand geographic reach but don't seem to significantly reduce costs and are challenging to scale widely while maintaining quality and participation; another question is whether more training should focus on digital skills.

- In a randomized controlled trial in Guatemala and Mexico, Davies et al. (2023) measured the impact and cost-effectiveness of a live *zoom business training* for women *micro-enterprises* during the COVID-19 pandemic. The zoom training led to improved business practices and higher sales after two months, but these effects disappeared after six months.

- A randomized evaluation in Guatemala tested a *digital business training* for *micro entrepreneurs* (franchise store owners), combining a mobile app with video content and virtual consulting. The study found significant improvements in knowledge, practices, sales, and profits, with consulting meetings, program flexibility, internet access, and initial sales levels as crucial determinants of training effectiveness (Estefan et al. 2023).

- Asiedu et al. (2023) examined the effects of *virtual peer networking* on businesses through an experiment with 1,772 growth-oriented female entrepreneurs in Ghana, placing treated firms into WhatsApp groups of eight to facilitate weekly virtual meetings aimed at expanding business networks. While the intervention did not significantly impact sales, treated firms saw a 21 percent increase in profits after one year.

- In a randomized controlled trial in Ethiopia, Cassidy et al. (2024) evaluated a *business training for growth-oriented* female entrepreneurs delivered through a smartphone app vs. in-person. Results showed high take-up rates but low completion rates for the smartphone app training. Low usage of the app persisted despite additional efforts to incentivize engagement, including social messaging groups, weekly reminders, cash-prize draws, and making the app available offline. The authors identified low digital skills or "not having the time" as possible reasons for not completing the app modules. Impacts on business practices and performance could not be observed from either modality. This paper highlights the challenges of scaling digital training, emphasizing that it may become less cost-effective and require measures to sustain engagement, further impacting its cost efficiency.

- Although not exploring effects on business performance, a case study from a World Bank project in Indonesia found that *online training programs* that integrate self-paced modules with virtual mentoring offer a cost-effective and scalable way to support women entrepreneurs in digitizing their businesses, many women seeking to combine the flexibility of online learning with in-person activities to foster networking and partnerships (GIL 2024).

Non-sex-disaggregated research: A study of 225 growth-oriented firms in the Western Balkans provided 30 hours of group training and five hours of one-on-one *virtual consulting,* which helped firms improve their digital presence and boost export sales. While the training cost $2,140 per firm, firms were estimated to recoup this within six to twelve months, though with some uncertainty (Cusolito et al. 2023). A randomized controlled trial with micro-entrepreneurs in Kenya exploring the effectiveness of automated *SMS business training* showed that the training led to greater monthly revenue and financial resilience, more extensive usage of formal book-keeping and a better self-reported understanding of financial concepts (Fuchs et al. 2022). A two-site randomized controlled trial in India and the Philippines found that mobile phone-based business training significantly improved business practices for micro-entrepreneurs, though no impact on profitability or sales was detected (Cole et al. 2022). An evaluation of the Imarisha Mentoring Program explored the feasibility of an online facilitated *mentoring* program compared to traditional in-person mentoring program and found that online facilitated mentoring was 31.2 percent cheaper than in-person mentoring, saving £1,449.1 per entrepreneur, though the cost difference was less than expected due to additional monitoring and communication needs (Genesis Analytics and Ardigius Foundation 2021).

BUNDLED TRAINING

Various meta-analyses find that training alone may not be sufficient to grow WSMEs (Bandiera et al. 2013; Buvinic et al. 2013; McKenzie and Woodruff 2013; Cho and Honoratia 2014; McKenzie and Woodruff 2023). Training combined with finance, coaching, and/or networking seems to be more effective in improving business performance for women-led businesses.

- Training + coaching: An experimental study from Peru focusing on women micro-entrepreneurs evaluated the impacts of a business training program with technical assistance (Valdivia 2015). Results showed that two years after the program, all women entrepreneurs who received technical assistance in addition to the training increased their revenues, adopted recommended business practices, and showed above 15 percent growth.

- Training + savings: In Indonesia, Buvinic et al. (2021) tested the effectiveness and cost effectiveness of providing incentives to promote savings accounts, business and financial literacy training, and the combination of the two on women's businesses and agency. Although the study found only small positive effects on the take-up of saving services, both interventions had significant positive effects on women's profits.

Research on the linkage between WSME business growth through stronger skills and networks, and higher **job growth *could not be found.*** Since impacts in terms of employment generation begin to appear only after several years, this could be an indication that impacts of training programs tend to be measured only in the short term.

R3.4 **R3.5** **R3.6**	**Impacts: Does better access to skills and networks for WSMEs lead to increased job growth, increased business creation among women, and women's empowerment?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Job growth	?	◆	◆
	Business creation	/	◆	◆
	Women's empowerment	/	◆	◆

Non-sex-disaggregated studies: McKenzie and Woodruff (2023), in their meta-analysis, suggest that traditional business training programs may lead to modest improvements in business practices and some performance outcomes for micro-enterprises, though they appear to have little to no impact on employment. An evaluation of MicroMentor, an online platform that connects entrepreneurs with volunteer mentors, found that while mentoring improved outcomes like external finance and self-employment for SMEs, it did not significantly impact revenue or job creation (DEVLEARN 2020).

There is ***mixed evidence*** on whether **traditional business training** encourages **business creation** among women. There is some evidence that indicates **networks (incl. role models) and mentoring** may have a positive impact on women's business startup. ***No evidence could be found*** on the effects of soft skills training, heuristic training, digital training, coaching/consulting, or accelerators/incubators on women's business creation.

- Business training: An ILO meta-analysis of findings from nine impact evaluations showed that only five business training programs had a positive (but not substantial) effect on women's business startup (ILO 2014).

- Mentorship: Mentorship may have the potential to increase the number of women entrepreneurs in male-dominated sectors. Two GIL studies revealed that women entrepreneurs in Uganda who, during their youth, were supported and encouraged to consider male-dominated sectors by a mentor were more inclined to do so (GIL 2020).

- Networking: Social networks and peer-support mechanisms may have a positive impact on women's business startup. A quasi-experiment from rural India examined the interplay of women's social networks and the initiation and success of *women micro-entrepreneurs.* Results showed that ties to family and community positively related to entrepreneurial activity (Venkatesh et al. 2017). Another study in India found that business trainings for women micro-entrepreneurs combined with peer-support-mechanisms (i.e. women attended with a friend) had a substantial positive impact on women's business startup (Field et al. 2016). For *high-growth startups,* evidence shows that people who personally know an entrepreneur are more likely to engage in high-growth entrepreneurship, but women are less likely to be acquainted with an entrepreneur, compared to men (Bullough et al. 2019). Moreover, networks represent an important asset for women entrepreneurs in the startup phases because of the role that networks can play in accessing financing.

- Role models: Using cross-sectional survey data from 127 higher education institutions in Germany, Seyberth and Overwien (2024) found that entrepreneurial role models significantly reduced gender disparities in entrepreneurship. Family members, especially those with close ties, have the most substantial influence in motivating female students to pursue entrepreneurial careers.

Limited evidence shows little to no effect of trainings on **women's empowerment** more broadly - although a common hypothesis suggests that training combined with mentoring, coaching, and/or peer networks may increase women's agency.[38] The limited results may question the extent to which training programs that work only with women entrepreneurs can strengthen women's empowerment without addressing underlying constraints, like social norms. For example, it may be beneficial for programs to include men or other household members in their interventions, as this can leverage their influence, foster allyship for gender equality, and address social norms.

- Of the nine studies in the ILO meta-analysis (2014) only two evaluated their impact on women's agency, showing little positive effect through the medium term.

- Several studies highlight the effectiveness of including men in supporting women's entrepreneurship and empowerment (Wolf and Frese 2018; Bernhardt et al. 2019; Bursztyn et al. 2022; Pierotti et al. 2023). However, the impact of male involvement may not always be positive and depends on the context and program design. For example, a randomized controlled trial on cash grants and gender-sensitive trainings in Tunisia found that providing women with cash grants and gender-sensitive financial training boosted income-generating activities, but only when male partners were not involved, while household living standards improved regardless of partner participation, suggesting that involving men in women's empowerment programs can hinder their success (Gazeaud et al. 2023).

A *non-sex-disaggregated* study that has potential learning and application for women-led businesses is a five-week Cognitive Behavioral Therapy program with 235 SME owners in Pakistan. It included modules on stress management, problem solving, support networks, and self-care. The study found that entrepreneurs who took part in the program had a 50 percent lower chance of suffering from depression and anxiety. Participants also experienced an improvement in their overall level of wellbeing (Saraf et al. 2019).

38 A paper by Buvinic et al. (2021) recommended that interventions designed to improve women's economic empowerment should be tracked long enough for women to manifest new business behaviors. This is consistent with other evidence on the delayed effects of some interventions targeting women's economic empowerment.

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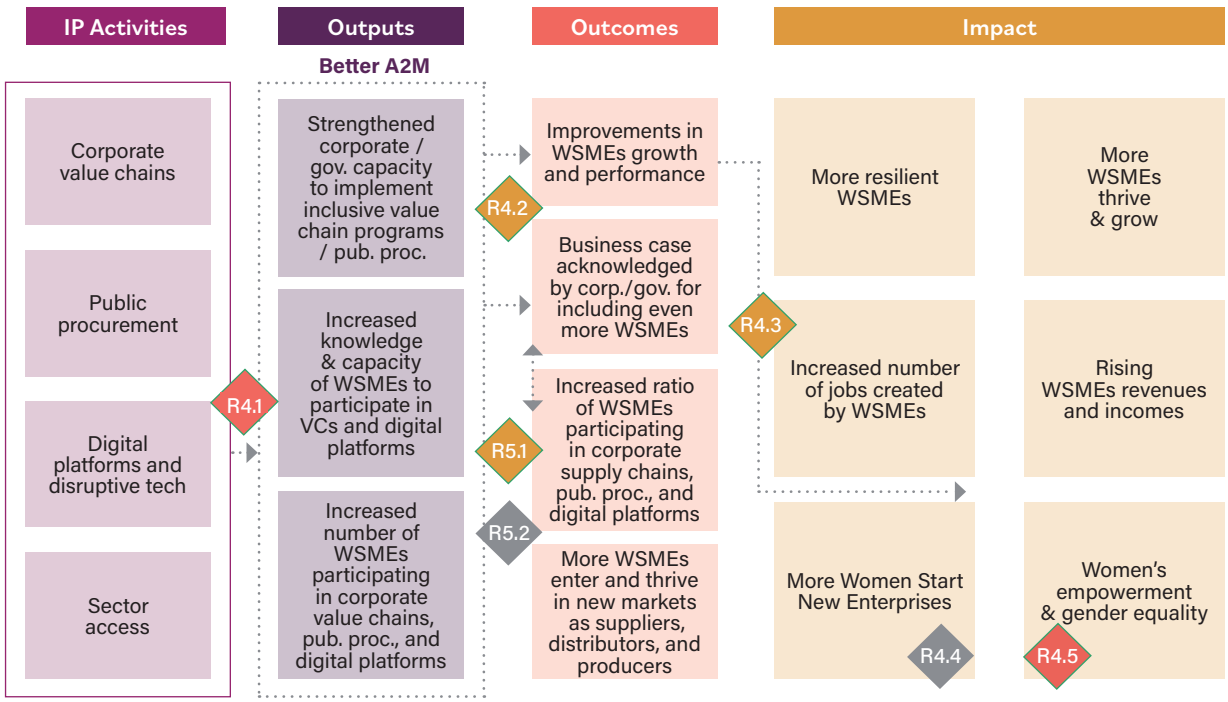
5 Evidence on access to markets and technology

5.1 Impact pathways

This chapter summarizes evidence on what works to improve WSMEs' access to markets and technology, using We-Fi's Theory of Change to map research questions (R4.1-R4.5 for direct outcomes and R5.1-R5.2 for indirect outcomes) to different impact pathways. It outlines the strength (strong, emerging, limited, no evidence found) and direction (positive, mixed, negative) of evidence for each research question, along with supporting sources.

Figure 5: Impact Pathways for Access to Markets and Technology



Strong evidence
At least two sources of high quality and one of medium quality, or four sources of medium quality

Emerging evidence
At least two sources of medium quality, or one source of high quality and two of low quality

Limited evidence
Only low quality sources; or insufficient medium/quality evidence to qualify for the previous categories

No Evidence found
No sources found (may include cases where related evidence is provided)

* Shifted rating in 2025 update

+ **Positive evidence**
Consistently positive evidence

/ **Mixed evidence**
Mixed evidence

- **Negative evidence**
Consistently negative evidence

5.2 Findings

DIRECT IMPACTS ON WSMES

H4	Improved access to markets and technology for WSMEs (through inclusive value chains, public procurement, digital platforms, and market access) leads to improved business performance, job creation, and women's empowerment			
R4.1	**Outputs: Do gender-inclusive market access programs lead to an increased number of WSMEs participating in corporate value chains, public procurement, digital platforms, and sectors?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Corporate value chains	+		
	Public procurement	+		
	Digital platforms	+		
	Sector access	?		

R4.2	Outcomes: Does improved access to markets and technology lead to improved WSME business growth?	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Corporate value chains	+		
	Public procurement	+		
	Digital platforms	+		
	Sector access	+		

CORPORATE VALUE CHAINS

There is ***limited evidence*** on corporate supplier diversity programs aimed at **increasing the number of WSMEs** as producers, suppliers, distributors, and retailers. Some industry reports show how training WSMEs improves their knowledge on accessing international markets, but better access to markets through corporate value chains depends on the sector and the dynamics of the value chain. While some sectors lend themselves to

engage more women (i.e. women retailers and distributors in fast-moving consumer goods, or FMCG), some need more effort to not perpetuate gender inequalities. A We-Fi study in Bangladesh found that nearly 20 percent of corporates did not know whether they procured from WSMEs or how to identify WSMEs (We-Fi and World Bank 2020). Although some anecdotal evidence does exist, including policy papers and practical guides on gender-responsive procurement[39], there is still limited evidence on which policies and practices are most effective to help corporates increase sourcing from WSMEs.

- Large corporations like Coca-Cola, Walmart, UPS, Unilever, and others have had long-standing supplier diversity programs.[40] For example, Coca-Cola's 5by20 initiative empowered 5 million women entrepreneurs by 2020, while Walmart introduced a "women-owned" logo with WEConnect International (Nelson et al. 2015). The UPS Women Exporters Program has trained over 6,000 WSMEs globally to engage in trade, with significant impacts reported in Mexico and Vietnam. In Mexico, 94 percent of UPS training participants reported that the activities improved their knowledge on accessing international markets, while in Vietnam, 78 percent reported that they increased their capacity and understanding on how to finance their business (International Trade Centre 2020). Unilever has supported 5.5 million small business owners and micro-entrepreneurs through its last-mile distribution networks in several countries, including Bangladesh, India, and Nigeria (Nelson et al. 2015).

- B2B *distribution platforms* (e.g., TradeDepot in Nigeria, MaxAB in Egypt, or Growsari in the Philippines) can help women entrepreneurs connect as distributors and retailers to corporate manufacturers (IFC 2022; IFC and We-Fi 2023).

Evidence on the effects of inclusive value chain programs on women's **business performance** is still ***limited***.

- According to the United States Small Business Administration, small businesses (men and women) that became suppliers to large corporations could grow their average revenue by 250 percent and their average number of employees by more than 150 percent (non-sex-disaggregated).[41]

39 See European Institute for Gender Equality 2022 (EU); UN Women 2023; World Bank Group 2024 (toolkit)

40 Although there have been recent shifts and discontinuations, underscoring the challenges of sustaining these initiatives in the current global environment.

41 Data from the U.S. Small Business Administration Women Entrepreneurs Summit Series, https://www.sba.gov/sites/default/files/Womens%20Entrepreneurs%20Summit%20Series%20FINAL.pdf

PUBLIC PROCUREMENT

There is ***emerging evidence*** that inclusive public procurement increases the **number and size of contracts** awarded to WSMEs through preferential policies, certification mechanisms, transparent processes, and capacity building for procurement officers and WSMEs. However, there is only limited evidence on how public policies have influenced private sector procurement.

- Chile has one of the most accessible public procurement systems for SMEs. Mercado Público is an e-marketplace that provides universal access to all public procurement tenders and information on doing business with the state. As a result, the share of women participating in the public procurement system reached 37 percent in 2016 (Chatham House 2017). Other good-practice examples are Israel and Kenya. Israel's Mandatory Tenders Law states that when two bids are evaluated with the same number of points, the bid from a WSME shall be chosen. In Kenya, every governmental procuring entity needs to allocate at least 30 percent of its procurement value to youth, women, and persons with disabilities. There is initial evidence that this policy has influenced the private sector to adopt these targets (We-Fi and IFC 2021).

- Despite more procurement policies to WSMEs in different countries, there is a significant data gap in public procurement, since only a few countries are currently collecting sex-disaggregated data and reporting progress. Another issue is the lack of a common definition across countries to identify and certify WSMEs. For example, WEConnect or Women's Business Enterprise National Council (WBENC) offer certification processes that provide organizations with an easy and effective way to assess whether a business is women-owned or not (Chin 2017). Other platforms, such as SheTrades, focus on increasing the visibility of WSMEs and facilitating their engagement in value chains. However, no evidence could be found yet on the effectiveness of such platforms and databases of registered and certified women suppliers to help corporations and governments identify suitable WSMEs as suppliers, distributors, producers, or retailers.

Emerging evidence points toward better business performance for WSMEs with **better access to markets** through public procurement.

- In a randomized control trial including 772 firms, Hjort et al. (2020) demonstrated the positive impacts that public procurement training for small businesses can have on their business performance.

- Moreover, a study conducted in Ghana found that women-owned firms significantly increased production and profits in response to experimentally introduced demand shocks, while men-owned firms did not. This could mean that women producers might benefit more from training that addresses demand constraints, such as public procurement or value chain training (Hardy and Kagy 2020).

DIGITAL PLATFORMS

There is ***limited*** evidence (based on case studies) on the impacts of digital skills trainings (e.g., e-payments, digital marketing, return policy, and regulations) or other interventions on **access to and use of digital platforms** (i.e. e-commerce) to access new markets, financing, and business opportunities.

- A number of case studies show how e-commerce companies can lead the way and recruit more women vendors by targeting women entrepreneurs for training, designing new financial solutions for women, and collecting sex-disaggregated data. For example, the IFC-led Digital2Equal initiative[42] partners with leading tech companies to expand opportunities for women entrepreneurs on digital platforms. Case studies highlight inclusive approaches, such as Brazil's Elo7, which surveyed 1,000 sellers to design targeted tools for women, and Nigeria's Jumia, which offers e-commerce training through its Women and Youth Empowerment Program. IFC reports estimate that closing gender gaps could add $280 billion to Southeast Asia's e-commerce market and $14.5 billion to Africa's by 2030. (IFC 2021).

- In Tunisia, a virtual market place pilot proved catalytic for women entrepreneurs, with 42 percent of participating SMEs led by women, who exported products to over 20 new destinations through e-commerce platforms such as Etsy, eBay, TradeKey, Alibaba, and Amazon (Word Bank and We-Fi 2019).

- Lessons from a pilot of a digital mentoring platform in Ethiopia showed that connecting female entrepreneurs to digital platforms for information and resources is feasible even in low-income, low-bandwidth settings, though initial take-up may require traditional, in-person marketing and onboarding (Friedson-Ridenour and Edey 2023).

42 See case studies here: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/gender+at+ifc/priorities/digital_economy_sa/digital2equal

Digital platforms may not only open new opportunities for increased access to markets for women entrepreneurs but also for increased access to financing. E-commerce platforms can use vendor sales histories to provide financial services to women entrepreneurs who tend to have difficulties accessing loans due to the lack of collateral or formal credit histories. Although more platforms are developing innovative financial services for loans and payments, data shows that only 7 percent of women in Africa have leveraged e-commerce-platform financing (Council on Foreign Relations 2021). Facilitating access to trade finance and working capital by leveraging digital transaction data might be crucial to WSMEs' growth.

Emerging evidence suggests that digital platforms can help women improve their **business performance** by enhancing access to markets (incl. international markets), such as through e-commerce.

- A study by Poole and Volpe (2023) examined how online business platforms can reduce informational barriers for women entrepreneurs in exporting. By analyzing data from firms participating in ConnectAmericas alongside detailed export data from Peru, the study found that women who use ConnectAmericas increased the value of their exports by 40 percent relative to non-users, while male users saw only a 10 percent increase. One possible explanation for this result is that women may be more likely to sign up for the platform once they have decided to grow their business and feel ready to start exporting.

- Moreover, data and descriptive evidence shows that engaging SMEs in cross-border e-commerce can yield productivity gains of 6 to 15 percent and double the participation of WSMEs (Mohiuddin et al. 2020).

- A study conducted by ITC showed that exporting firms owned by women had about 1.2 times higher productivity than exporting companies owned by men (ITC 2015).

There is ***emerging evidence*** on how **better access to technology** and digital platforms can unlock growth for women entrepreneurs through **digitalization**.

- Evidence from formal firms in Kenya shows that access and use of technologies like email, websites, and the internet boosted productivity in female-owned firms, with a 10 percent increase in technology use raising value-added per worker by 1.69 percentage points. While male-owned firms also benefit, the effect is notably smaller (Menon 2015).

- Results from a study based on low-income female entrepreneurs in Jordan underline the promise of digitalization as a 'market access technology' in unlocking the growth of women-owned home-based businesses (often constrained by social norms and childcare responsibilities). Providing women entrepreneurs with virtual storefronts and digital marketing training led to higher business survival, revenue, and online clients, with the greatest benefits seen among mobility-constrained women (Alhorr 2024).

- Manalova et al. (2023) found that digitalization helped mitigate revenue losses for women-led businesses and that women were more likely than men to adopt digital tools to engage with their markets during the COVID-19 pandemic.

- A study by Cirera et al. (2024) based on survey data from 11 countries, including both developing and developed economies, showed that firms with female top managers were equally likely as those led by men to adopt advanced general business technologies but less likely to adopt sector-specific technologies, though the productivity gains from the use of sophisticated technologies were greater in women-managed firms.

SECTOR ACCESS

No evidence could be found on the impacts of market access interventions, aimed at increasing the number of women-led businesses in **male-dominated sectors**[43] , although there are some sector-specific policy notes available (e.g., agriculture[44]).

Strong evidence based on experimental studies demonstrates a positive impact on **business performance** for women entrepreneurs who enter male-dominated sectors.

- A mixed methods study from Uganda found that women entrepreneurs who shifted into male-dominated industries earned as much as men and three times more than women in female-dominated sectors (Campos et al. 2014). The paper suggests that information gaps about the profitability of male-dominated industries are likely to play an important role, as do role models influencing girls as they determine their career paths.

43 Male-dominated sectors are typically defined as those in which men represent the majority of the workforce, business ownership, or leadership roles, such as STEM, climate-related industries, construction, energy, and export-oriented manufacturing. Female-dominated sectors often include agriculture, health care, education, retail, and services - although women-led businesses in these sectors often remain concentrated in lower-value or informal segments.

44 See Bloem et al. 2022; Okemini et al. 2022

- In an experiment in the Republic of Congo, Gassier et al. (2022) also found that providing information on earnings is a low-cost intervention that can encourage women to cross over to more profitable sectors, thereby reducing the gender gap in earnings.

- Moreover, a GIL study focusing on women entrepreneurs in Mexico indicated that Mexican women who crossed over to male-dominated sectors performed better in terms of sales and profits than non-cross-overs (Cucagna et al. 2020).

- Other studies also indicated that returns to sectorial shifts may be high, and that encouraging women entrepreneurs to cross over into male-dominated sectors may be feasible (Bardasi et al. 2011).

R4.3 R4.4 R4.5	**Impacts: Does better access to markets and technology lead to increased job growth, business creation among women, and women's empowerment?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
	Jobs (international markets)	+		
	Business creation	?		
	Women's empowerment	+		

BUNDLED INTERVENTIONS

Linking access to markets interventions with financing (i.e. trade finance) might be crucial for WSMEs to leverage opportunities for growth. Limited access to trade finance remains a major barrier for SMEs in expanding their trade and entering international markets. New efforts to support WSMEs' access to trade finance could have a significant positive impact on the internationalization and business growth of WSMEs. ***No evidence could be found*** on the impacts of trade finance on the improved access to (international) markets or on the impacts of combined interventions (e.g., e-commerce or corporate value chains with trade finance). More research on the impacts of trade finance on WSME business growth and the combination with other markets access interventions is needed.

There is ***limited evidence*** on how **improved access to markets**—through exports and international trade—affects **women's employment** in firms overall (both women- and men-owned).

- A study using firm-level data from 154 developing economies—particularly in the Middle East and North Africa (MENA) region—found that integration into global value chains significantly increased the likelihood of female business ownership and raised the share of female employees, especially in production roles. These findings suggest that global value chains can serve as a valuable tool for advancing women's empowerment in emerging economies, particularly in the MENA region (Kalliny and Zaki 2024).

- Using data from firms in 91 countries, Amin and Islam (2021) found that both men- and women-led firms with higher export intensity tend to employ a greater share of women. Specifically, a 1 percent increase in the share of exports in total sales is associated with a 0.16 percent rise in the share of female workers. This effect is strongest in female-intensive industries, in markets exposed to global competition, and in contexts with supportive social norms, labor laws, and local conditions.

- Similarly, a report by the World Bank Group and World Trade Organization (2020) shows that firms engaged in international trade tend to employ more women. In developing countries, 33.2 percent of the workforce in exporting firms are women, compared to 24.3 percent in non-exporting and 28.1 percent in non-importing firms. Women's representation is also higher in global value chain and foreign-owned firms, making up 36.7 percent and 37.8 percent of their workforce, respectively. Furthermore, women are less likely to hold informal jobs in trade-integrated sectors, with informality rates dropping from 20 percent in low-export sectors to 13 percent in high-export sectors.

No evidence could be found on the links between **better access to markets** and **women's business creation.**

There is ***limited evidence*** that access to **digital technologies and platforms** can lead to **women's empowerment** through more flexibility and autonomy.

- Increased capacity of WSMEs to engage on digital platforms may lead to more flexibility and autonomy for women to combine work and care responsibilities, which may result in an increased number of women engaging in entrepreneurship (USAID 2018).

IMPACTS ON INTERMEDIARIES (INDIRECT IMPACTS ON WSMES)

H5	**Strengthened capacity of intermediaries (corporates / governments) to implement inclusive value chain / digital programs leads to broader access to markets for WSMEs**			
R5.1	**Do inclusive value chain programs generate positive financial returns for intermediaries (i.e., corporates / governments)?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
		+	◆	◆

Emerging evidence suggests that supplier diversity programs might be a **good financial bet** for corporations, leading to improved profitability, strengthened customer loyalty, innovation, and resilience. However, data is usually not disaggregated for specific groups such as WSMEs. Evidence builds on the topic of supplier diversity overall, since many corporates are focusing and reporting on multiple segments of underserved groups as part of their overall sustainability strategies.

- **Return on investment:** Research by The Hackett Group found that companies that prioritized supplier diversity had a 133-percent greater return on procurement investments. It also showed a strong relationship between high levels of diversity spend and increased market share. It found that companies that allocated more than 20 percent of their spend to diverse suppliers, attributed 10 to 15 percent of their annual sales to supplier diversity programs (The Hackett Group 2017). A study by McKinsey confirmed that, for many companies, gender-inclusive procurement practices have had a positive impact on profitability and return on investment. It found that 34 percent of companies said working with women-owned suppliers had led to increased profits (McKinsey 2010). Integrating more WSMEs across the value chain can also bring new strengths to distribution networks, particularly when designing for last-mile sales. For example, Coca-Cola's 5by20 program focused on expanding the distribution of Coca-Cola products, which resulted in increasing their revenues by 17 percent and their store income by 12 percent (IFC 2022).

- **Cost reduction:** The same study also indicated that companies with more diverse supplier programs spent on average 20 percent less on their buying operations than those with less diverse supply chains (The Hackett Group 2017).

- **Customer reputation and loyalty:** Research by WEConnect found that promoting supplier relationships with women entrepreneurs is linked to improved brand reputation and increased customer loyalty (Vazquez and Frankel 2017).

- **Innovation:** UN Women (2022) found that gender-inclusive procurement is correlated with more innovation and adaptability, enabling corporates to better respond to customers' needs.

- **Risk mitigation and resilience:** A diverse base can mitigate operational risks when facing demand shocks due to pandemics, natural disasters, or economic downturn and make supply chains more resilient and agile, by increasing the number of suppliers, distributors, or retailers (Chin 2017).

R5.2	**Do performance benefits incentivize intermediaries (i.e., corporates / governments) to increase their sourcing from WSMES?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
		?		

No evidence could be found on whether performance benefits incentivize corporates to increase their sourcing from WSMEs. Further research is needed, particularly on how performance-based incentives can drive organizational change and encourage corporates to sustainably increase sourcing from WSMEs over the long term.

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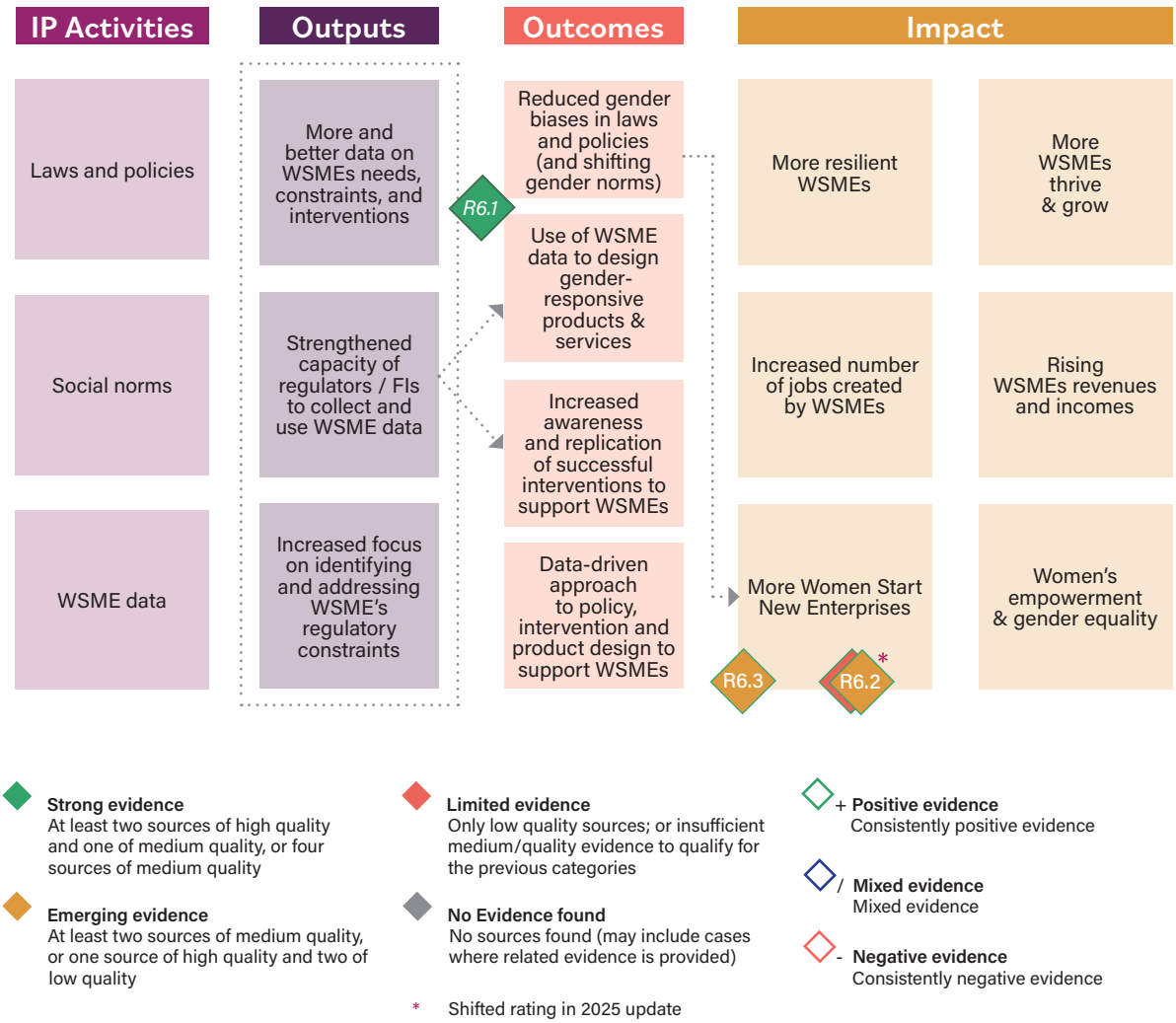
6 Evidence on the enabling environment

6.1 IMPACT PATHWAYS

This chapter summarizes evidence on what works to improve the enabling environment for WSMEs, using We-Fi's Theory of Change to map research questions (R5.1-5.4) to different impact pathways. It outlines the strength (strong, emerging, limited, no evidence found) and direction (positive, mixed, negative) of evidence for each research question, along with supporting sources.

Figure 6: Impact Pathways for Enabling Environment



6.2 FINDINGS

H6	Gender-equal laws and policies, reshaped gender norms, and the availability and use of WSME data has a positive effect on the rate of women's entrepreneurship			
R6.1	Do more gender-equal laws and policies correlate with higher women's entrepreneurship / business creation?	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
		+	◆	◆

There is ***strong evidence*** on the correlation between more gender-equal laws and policies and women's employment and entrepreneurship (incl. access to finance), although the supporting evidence is stronger in some areas than others.

Entrepreneurship

- Research by Hyland and Islam (2021) explored the relationship between discriminatory laws and the probability that a women-owned business begins operating in the informal sector. It found that discriminatory laws increased the likelihood that women-owned firms begin operations in the informal sector.

Female labor force participation

- Data from Women, Business and the Law (2024) shows that legal reforms are positively associated with outcomes in women's employment. Similarly, OECD data on gender equality and entrepreneurship indicates that more women join the workforce in economies that are reforming toward gender equality.[45]

- Several studies show that more gender-equal laws are positively associated with improved labor market outcomes (Gonzales et al. 2015; Hyland et al. 2020). Sever (2022) demonstrates that removing legal barriers to gender equality significantly improves women's labor force participation without negatively affecting men's, leading to long-term, inclusive economic growth.

45 See Key Charts on Entrepreneurship, OECD, https://www.oecd.org/gender/data/entrepreneurship/#d.en.387805

- A study by Iqbal et al. (2016), using Women, Business and the Law data across 167 countries, found that greater legal gender disparities are negatively associated with various outcomes, including women's labor force participation, representation among top managers, and access to formal credit. Similarly, a study by Islam et al. (2017), using data from more than 60,000 firms across 104 economies, found that discriminatory laws discourage women's participation in the workforce as well as their likelihood of becoming top managers or business owners.

Access to financing

- Using data from 148 countries, Perrin and Hyland (2023) showed a significant positive correlation between legal gender equality and women's access to financial services. However, the findings also indicated that adverse social norms may weaken these effects, while effective legal implementation can enhance women's financial inclusion.

- Another study examining the impact of gender-equal laws on women-led firms' access to credit, based on data from 124 countries, distinguishes between demand-side discouragement and supply-side credit approval. The findings indicated that while women-friendly legal protections reduced credit discouragement, they did not significantly improve access to credit unless accompanied by strong enforcement, which amplifies the law's effectiveness—particularly for smaller firms and those in high-income countries (Bertrand and Perrin 2022).

- Perrin and Weill (2022) found that greater gender equality in access to credit is linked to improved financial stability, reinforcing the idea that expanding women's access to credit can generate broader systemic benefits.

- A study by Becerra-Ornelas et al. (2024) explored the impacts of a regulatory reform on women's access to finance. The reform reduced the loan loss provisions required for loans granted to women in Mexico. Results showed that the reform significantly increased personal loans to women, improved credit conditions (lower interest rates, higher amounts), and reduced default rates, especially for first-time borrowers and those in areas with higher labor informality. It also enhanced access to future personal loans with better terms.

Care

- Care policies, such as maternity and paternity leave, play a critical role in supporting women's employment and entrepreneurship, redistributing unpaid care work, and shifting social norms to address long-term gender inequalities. However, the availability and design of these policies vary globally, and evidence on their effectiveness remains limited—largely due to a lack of sex-disaggregated data, which constrains comprehensive analysis of their impact (ICR Facility 2024).

- A study from Canada found that childbirth significantly reduced women's business founding rates and startup performance, contributing to the gender gap in entrepreneurship, with long-lasting effects that did not return to pre-birth levels. However, access to childcare, progressive social norms, and supportive policies—such as parental leave and flexible work arrangements—can help mitigate these impacts and promote women's long-term entrepreneurial success (Rutigliano, 2024).

- Anukriti et al. (2023) found that the enactment of childcare laws is associated with an average 2 percentage point increase in women's labor force participation, with the effect growing over time to 4 percentage points within five years of implementation.

Drivers of reform

- Based on Women, Business and the Law data, Behr and Cheney (2025) highlighted how Sierra Leone made significant progress in advancing women's entrepreneurship by combining government action with grassroots efforts. Legal and policy reforms, supported by political leaders, international assistance, and civil society activism, expanded women's economic rights and set an example for other countries in the region.

R6.2	**Does reshaping gender norms boost gender equality in entrepreneurship?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
		+	◆	◆

There is ***emerging (previously limited) evidence*** demonstrating how shifting social norms can lead to more gender equality in entrepreneurship, such as more women starting a business or more women entrepreneurs entering male-dominated industries, as well as how it can lead to better access to finance, skills or markets.

Entrepreneurship

- Bento et al. (2023) developed a quantitative framework demonstrating that social norms are a key driver of gender differences in entrepreneurship and time use, with significant implications for women's welfare, firm size, and worker productivity across countries.

- Results from a quasi-experimental study in India showed that a reform that granted women from specific religious groups inheritance rights equal to men significantly increased firm creation by women (Naaraayanan 2019).

- Barsoum et al. (2022) found that a TV show in Egypt significantly improved perceptions of women's entrepreneurial capacities, particularly reducing gender-biased beliefs among male viewers.[46] However, the study does not examine how this translates into the number of women starting new businesses.

Access to resources

- There are some studies exploring the impacts of social norms on women's access to finance, markets, and skills. Evidence from South Africa indicates that women face deeply rooted socio-cultural challenges, in particular patriarchal attitudes in male-dominated industries (i.e. construction industry). Strategies to overcome these challenges can include partnering with male business owners when bidding for jobs and forming business networks, but more evidence is needed here (Aneke et al. 2017).

- Görg and Jäkel (2024) examined the impact of social norms and institutional biases on the performance of female-led businesses using data on Danish startups and trade behavior. They found that gender inequality and biases in partner countries significantly affected gender gaps in export and import activity, with evidence from Norway's board quotas suggesting that policy reforms can help reduce disparities in trade participation.

- A review by Chang et al. (2020), based on quantitative evidence from 160 randomized controlled trials and quasi-experiments in low- and middle-income countries, finds that social norms often limit the effectiveness of interventions aimed at enhancing women's agency. For example, access to finance alone, without addressing household dynamics or norms, does not consistently improve agency, whereas programs that give women greater control over resources tend to be more successful (Chang et al. 2020).

46 Also see Marcus and Somji 2024.

Female labor force participation

- Using data from 150,000 people across 111 countries, Goldstein et al. (2024) showed that more equitable social norms led to higher female workforce participation, greater male involvement in household chores, and more shared decision-making in couples.

- A review of nine randomized evaluations of childcare interventions[47] from eight low- and middle-income countries by J-PAL found that access to childcare can enhance women's employment outcomes, but its effectiveness may be limited in contexts where additional barriers to working outside the home exist (e.g., restrictive social norms or lack of employment opportunities). The review also shows that childcare can help women become more productive in their current jobs and businesses or transition to more desirable work that is otherwise incompatible with childcare responsibilities (Gulesci and Jayachandran 2023).

R6.3	**Does the collection and use of sex-disaggregated data by governments and financial intermediaries lead to a more data-driven approach to policy, intervention, and product design to support WSMEs?**	*Direction of Evidence*	*Strength of Evidence (2022)*	*Strength of Evidence (2025)*
		+	◆	◆

The collection of high-quality, quantifiable sex-disaggregated data is fundamental for policymakers to inform the design and implementation of gender-responsive programs and policies, and for financial institutions to design tailored products and services (Meunier et al. 2017; Eden and Wagstaff 2021; Bonfert et al. 2023). Sex-disaggregated data is not only critical for financial service providers to improve access to financing for WSMEs but also plays a broader role in evidence-based policymaking. The effective design of interventions (e.g., training programs, value chain interventions etc.) requires a clear understanding of gender gaps, which can only be better understood through robust sex-disaggregated data. For example, this includes sex-disaggregated data collection on unpaid care work, which is often missing from national time-use surveys but is essential for designing policies that promote a more equitable distribution of care responsibilities. Women, Business and the Law (2024) found that over the last three years only 46 economies published sex-disaggregated data on unpaid care work.

47 The interventions vary in target age ranges and in modalities of childcare (including vouchers for private childcare, publicly provided daycare, and public after-school childcare).

Most governments and private sector companies are not yet in the habit of collecting sex-disaggregated data on financing for SMEs (also due to a lack of WSME definitions) and do not fully recognize the value of this information to develop effective financial products, policies and programs for WSMEs. Women, Business and the Law (2024) indicates that only 67 economies (out of 190) publish such sex-disaggregated data on women's entrepreneurship and women-owned businesses. A 2015 study that included 173 banks from over 50 countries found that only 30 percent of included financial institutions were collecting and using sex-disaggregated data (Financial Alliance for Women 2018). Additionally, not all actors who collect sex-disaggregated data use the data to inform their business decisions. A report by IFC showed that 60 percent of financial institutions surveyed indicated they collect sex-disaggregated data, but only 14 percent used the data to inform their business decisions (IFC and UKAid 2021).

A common challenge cited by regulators is the lack of awareness—both among regulators and financial institutions—about the value of sex-disaggregated data (GBA, IDB, MIF and Data 2X 2019). The collection and use of sex-disaggregated data are often hampered by legacy information systems, limited data management capabilities, a lack of common standards and definitions leading to inconsistencies and low data quality, and concerns around data privacy. It is estimated that building and sustaining sex-disaggregated data systems will require an additional $500 million annually from donors through 2030 (Data 2X 2019).

A number of efforts are underway to improve the collection and use of sex-disaggregated data. For instance, partnerships like the WFID have developed global strategies to expand its role of sex-disaggregated data in increasing women's financial inclusion in advancing women's financial inclusion (World Bank Group 2020). Various institutions have introduced methodologies for this purpose, while the IMF piloted data collection through their Financial Access Surveys. However, as analyzed in a CGAP report, no ideal or standard set of best practices has emerged for collecting and using sex-disaggregated data in the financial sector (Alonso and Dezso 2024). The WE Finance Code, a global multi-stakeholder initiative launched in 2023 by the We-Fi Secretariat in collaboration with 7 Multinational Development Banks, Financial Alliance for Women, OECD and other global partners emphasizes the collection of supply-side SME finance sex-disaggregated data, advocating for increased funding for women-led firms, and promoting leadership in this area. The WE Finance Code was developed collaboratively with finance leaders from private and public sector organizations and draws on lessons from the UK Investing in Women Code. We-Fi has allocated over $14 million to its implementing partners to support over 30 pilot countries in implementation. Lessons learned from Code launches and implementation are forthcoming.[48]

48 See https://We-Fi.org/We-Finance-code/#newsresources for more information and resources for country launches

There is a ***limited but growing number of examples*** of how sex-disaggregated data has been used to develop new products, programs, or policies for WSMEs and increase financing going to WSMEs.

- Chile is the only country in the world that has consistently tracked sex-disaggregated data on its financial system for over 10 years. It has narrowed gender gaps in many areas, but several persist, including in labor force participation and wages. Using insights from supply-side sex-disaggregated data, BancoEstado officials, for instance, developed the internal business case for its Crece Mujer Emprendedora program (Data 2X et al. 2016).

- In Bangladesh, sex-disaggregated data led the Bangladesh Bank to modify its SME financing policy for women. The central bank in Bangladesh also issued regulations based on collected data, instructing banks and other financial institutions to provide collateral-free loans to women entrepreneurs, and created a dedicated desk at bank branches to serve them. In Senegal, the Ministry of Economy Finance and Planning, informed by sex-disaggregated data, made available public funds to support women's entrepreneurship, built awareness about women's access and usage of financial services and established programs to increase women's access to credit. Other examples include Tanzania, Zimbabwe, and Mozambique. Tanzania collects sex-disaggregated financial data through FinScope surveys and supply-side data from financial service providers to monitor financial inclusion targets related to women and men. Zimbabwe's Reserve Bank uses such data to set financial inclusion goals, addressing barriers like illiteracy and lack of collateral affecting women. Mozambique's NFIS (2016–2022) established targets for women's access to deposit, credit, and electronic money accounts, aiming to improve financial inclusion for women significantly (Alliance for Financial Inclusion 2023).

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7 Summary on "What Works" and Evidence Gap Maps

This chapter builds on the findings from the evidence review and summarizes evidence-based insights on the effectiveness of interventions in supporting WSMEs. Overall, the evidence base is growing, but still limited, especially when it comes to long-term impacts. Based on the evidence mapping, a few preliminary patterns emerge on which interventions may be effective in supporting WSMEs, although more evidence is required to substantiate them and better understand the dynamics and effectiveness of interventions in different settings and regions. Moreover, these preliminary results do not mean that other interventions are not effective, as impacts may hide among evidence gaps where large-scale data gathering and valid impact evaluations have been hampered.

General insights

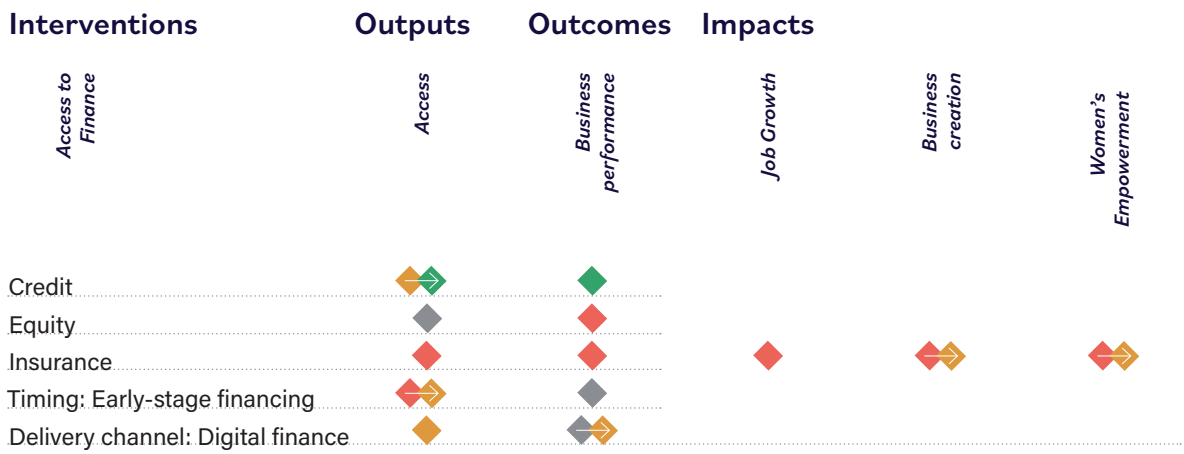
- **Segmentation and targeting:** A growing body of evidence underscores the importance of segmentation in the design and evaluation of interventions targeting women entrepreneurs. Many studies report low average treatment effects with large standard errors, suggesting substantial heterogeneity in outcomes within the same sample. This implies that average effects can obscure important differences, where a program may yield significant benefits for one subgroup while having little to no impact—or even unintended consequences—for another. Tailoring interventions to specific growth segments and entrepreneur profiles has the potential to significantly enhance both impact and cost-effectiveness. These findings underscore the importance of research that goes beyond aggregate outcomes to explore the underlying mechanisms—namely the "how" and "why"—through which interventions generate impact, in order to inform more targeted and effective policy and program design.

- **Contextual constraints:** The effectiveness of interventions may often depend on underlying contextual constraints (e.g., intra-household norms). Therefore, engaging men in the dialogue and interventions may be crucial to creating a more supportive environment for women entrepreneurs. Clearly understanding the constraints that WSMEs face in different contexts is an important first step to designing effective interventions.

- **Multi-faceted interventions:** Since WSMEs are likely to face multiple, overlapping constraints, addressing a single barrier in isolation is unlikely to yield transformative outcomes. Emerging evidence suggests that combining complementary interventions (e.g., access to finance with training, or market linkages with digital tools) holds promise for enhancing business performance and growth. However, more needs to be known on the optimal combination and sequencing of such interventions, underscoring the need for further research to guide effective program design.

Access to finance:

Figure 7: Access to Finance Gap Map (H1)[49]



49 Colored dots represent synthesized evidence ratings (red=limited evidence; yellow=emerging evidence; green=strong evidence; two dots and arrow indicate a change in the evidence rating between 2022 and 2025).

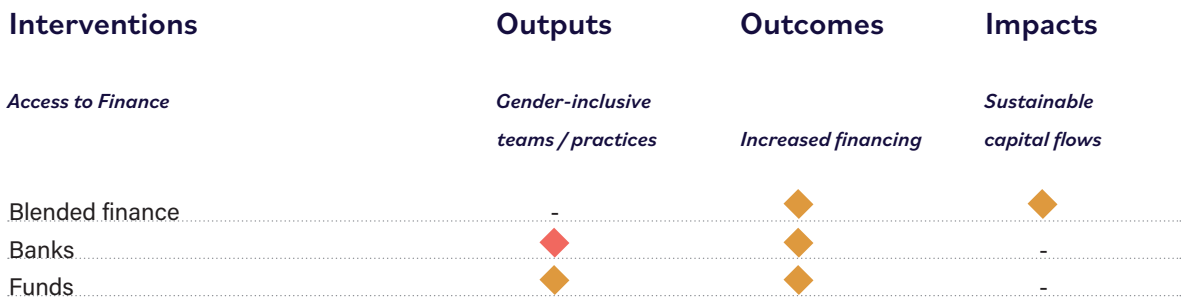
- **Credit** [Studies 2-6 in annex; experimental and non-experimental]: Financial products and services tailored to the needs of WSMEs and interventions that mitigate bias in loan approvals (incl. screening and selection) have proven to be effective in enhancing access to finance for women entrepreneurs. For example, alternative forms of credit risk assessment (e.g., psychometric tests, cashflow-based lending, and digital footprints) and securing loans (e.g., revenue-based financing, asset-based finance, digital collateral, microequity) could significantly enhance credit accessibility for women, although more evidence is needed in most of these areas. Relaxing some of the features of the traditional approach (e.g., allowing for flexible repayment and removing joint liability) shows promise for micro-enterprises, but still needs to be tested for SMEs. Moreover, some evidence indicates that certain lending approaches, such as asset-based financing, may help reduce credit barriers for women; however, sex-disaggregated research on this remains limited.

- **Grants** [Studies 30-31 in annex; experimental and non-experimental]: In-kind grants for women microentrepreneurs, and large cash grants for growth-oriented businesses (as part of business competitions and awards) have proven to encourage business investment and increase business performance of WSMEs.

- **Equity and early-stage financing** [Studies 11-14 in annex; non-experimental]: While alternative funding mechanisms—such as angel networks, crowdfunding, and innovative structures like evergreen and blended funds—have the potential to offer patient risk capital tailored to WSMEs, including benefits like local currency options and flexible financing, there is limited sex-disaggregated evidence on their effectiveness. Emerging models like revenue-based financing may hold particular promise for WSMEs, but sex-disaggregated research is needed to assess their impact for women.

- **Digital finance** [Studies 17-20, 33-35 and 45-48 in annex; non-experimental and experimental]: Digital technologies can offer new digital delivery channels to effectively deliver credit and other financial services to women entrepreneurs, helping to address challenges related to time management, mobility, and security; however, they also come with potential risks that need to be considered. Digital financial services (i.e. mobile money) hold the promise to significantly improve women entrepreneurs' access to finance and business performance, leading to women's empowerment, as providing funds directly to accounts controlled solely by women and digitizing loans can offer them more privacy and reduce pressure to share funds. However, existing research primarily focuses on micro-entrepreneurs, with limited studies on WSMEs.

Figure 8: Access to Finance Gap Map (H2)



- **Blended finance** [Studies 49-51 and 73-76 in annex; mostly non-experimental]: Blended finance, including performance-based incentives, can support financial intermediaries in surpassing women's inclusion targets, justify resource allocation for related initiatives, and—when combined with technical assistance—help build critical capacity and align stakeholder interests. Targeted funding and technical assistance for financial intermediaries to better serve WSMEs have shown early positive results, including mobilizing additional capital and influencing intermediaries' strategic approaches to the WSME segment.

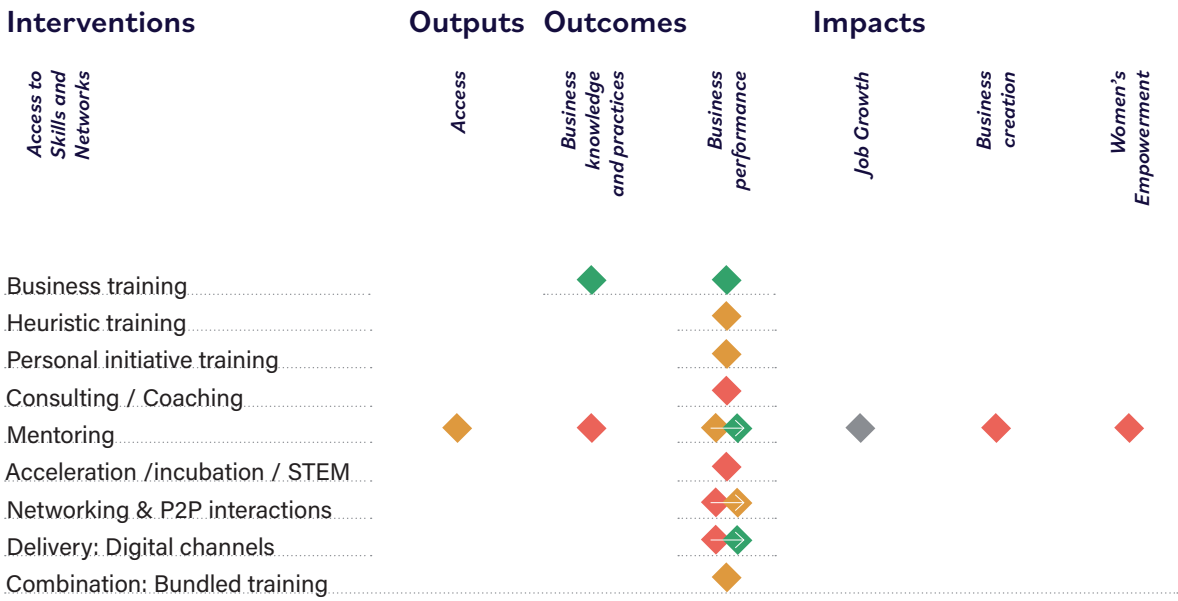
- **Female leadership** [Studies 52-53 and 56-59 in annex; mostly non-experimental]: Greater female representation and diversity among financial intermediaries—such as investors, fund managers, and loan officers—may play a crucial role in increasing financing for WSMEs and narrowing the gender financing gap within banks and investment funds. However, the evidence remains mixed, and the underlying dynamics require further exploration.

- **Inclusive practices** [Studies 54-55 and 60-61 in annex; mostly experimental]: Awareness of common practices and adoption of tactics to mitigate biases in lending/investment processes are crucial to closing the gender gap in equity funding. Systematized investment processes at funds and unconscious biases / gender intelligence trainings at banks have shown first results to be effective in tackling gender biases, leading to increased financing flows going to women.

- **Business case** [Studies 62-72 in annex; non-experimental/descriptive]: Sex-disaggregated data is fundamental to building the business case for financial intermediaries (e.g., banks, funds, fintechs) to serve the WSME market. Emerging data underlines a clear positive business case for financial intermediaries targeting WSMEs.

Access to skills and networks

Figure 9: Access to Skills and Networks Gap Map (H3)



- **Type and targeting** [Studies 89-115; mostly experimental]: There is a wide variety of training programs, and different objectives require different approaches and training design, emphasizing the importance of segmentation and targeting different types of firms. Self-selection, such as through an online portal or introductory session, along with the role of pricing and a funnel approach, can be effective strategies in attracting and engaging the right participants. Traditional business training, heuristics training, and personal initiative training have proven effective for micro-enterprises in some contexts, while bespoke support services like coaching or consulting can improve the performance of larger firms, although more sex-disaggregated studies are needed. Mentoring tends to positively impact women's business performance, particularly for larger firms, with the mentor's characteristics, including gender, influencing the results. Lastly, acceleration, incubation, and STEM initiatives seem particularly valuable for high-growth startups.

- **Content and delivery** [Studies 77-83 in annex; non-experimental]: Innovating the content and delivery methods for training is important. Training programs that integrate content relevant to women's experiences (e.g., gender stereotypes, family responsibilities, or work-life balance) and SME-specific content (e.g., on public procurement or corporate value chains) tend to impact WSMEs' business performance positively. Innovative delivery mechanisms for training programs (e.g., wraparound services like childcare services, peer and spousal support, and transportation) seem to be an effective way to make training programs more accessible to women entrepreneurs. Additionally, encouraging women to train in non-traditional sectors and incorporating measures to prevent and address sexual harassment further reduces barriers to participation. Operational adjustments, including stipends and incentives that address women's time burdens and childcare demands, as well as joint sessions with spouses, can enhance the overall effectiveness and inclusivity of these programs.

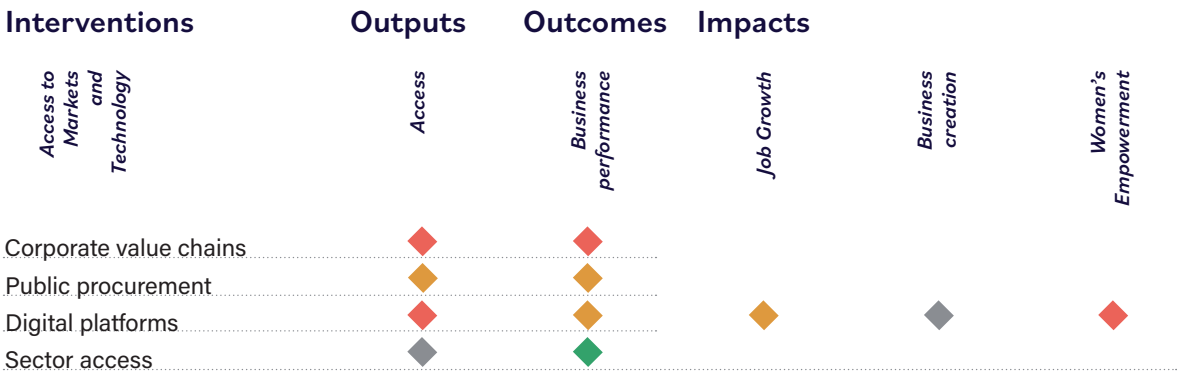
- **Networks** [Studies 116-118, 128-130 in annex; experimental and non-experimental]: Networks (e.g., business networks, social networks, and peer networks) are likely to play a central role for entrepreneurs in general, but particularly for high-growth entrepreneurs, as networks may enable better access to finance and markets, but more sex-disaggregated research is needed.

- **Digital** [Studies 119-123 in annex; mostly experimental]: Online training may help women overcome logistical challenges, but evidence on its impact is mixed with ongoing challenges in access, cost, and scalability. Cost-effectiveness may be limited due to resources needed for onboarding women, and although technical barriers are lower than expected, the content must be highly relevant.

- **Bundled interventions** [Studies 21-22, 124-125 in annex, mostly experimental and systematic reviews]: Interventions that combine finance and training tent to be more effective in supporting WSMEs' business performance than finance or training alone. Bundling different training components and integrating coaching, consulting, and networking activities into traditional business trainings have seen promising results in increasing WSMEs' business performance, although more sex-disaggregated research is required, including on cost-effectiveness.

Access to markets and technology

Figure 10: Access to Markets and Technology Gap Map (H4)



- **Corporate and public procurement** [Studies 132-137, 141-142 in annex, mostly non-experimental/descriptive]: Inclusive value chain programs can be effective in helping WSMEs access corporate value chains and public procurement, leading to improved business performance. Improving procurement transparency, guidelines, application processes, and training can boost WSME participation in value chains and public procurement, though effective policies are still unclear.

- **Digital platforms** [Studies 138-140, 143-145 in annex, mostly non-experimental/descriptive]: E-commerce and digital platforms have shown promise in supporting WSMEs accessing regional and international markets and improving business outcomes, although more sex-disaggregated studies are needed.

- **Digitalization** [Studies 146-149 in annex, mostly non-experimental]: Access to technology and digital platforms can unlock business growth for women entrepreneurs by offering greater flexibility and autonomy—particularly in navigating time, mobility, and caregiving constraints. Beyond improving market access, digital tools also enable business model innovation.

- **Sector access** [Studies 150-153 in annex, experimental and non-experimental]: Strong evidence shows that supporting women to enter more profitable, male-dominated sectors can reduce the gender earnings gap. Mentorship, spousal support, and role models have shown to increase the likelihood of women to cross over to male-dominated sectors. Moreover, improved access to innovative sectors, in combination with increased access to disruptive technology, can spur women's participation in high-growth entrepreneurship.

Figure 11: Access to Markets and Technology Gap Map (H5)

- **Business case** [Studies 158-163 in annex, non-experimental/descriptive]: More gender-inclusive procurement policies and practices have demonstrated a positive business case for corporates. Multinational corporations are increasingly committing to sourcing from WSMEs through corporate commitments, measurable goals, and raising internal awareness.

Enabling environment

Figure 12: Enabling Environment Gap Map (H6)

- **Laws and policies** [Studies 164-173 in annex, non-experimental]: There is strong positive evidence on the correlation between more gender-equal laws and policies and women's entrepreneurship / employment, as well as positive correlation between legal gender equality and women's access to financial services.

- **Social norms** [Studies 177-185 in annex, experimental and non-experimental]: Findings across numerous studies and geographical contexts indicate that social norms often limit the effectiveness of interventions, unless household dynamics are addressed, and while engaging spouses or other family members, fostering networks and role models, and promoting women's asset ownership show potential, they require further study and careful consideration.

- **Sex-disaggregated data** [Studies 186-189 in annex, non-experimental]: The availability and use of sex-disaggregated data by financial intermediaries and policymakers is crucial for understanding the challenges women entrepreneurs face and developing policies, programs, and products to support them. Effective strategies to address challenges such as legacy information systems, limited data management capabilities, lack of common standards and definitions, inconsistent data quality, and concerns around data privacy need to be explored (through initiatives like the WE Finance Code).

8 Evidence Gaps And Research Opportunities

8.1 Common challenges in the evidence base

Women and SME focus: Research specifically focusing on women-owned and led SMEs is still scarce. Studies on SMEs usually do not measure sex-disaggregated effects in business outcomes, although men and women entrepreneurs may be included in the samples. A general issue is the lack of sex-disaggregated data. The low availability of evidence on WSMEs in some areas suggests that evidence gaps and questions might not be on the same level of specificity. Most of the available evidence focuses on micro-entrepreneurship. Although the needs, growth, and dynamics may differentiate between micro-enterprises and SMEs, studies on micro-entrepreneurship (always marked as such) should be acknowledged to derive lessons learned and identify interventions that can be tested with WSMEs. However, it is also important to note that some of the discussions around micro-entrepreneurship might not apply to SMEs, which may need different kinds of attention and support in some areas.

Segmentation: WSMEs should not be viewed as a homogeneous group. Although research highlights the importance of differentiating between different types of women-led businesses, there are only few studies that disaggregate data and explore business outcomes for different segments of women entrepreneurs. Furthermore, there are only a few frameworks for segmentation and definitions can vary widely. Target-specific research based on better segmentation frameworks are central to better understanding what works for whom and why. Based on these insights, We-Fi, in collaboration with the Argidius Foundation, The Dutch Good Growth Fund, and ConsumerCentriX, have developed a segmentation framework, specifically focused on women-owned and led SMEs (forthcoming 2025).

Methodology: Certain evidence gaps may be based on the lack of particular study methods or the insufficient duration of studies to track long-term impacts. For example, a significant number of programs that support WSMEs do not include rigorous impact evaluations based on RCTs. These are time-consuming and costly, and may not be feasible for private organizations, such as banks, investors, or fintechs. Therefore, building the evidence base on the impacts of improved access to finance, skills, networks, and markets cannot be based solely on RCTs, but must also include other types of data and inputs, including non/quasi-experimental quantitative methods and qualitative methods, like ethnography and case studies to complement surveys and help interpret the data. Additionally, some topics may not be suitable for RCTs, requiring alternative evaluation methods. Mixed methods can spur a richer understanding and more complete picture of what works. Moreover, the evaluation of interventions over longer periods of time should not be neglected, as some studies have shown that impacts on WSMEs may change over time. Lastly, for rigorous studies, there are questions about the generalizability of findings across geographies and sectors, as findings are typically drawn from narrow contexts. Expanding the geographic and sectoral diversity of study settings could enhance the external validity of results and deepen understanding of how interventions function across different contexts.

Endogenous factors: Some evidence compares samples of women and men, without fully controlling for endogenous factors. Since many more men start businesses than women, the bar might be higher for women and there might be a wider range of quality and type of male firms. Thus, failure and growth rates of existing entrepreneurs, by sex, might not be accurate.

Average effects: "Average effects" are often heavily diluted by the heterogeneity of businesses and business owners in a given research sample. Program and policy goals are to provide programming that benefits the target group or market. Average effects, in contrast, reflect net effects. This means that half of the group may benefit considerably from a particular financing or training program, while the other half does not. This is one area where research questions on "how" and "why" play an important role for defining who benefits from which types of policies and programs, not so much whether the average outcome is significant across all businesses or entrepreneurs. Instead of binary questions (e.g., whether having more women in venture capital leads to higher investments), the emphasis should also be on uncovering the mechanisms that drive such change—for example, how networks support women's business growth and why they are effective for some but not others, or how financial intermediaries can build more inclusive teams and structures.

Data gaps on macro-level and impact-level: The review also highlights the need to fill data gaps on a more macro-level, (e.g., WSME financing gap, productivity gap, or economic contribution). Having key macro level data helps to support research and policy makers to better understand the state of women's entrepreneurship and the further progress needed in order to reach gender parity. Moreover, the review shows that evidence on impact level is often lacking. It is not clear how different interventions to increase access to finance, skills, and markets contribute to job growth, women's business startup, and women's empowerment more broadly. For example, the review shows that evidence on direct and indirect job creation through WSMEs remains limited. Given that women entrepreneurs tend to hire other women, it would be interesting to examine the extent of WSMEs' impact on wage employment of other women (job quality and number of jobs). Further articulating and quantifying the direct as well as indirect impacts on WSMEs and women's economic empowerment would bring important insights to better support WSMEs by establishing a more data-driven approach to policy, intervention, and product design.

8.2 Evidence Gaps and Research Opportunities in Access to Finance

FINANCIAL PRODUCTS AND SERVICES TAILORED TO THE NEEDS WSMES

Evidence gaps: Overall, this review shows that evidence on improving access to finance for WSMEs is growing but still scarce. Most of the available evidence is focused on micro-credit, while ***larger loans*** or lines of credit (incl. in trade finance) remain widely unexplored. Further research is needed to understand how different micro-credit features—such as loan size, tenor, repayment flexibility, interest rates, credit assessment, and digital delivery—perform in varying contexts, and whether these features have distinct impacts on larger SMEs with more complex operations and greater financing needs, or how they can be adapted to serve such firms effectively. While emerging studies examine biases in lending and the effectiveness of alternative credit scoring methods, further research is needed to assess the impact of specific interventions in addressing these biases and their potential for scalability. Moreover, there is still very limited evidence (and a lack of rigorous studies) on insurance and ***equity financing*** (incl. early-stage financing from acceleration, angel investing, crowdfunding), particularly regarding their impact on WSMEs' business performance and access to additional financing. Methodological challenges—such as high early-stage failure rates and women's underrepresentation—limit robust

analysis. No sex-disaggregated data is available for ***alternative financing models*** like asset-based or revenue-based lending, despite their potential. Similarly, digital finance research focuses mainly on mobile money in Sub-Saharan Africa, with little evidence on other models. Overall, there is limited data on how financial services contribute to broader outcomes such as women's business creation, job growth, and empowerment.

Research opportunities: Studies exploring the effectiveness of financial products and services tailored to the needs of WSMEs—including delivery channels and sources of finance—on access to finance, business growth, and women's empowerment, for different types of entrepreneurs (segmentation):

- How effective are WSME-focused loan products—including trade finance—beyond microcredit in improving access to finance and business performance for WSMEs?
- How can alternative lending models (e.g., cashflow–based, asset-based, revenue-based, and psychometric-based lending) be scaled to increase access to larger loans for WSMEs and support their business growth, repayment capacity, and continued access to financing?
- How does equity financing improve access to additional financing and impact business performance for men vs. women (incl. segmentation analysis to better understand inequality in access to equity financing)?
- What is the effectiveness of digital delivery channels, including embedded finance, in expanding access to and use of financial products and services for women entrepreneurs, and to what extent does digital finance support their ability to grow and access traditional forms of credit?
- How can digital finance solutions, such as digital warehouse financing, improve access to supplier and distributor credit and facilitate WSMEs' participation in regional and international value chains?

THE USE OF BUNDLED PRODUCTS AND SERVICES

Evidence gaps: Much of the existing research, albeit limited, focuses on specific products or services being provided to support women entrepreneurs. Emerging evidence shows that combining access to finance with training might positively affect outcomes. In addition, there is no clear evidence how ***bundling financing and training*** can be done cost-effectively. More research is needed to test the effects of relaxing multiple constraints versus a single constraint; however, sample sizes may be a major issue here.

Research opportunities: Studies exploring how to tackle multiple constraints by combining complementary interventions (e.g., finance, skills, networks):

- What combinations of financial and non-financial services are most effective in promoting WSME business growth and women's empowerment, and how do these compare in terms of cost-effectiveness?
- How effective are bundled products and services in improving business outcomes for different types of entrepreneurs and enterprises?
- What methods can be used to effectively identify and target women entrepreneurs with the highest potential returns to capital and training interventions?

FINANCIAL INTERMEDIARY EFFECTIVENESS

Evidence gaps: New evidence on the effectiveness of ***blended finance instruments*** (incl. performance-based incentives and FLRC) is mostly focused on descriptive studies, while experimental evidence is mostly missing. Moreover, no evidence could be found yet on whether these instruments promote sustainable market engagement. While there is growing evidence of financial benefits for intermediaries engaging with women entrepreneurs, data remain insufficient to build a strong ***business case*** or understand how to translate these gains into organizational change and reduced gender bias. More research is needed on how financial intermediaries use sex-disaggregated data to inform decisions, as well as on the effectiveness of other change-driving interventions—such as unconscious bias training and increasing female leadership.

Research opportunities: Studies exploring what factors and mechanisms work best to drive organizational change in financial intermediaries and create sustainable capital flows going to WSMEs:

- How effective are blended finance mechanisms—such as performance-based incentives and risk-sharing instruments—in enabling financial intermediaries to expand financing for WSMEs that would otherwise lack access to financing?
- What factors determine whether performance-based incentives, guarantees, or other blended finance instruments have a sustainable effect on financial intermediaries?
- How do financial intermediaries use sex-disaggregated data, and what is the impact of its use on institutional policies and lending practices?
- What are the long-term effects of female leadership programs and unconscious bias training on the volume of financing going to WSMEs (for different types of financial intermediaries)?

8.3 Evidence Gaps and Research Opportunities in Access to Skills and Networks

DESIGN AND EFFECTIVENESS OF DIFFERENT TYPES OF TRAINING FOR DIFFERENT TYPES OF ENTREPRENEURS

Evidence gaps: More research is needed on how to design training programs tailored to women's needs, including ***customized content*** on gender stereotypes, family responsibilities, and work-life balance. While most existing studies focus on traditional business training—with often mixed results— evidence on ***specialized SME training*** (e.g., MBA-style programs) and ***complementary approaches*** such as soft skills training, coaching, and consulting remains limited. Further research is also required to understand how these methods can be effectively bundled in a cost-efficient way. Academic research on ***incubators and accelerators*** remains in early stages, with little clarity on which program elements are most impactful, cost-effective, and scalable. Moreover, the long-term effects of all training types are underexplored, and variation in content and participant

profiles complicates cross-study comparisons. Developing segmentation frameworks and targeted research on what works for different types of women entrepreneurs could enhance training effectiveness.

Research opportunities: Studies exploring the (long-term) effectiveness (incl. cost-effectiveness) of different types of training (incl. specialized training, soft skills training, coaching, consulting) for different types of entrepreneurs (e.g., micro, SME, startup)

- What is the relative effectiveness and cost effectiveness of bundling business training with soft skills training, coaching, consulting, mentoring, or networking activities?
- What design features of incubator and accelerator programs are most effective in supporting the growth of WSMEs?
- What are effective ways to deliver digital or AI-based skills training to women entrepreneurs to improve business practices and firm performance?
- How can interventions targeting access to markets and technology, improving social norms, offering access to childcare, or providing access to finance become more effective by including business or soft skills training?
- Under what conditions do different types of training programs not only improve women entrepreneurs' business performance and productivity but also lead to increased job creation through the hiring of additional workers?

THE ROLE OF NETWORKS

Evidence gaps: Networks can be a valuable asset for women entrepreneurs, particularly during the startup and growth phases, by facilitating access to resources, role models, and capital. While recent studies have begun to explore this area, more sex-disaggregated research is needed to understand the complex relationships between ***different types of networks*** (business, social, and peer), improved business practices, and access to finance and markets. Networks may also play a key role in supporting women to enter ***male-dominated sectors*** or pursue high-growth entrepreneurship. Additionally, how networks influence the confidence and aspirations of women leading SMEs remains an important research gap.

Research opportunities: Studies exploring the impacts of networks (e.g., business networks, social networks, and peer networks) on WSMEs' business growth, women's business creation, and women's agency:

- How can networks help women entrepreneurs reach new financing and markets?
- How can networking programs and tools (e.g., digital peer networking groups) be designed to help WSMEs grow?
- How can networks strengthen women's agency and be leveraged to support more women in starting successful businesses in male-dominated sectors and high-growth entrepreneurship?
- How do networks influence the confidence and aspirations of women leading SMEs?
- How effective are networks as enablers for faster business recovery from macro-related shocks (e.g., pandemics, climate disasters)?

THE USE OF TECHNOLOGY AND DIGITAL DELIVERY OF TRAININGS

Evidence gaps: Emerging evidence shows that approaches to the design and delivery of trainings might be more effective in increasing women's participation, WSME business growth, and women's empowerment than the type of training offered. ***Digital training*** shows promise, but ***cost-effectiveness*** may be limited due to resources needed for onboarding women and more research is needed to explore which digital practices and design elements are most effective in driving WSMEs business growth for different types of entrepreneurs.

Research opportunities: Studies exploring how technology can be used to deliver training in a cost-effective and scalable way and how this impacts WSMEs' business growth and women's empowerment for different types of entrepreneurs:

- How do various delivery modalities (e.g., online, in-person, and hybrid) influence the impact and cost-effectiveness of different types of training interventions—such as business, soft skills, mentoring, and accelerator programs?
- How can digital tools be leveraged to scale training programs and significantly reduce delivery costs?
- What is the role of artificial intelligence (AI) in enhancing the delivery and effectiveness of training programs for entrepreneurs?
- How can online training and AI-based tools contribute to women's empowerment by addressing or shifting restrictive social norms?

8.4 Evidence Gaps and Research Opportunities in Access to Markets and Technology

CORPORATE VALUE CHAINS

Evidence gaps: Overall, evidence on access to markets remains largely descriptive, with few rigorous studies. The absence of baseline data limits the ability to track corporate spending on women-owned businesses, reducing incentives to expand sourcing from WSMEs. There is limited evidence on what makes ***supplier diversity programs*** effective, or which practices best increase WSME participation in supply chains. Additionally, the impacts of these programs on women's ability to export, access international markets, and promote long-term job creation are underexplored. Evidence is also lacking on how interventions in other areas—such as access to trade finance—can enhance the effectiveness of market access initiatives. While ***trade finance*** appears critical for WSMEs to grow and enter new markets, its specific impact on their participation in value chains requires further study.

Research opportunities: Studies exploring what works to engage WSMEs in corporate value chains as producers, suppliers, distributors, and retailers, including sector-specific studies on the dynamics of different value chains and the role and needs of women therewithin:

- Which sector-specific practices and policies are most effective in increasing sourcing from WSMEs within corporate value chains?
- How do partnerships between corporates, financial intermediaries, and fintechs enable value chain financing, and how can these be integrated with training programs offered by corporates?
- To what extent is trade finance effective in increasing the participation of WSMEs in corporate value chains?
- How effective are performance-based incentives in motivating corporations to increase sourcing from WSMEs?
- What are the long-term business and social impacts of inclusive value chain programs for WSMEs and participating firms?

THE USE OF TECHNOLOGY AND DIGITAL PLATFORMS

Evidence gaps: Digital platforms and e-commerce show potential for helping SMEs access regional and international markets and improve business outcomes, but evidence remains limited, and no sex-disaggregated studies were identified. More research is needed to identify effective interventions—such as training, technical assistance, and tailored financial solutions—that support women entrepreneurs in joining and navigating digital platforms. Evidence is also scarce on the role of ***B2B distribution platforms*** in connecting women-led businesses to corporate buyers. Additionally, little is known about how women use technology to enhance efficiency, productivity, and adaptability, or how they can leverage digital tools to build ***scalable business models.***

Research opportunities: Studies exploring how technology and digital can be used to help WSMEs access new markets and grow:

- How effective are digital skills training programs (and/or technical assistance) in enabling women entrepreneurs to reach new customers through digital platforms?
- What role does e-commerce play in supporting the business growth and internationalization of WSMEs?

- How can digital platforms leverage user data—such as sales histories—to expand access to financing for women entrepreneurs?
- What role do technology platforms play in connecting women entrepreneurs to corporate value chains as distributors and retailers?
- How can women entrepreneurs use digital tools and software to digitalize their operations and develop scalable business models?

MALE-DOMINATED SECTORS

Evidence gaps: There is strong evidence on the high positive impacts of supporting women entrepreneurs in crossing over to more innovative, productive, mostly male-dominated sectors (e.g., manufacturing, technology, financing). More research is needed to better understand how women entrepreneurs can enter male-dominated sectors and successfully pursue ***growth paths*** within them.

Research opportunities: Studies exploring the dynamics, motivation, and incentives of women entrepreneurs to cross over to male-dominated sectors:

- What factors influence potential and existing women entrepreneurs to enter or transition into male-dominated sectors?
- How do role models, soft skills training, and inclusive value chain initiatives motivate women to start businesses or transition into high-growth and male-dominated sectors?
- What forms of support are most effective in enabling women entrepreneurs in male-dominated sectors to pursue and sustain growth trajectories?
- How do networks shape women's decisions to enter or remain in male-dominated industries?
- What insights emerge from granular, sector-specific analyses regarding women's participation, challenges, and opportunities in male-dominated fields?

8.5 Evidence Gaps and Research Opportunities on the Enabling Environment

LAWS AND POLICIES

Evidence gaps: Although there is strong evidence on the positive effects of gender-equal laws and regulations on women's entrepreneurship/employment and women-led businesses' access to finance, more research is needed to better understand ***which laws matter most,*** and how regulatory and policy changes impact women's access to finance (markets and skills) and business growth. Moreover, while most of the literature focuses on gender-equal laws, less is known about the ***drivers of legal reforms,*** which are often context-dependent and influenced by the strength of institutional frameworks.

Research opportunities: Studies exploring the impact of legal frameworks on women's entrepreneurship and the drivers of gender-equal reforms:

- What are the causal impacts of gender-equal laws and policies on women's business performance, job creation, and long-term rates of women's business creation?
- What are the key drivers of effective legal reform in the area of gender equality—such as economic development, civil society engagement, or democratic institutions—and how do these factors influence the pace and scope of reform?
- How do legal reforms interact with prevailing social norms, and to what extent do gender-equal laws contribute to shifts in norms over time?

THE ROLE OF SOCIAL NORMS

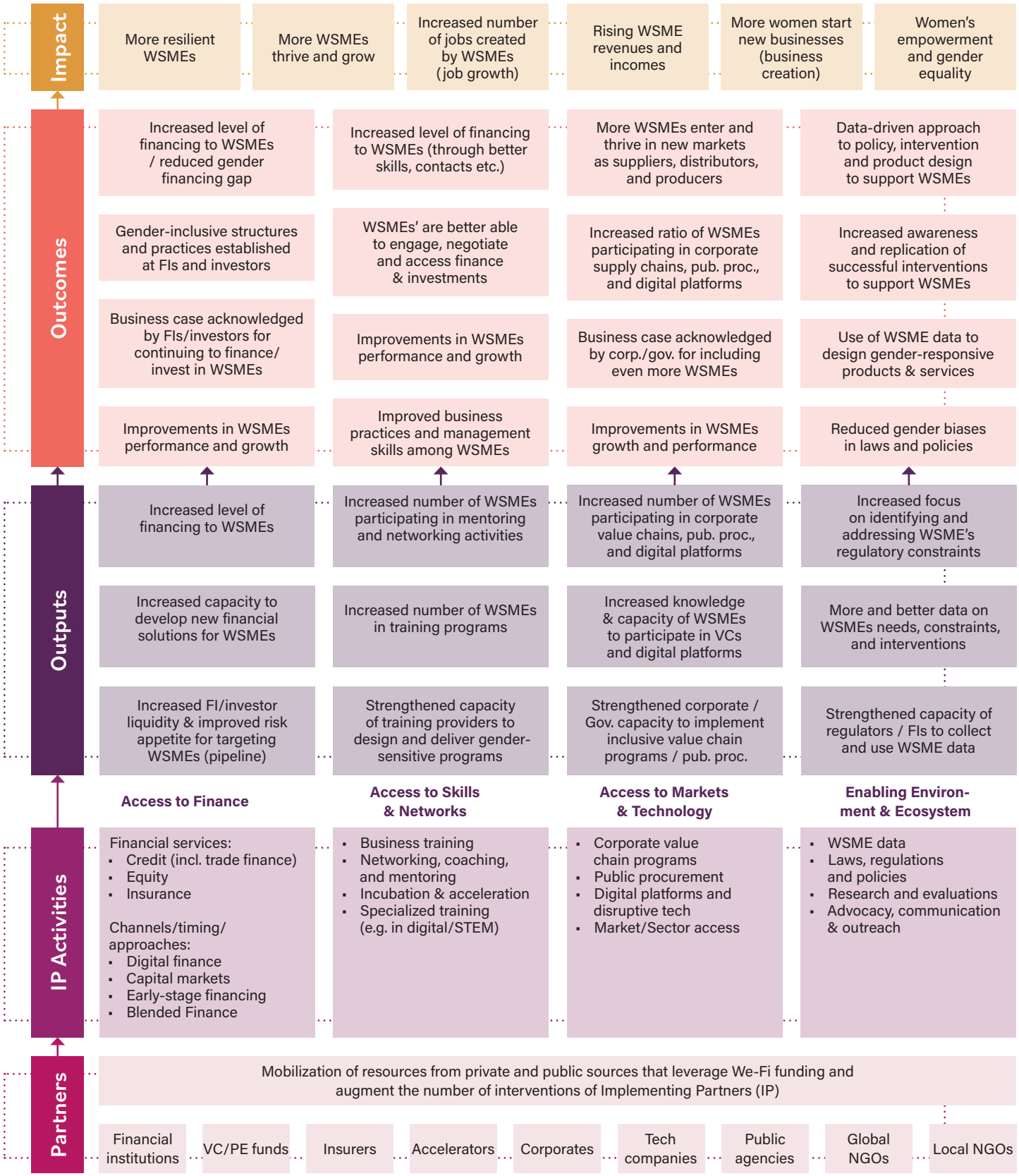
Evidence gaps: Emerging evidence highlights the influence of social norms on women's entrepreneurship, with recent studies noting that such norms often restrict WSMEs' access to ***opportunities and resources,*** including finance, skills training, and networks. Social norms also appear to affect the representation of women in ***male-dominated sectors*** and overall entrepreneurial activity. However, more research is needed to understand their impact across different contexts and how these norms can be effectively shifted to support women's entrepreneurship.

Research opportunities: Studies (experimental studies as well as qualitative research) exploring how social norms limit WSMEs' access to new opportunities in different contexts and can be shifted:

- What is the impact of social norms on women's decisions to start businesses in male-dominated sectors in different contexts?
- How do social norms mediate the effectiveness of interventions to increase access to finance, skills, and markets?
- What approaches are most effective in shifting restrictive social norms (e.g., how to effectively engage men in entrepreneurship training; how social media can influence perceptions of women entrepreneurs)?
- Who should be targeted (e.g., women, men, children, parents) to shift restrictive social norms?
- How do intra-household social norms shape the entrepreneurial decisions, roles, and outcomes of women and men?

Annexes

Annex 1: ToC Diagram



Annex 2: overview of hypotheses and research questions

- Colored dots represent synthesized evidence ratings (red=limited evidence; yellow=emerging evidence; green=strong evidence; two dots indicate a change in the evidence rating between 2022 and 2025)
- * Marks newly added research question

Improved access to finance for WSMEs (through more financing/ investment going to WSMEs and increased capacity of financial intermediaries to serve WSMEs) leads to increased business performance, job creation and women's empowerment

Does the availability of (tailored) financial products and services lead to better access to finance for WSMEs?	
Does improved access to finance lead to increased business investment and growth for WSMEs?	
Does improved business performance and growth (through better access to finance) lead to increased job growth in WSMEs?	
Does improved business performance and growth (through better access to finance) lead to increased business creation in WSMEs?	
Does improved business performance and growth (through better access to finance) lead to women's empowerment?	

Strengthened capacity of financial intermediaries to serve WSMEs leads to sustainable capital flows to WSMEs (systemic change)

Does increased FI liquidity, risk appetite, and capacity to serve WSMEs (e.g., through blended finance / TA) lead to increased financing going to WSMEs?	
Do gender-inclusive teams and practices (incl. more women in leadership) lead to increased financing going to WSME?	

R2.2	Do (targeted) investments into WSMEs lead to performance benefits for financial intermediaries (business case)?	
R2.3	Do performance benefits for gender-inclusive financial intermediaries catalyze broader financing and investment to WSMEs?	

H3 Improved access to skills and networks for women entrepreneurs (through gender-sensitive training programs and networking activities) leads to improved business performance, job creation, and women's empowerment

R3.1	Does a gender-sensitive design and delivery of training programs and networking activities lead to increased female participation?	
R3.2	Do business trainings for WSMEs lead to improved business knowledge and practices for WSMEs?	
R3.3	Do training programs lead to improved business performance and growth for WSMEs?	
R3.4	Does better access to skills and networks for WSMEs lead to increased job growth?	
R3.5	Does better access to skills and networks for WSMEs lead to increased business creation among women?	
R3.6	Does better access to skills and networks for WSMEs lead to women's empowerment?	

H4 Improved access to markets and technology for WSMEs (through inclusive value chains, public procurement, digital platforms, and market access) leads to improved business performance, job creation, and women's empowerment

R4.1	Do gender-inclusive market access programs lead to an increased number of WSMEs participating in corporate value chains, public procurement, digital platforms, and sectors?	
R4.1	Does improved access to markets and technology lead to improved WSME business growth?	
R4.3	Does better access to markets and technology lead to increased job growth?	

R4.4	Does better access to markets and technology lead to increased business creation among women?	
R4.5	Does better access to markets and technology lead to women's empowerment?	
H5	**Strengthened capacity of intermediaries (corporates / governments) to implement inclusive value chain / digital programs leads to broader access to markets for WSMEs**	
R5.1	Do inclusive value chain programs generate positive financial returns for intermediaries (i.e., corporates / governments)?	
R5.2	Do performance benefits incentivize intermediaries (i.e., corporates / governments) to increase their sourcing from WSMES?	
H6	**Gender-equal laws and policies, reshaped gender norms, and the availability and use of WSME data has a positive effect on the rate of women's entrepreneurship**	
R6.1	Do more gender-equal laws and policies correlate with higher women's entrepreneurship / business creation?	
R6.2	Does reshaping gender norms boost gender equality in entrepreneurship?	
R6.3	Does the collection and use of sex-disaggregated data by governments and financial intermediaries lead to a more data-driven approach to policy, intervention, and product design to support WSMEs?	

Annex 3: evidence rating methodology[50]

The following rating methodology, based on Dalberg Advisors' methodology in the MASSIF evidence paper (2021), was used to systematically evaluate each source included in this evidence review.

SCREENING

Studies were required to match the respective research question (e.g., intervention match, relevant intermediary, investment type, etc.) and meet of the following criteria:

- Geographic match: Focus on low- and middle-income countries
- Population match: Focus on women/women entrepreneurs
- Segment match: Focus on SMEs (including micro-enterprises) and startups

Additionally, studies were screened for the study design to only include robust empirical evidence studies. This includes experimental studies (incl. RCTs, quasi-experimental studies), as well as non-experimental studies (e.g., systematic reviews, comparative and correlational studies[51]).

RATING

All the studies that passed the screening were then rated on a quality criteria, including:

- Quality of the publication (e.g., peer review, number of citations)
- Quality of the study method (e.g., level of randomization for experimental studies, number of studies cited for literature reviews, etc.)
- Demonstrated impact (e.g., generalizability of the study)

50 Based on Dalberg Advisors' methodology in the MASSIF evidence paper
51 For some RQs also descriptive evidence has been included

OVERALL CONFIDENCE

Then, the tested coding methodology by Dalberg Advisors, which uses the unweighted averages of the different parameters, was applied to determine an overall confidence score for each source. The categorization is based on the following:

- Overall confidence score = <0.8 →*Low*
- Overall confidence score = >0.8 and <1.5 →*Medium*
- Overall confidence score = >1.5 →*High*

RATING SYNTHESIS

After giving each source a rating (low, medium, high), the direction and weight of evidence for each of the research questions was assessed. The number of high, medium, and low studies were counted for each research questions and then weighted against the following algorithm.

Direction of evidence

- Positive: Consistently positive evidence
- Mixed: Mixed evidence
- Negative: Consistently negative evidence

Strength of evidence

- Strong: At least two sources of high quality and one of medium quality; or four sources of medium quality
- Emerging: At least two sources of medium quality; or one source of high quality and two of low quality
- Limited: Only low quality sources; or insufficient medium/quality evidence to qualify for the previous categories
- No evidence found: No sources found (may include cases where related evidence is provided)

Annex 4: list of studies included in evidence gap maps

A full list of studies included in this paper (beyond evidence gap maps) can be found here: https://We-Fi.org/evidence-base/

Study number	Research question	Topic	Authors	Year	Title	Methodology
1	RQ 1.1	Microcredit / Access	Agarwal et al.	2021	Serving the Underserved: Microcredit As a Pathway to Commercial Banks	Non-experimental
2	RQ 1.1	Larger loans / Access	Buehren et al.	2024	Enterprising Women: A Decade of Learning from Ethiopia's Women Entrepreneurship Development Project (WEDP)	Non-experimental
3	RQ 1.1	Larger loans / Credit scoring / Access	Alibhai et al.	2022	Evening the Credit Score? Impact of Psychometric Loan Appraisal for Women Entrepreneurs	Experimental (RCT)
4	RQ 1.1	Credit scoring / Access	Gruver et al.	2024	From Collateral to Cashflow: Expanding Access to Finance for Nigeria's Female Business Owners	Non-experimental
5	RQ 1.1	Credit scoring / Access	KCB Group and Women's World Banking	2020	Empowering MSMEs - Creating a Better Banking Experience for Women-Led Micro, Small, and Medium Enterprises in Kenya	Experimental
6	RQ 1.1	Credit scoring / Access	Chioda et al.	2024	FinTech Lending to Borrowers with No Credit History	Non-experimental
7	RQ 1.1	Grants / Access	Ferrah et al.	2021	Enhancing Female Entrepreneurship through Cash Grants: Experimental Evidence from Rural Tunisia	Experimental (RCT)
8	RQ 1.1	Acceleration / Access	IDB Lab	2024	The Rise of Women STEMpreneurs in Latin America and the Caribbean	Non-experimental (descriptive)
9	RQ 1.1	Acceleration / Access	Dutch Good Growth Fund	2023	SHE Cambodia Lessons From A Gender-Focused Entrepreneurship Incubator	Non-experimental (descriptive)
10	RQ 1.1	Acceleration / Access	Aspen Network of Development Entrepreneurs (ANDE)	2022	Accelerating Investment into Women-led Enterprises: Comparative Evidence from Two Rounds of Intermediary Grantmaking in the SGB Sector	Non-experimental (descriptive)

11	RQ 1.1	Acceleration / Access	Village Capital	2019	Flipping the Power Dynamics	Non-experimental
12	RQ 1.1	Acceleration / Access	GALI	2020	Accelerating Women-led Startups: A Knowledge Brief by the Global Accelerator Learning Initiative	Non-experimental
13	RQ 1.1	Acceleration / Access	IFC, We-Fi and Village Capital	2020	Venture Capital and the Gender Financing Gap: The Role of Accelerators	Non-experimental
14	RQ 1.1	Crowdfunding / Access	Cicchiello et al.	2021	In women, we trust! Exploring the sea change in investors' perceptions in equity crowdfunding	Non-experimental
15	RQ 1.1	Alternative financing / Access	Cordaro et al.	2023	Microequity and Mutuality: Experimental Evidence on Credit with Performance-Contingent Repayment	Experimental
16	RQ 1.1	Insurance / Access	IFC / AXA / Accenture	2015	SHEforSHIELD	Non-experimental (descriptive)
17	RQ 1.1	Digital / Access	Islam and Muzi	2020	Mobile Money and Investment by Women Businesses in Sub-Saharan Africa	Non-experimental
18	RQ 1.1	Digital / Access	Nugroho and Chowdhury	2015	Mobile Banking for Empowerment Muslim Women Entrepreneur: Evidence from Asia (Indonesia and Bangladesh)	Non-experimental
19	RQ 1.1	Digital / Access	Robinson et al.	2022	The Impact of Digital Credit in Developing Economies: A Review of Recent Evidence	Non-experimental
20	RQ 1.1	Digital / Access	TechnoServe	2023	How financial services providers can benefit by serving low income women better and increase women's economic empowerment?	Non-experimental (descriptive)
21	RQ 1.2	Micro-Credit / Business performance	Bandiera et al.	2013	Capital, skills and the economic lives of the poor: Recent evidence from field experiments	Non-experimental (systematic review)
22	RQ 1.2	Micro-Credit / Business performance	ILO	2014	Effectiveness of Entrepreneurship Development interventions on Women Entrepreneurs	Non-experimental (systematic review)
23	RQ 1.2	Micro-Credit / Business performance	Cai et al.	2023	Microfinance	Non-experimental (systematic review)
24	RQ 1.2	Micro-Credit / Business performance	Khaleque	2018	Performance of Women Entrepreneurs: Does Access to Finance Really Matter?	Experimental

25	RQ 1.2	Micro-Credit / Business performance	Karlan and Zinman	2011	Microcredit in Theory and Practice: Using Randomized Credit Scoring for Impact Evaluation	Experimental (RCT)
26	RQ 1.2	Micro-Credit (heterogenity) / Business performance	Bernhardt et al.	2019	Household Matters: Revisiting the Returns to Capital among Female Microentrepreneurs	Experimental (RCT)
27	RQ 1.2	Larger loans / Business performance	Alibhai et al.	2018	Better Loans or Better Borrowers	Non-experimental
28	RQ 1.2	Grants / Business performance	Bandiera et al.	2013	Capital, skills and the economic lives of the poor: Recent evidence from field experiments	Non-experimental (systematic review)
29	RQ 1.2	Grants / Business performance	ILO	2014	Effectiveness of Entrepreneurship Development interventions on Women Entrepreneurs	Non-experimental (systematic review)
30	RQ 1.2	Grants / Business performance	Fafchamps et al.	2011	When is capital enough to get female microenterprises growing? Evidence from a randomized experiment in Ghana	Experimental (RCT)
31	RQ 1.2	Grants / Business performance	Campos and Gassier	2017	Gender and Enterprise Development in Sub-Saharan Africa	Non-experimental
32	RQ 1.2	Insurance / Business performance	IFC / AXA / Accenture	2015	SHEforSHIELD	Non-experimental (descriptive)
33	RQ 1.2	Digital / Business performance	Riley	2024	Resisting Social Pressure in the Household Using Mobile Money: Experimental Evidence on Microenterprise Investment in Uganda	Experimental (RCT)
34	RQ 1.2	Digital / Business performance	Arraiz	2023	Boosting Business Growth while Leveling the Credit Playing Field for Women MSMEs in Mexico	Non-experimental
35	RQ 1.2	Digital / Business performance	Lemma and Mlilo	2024	Digital Finance and Gender Gap in Enterprise Performance: Evidence from Kenya	Non-experimental
36	RQ 1.3	A2F / Jobs	Loko and Yang	2022	Fintech, Female Employment, and Gender Inequality	Non-experimental
37	RQ 1.4	A2F / Business creation	McKenzie and Sanone	2019	Predicting Entrepreneurial Success is Hard : Evidence from a Business Plan Competition in Nigeria	Non-experimental

38	RQ 1.4	A2F / Business creation	Banerjee et al.	2014	The miracle of microfinance? Evidence from a randomized evaluation	Experimental (RCT)
39	RQ 1.4	A2F / Business creation	Asongu and Odhiambo	2023	Microfinance institutions and female entrepreneurship in Sub-Saharan Africa: avoidable female unemployment thresholds	Non-experimental
40	RQ 1.4	A2F / Business creation	Garg et al.	2022	Financial Access and Gender Gap in Entrepreneurship and Employment: Evidence from Rural India	Experimental
41	RQ 1.5	A2F / WEE	EBRD	2015	The impact of microcredit: evidence from across the world	Non-experimental (systematic review)
42	RQ 1.5	A2F / WEE	Hillesland et al.	2021	Did a Microfinance 'plus' Programme Empower Female Farmers and Pastoralists and Improve Intrahousehold Equality in Rural Ethiopia?	Experimental (RCT)
43	RQ 1.5	A2F / WEE	Cai et al.	2023	Microfinance	Non-experimental (systematic review)
44	RQ 1.5	A2F / WEE	Fiala, Nathan	2018	Returns to microcredit, cash grants and training for male and female microentrepreneurs in Uganda	Experimental (RCT)
45	RQ 1.5	A2F / WEE (digital)	Riley	2020	Resisting Social Pressure in the Household Using Mobile Money: Experimental Evidence on Microenterprise Investment in Uganda	Experimental (RCT)
46	RQ 1.5	A2F / WEE (digital)	Dupas and Robinson	2013	Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya	Experimental (RCT)
47	RQ 1.5	A2F / WEE (digital)	Suri and Jack	2016	The long-run poverty and gender impacts of mobile money	Experimental
48	RQ 1.5	A2F / WEE (digital)	Heath, Rachel and Emma Riley	2024	Digital Financial Services and Women's Empowerment: Experimental Evidence from Tanzania	Experimental (RCT)
49	RQ 2.0	Blended finance	Aydın et al.	2024	Blended Finance and Female Entrepreneurship	Experimental

50	RQ 2.0	Blended finance	IDB Invest, Dalberg, We-Fi	2023	Promoting Gender Equality through Performance-based Financial Incentives An Analysis of IDB Invest's Experience	Non-experimental
51	RQ 2.0	Blended finance	USAID	2022	Mango Fund Case Study: How a Ugandan Investment Fund Is Doubling the Number of Women-Owned Businesses in Its Portfolio	Non-experimental (descriptive)
52	RQ 2.1	Banks / Female leadership	Alliance for Financial Inclusion	2023	A Policy Framework for Women-led MSME Access to Finance 2023	Non-experimental (descriptive)
53	RQ 2.1	Banks / Female leadership	Saparito et al.	2013	Bank–Firm Relationships: Do Perceptions Vary by Gender?	Non-experimental
54	RQ 2.1	Banks / Practices	IFC	2017	Gender Intelligence for Banks—Moving the Needle on Gender Equality	Non-experimental
55	RQ 2.1	Banks / Practices	Brock and De Haas	2020	Discriminatory Lending: Evidence from Bankers in the Lab	Experimental (RCT)
56	RQ 2.1	Funds / Female leadership	PitchBook, AllRaise, Goldman Sachs, and Microsoft for Startups	2019	All In - Women in the VC Ecosystem	Non-experimental (descriptive)
57	RQ 2.1	Funds / Female leadership	Assenova and Mollick	2019	This is Not a Game: Massive Simulation Experiments on Entrepreneurial Gender Bias	Experimental (RCT)
58	RQ 2.1	Funds / Female leadership	IFC, Oliver Wyman, and Rock Creek	2019	Moving Toward Gender Balance in Private Equity and Venture Capital	Non-experimental
59	RQ 2.1	Funds / Female leadership	Snellman and Solal	2022	Does Investor Gender Matter for the Success of Female Entrepreneurs? Gender Homophily and the Stigma of Incompetence in Entrepreneurial Finance	Experimental
60	RQ 2.1	Funds / Practices	Kanze et al.	2018	We Ask Men to Win and Women Not to Lose: Closing the Gender Gap in Startup Funding	Experimental
61	RQ 2.1	Funds / Practices	Miller et al.	2023	Asking Better Questions: The Effect of Changing Investment Organizations' Evaluation Practices on Gender Disparities in Funding Innovation	Experimental (RCT)

62	RQ 2.2	Banks / Business case	Financial Alliance for Women	2014	How Banks Can Profit from the Multi-Trillion Dollar Female Economy	Non-experimental (descriptive)
63	RQ 2.2	Banks / Business case	IFC	2020	Banking on Women	Non-experimental (descriptive)
64	RQ 2.2	Banks / Business case	Clempner et al.	2020	Women in financial services 2020	Non-experimental (descriptive)
65	RQ 2.2	Banks / Business case	TechnoServe	2023	How financial services providers can benefit by serving low income women better and increase women's economic empowerment?	Non-experimental (descriptive)
66	RQ 2.2	Banks / Business case	Grover and Viollaz	2024	The Gendered Impact of Social Norms on Financial Access and Capital Misallocation	Non-experimental
67	RQ 2.2	VC & PE funds / Business case	Abouzahr et al.	2018	Why women owned startups are a better bet	Non-experimental (descriptive)
68	RQ 2.2	VC & PE funds / Business case	IFC and CDC	2020	Private Equity and Value Creation - A Fund Manager's Guide to Gender-Smart Investing	Non-experimental (descriptive)
69	RQ 2.2	VC & PE funds / Business case	PitchBook, AllRaise, Goldman Sachs, and Microsoft for Startups	2019	All In - Women in the VC Ecosystem	Non-experimental (descriptive)
70	RQ 2.2	VC & PE funds / Business case	2X Global and Sagana	2024	Tracking gender lens investing activity in private markets	Non-experimental (descriptive)
71	RQ 2.2	Fintechs / Business case	Financial Alliance for Women	2020	How Fintechs Can Profit from the Multi-Trillion Dollar Female Economy	Non-experimental (descriptive)
72	RQ 2.2	Fintechs / Business case	McKinsey Global Institute	2016	Digital Finance for All: Powering Inclusive Growth in Emerging Economies	Non-experimental (descriptive)
73	RQ 2.3	Mobilized funding	We-Fi	2025	Women Entrepreneurs: Creating Jobs, Building Futures	Non-experimental
74	RQ 2.3	Mobilized funding	Alibhai et al.	2020	Designing a credit facility for women entrepreneurs	Non-experimental
75	RQ 2.3	Mobilized funding / org. change	IFC and Goldman Sachs	2019	IFC & Goldman Sachs 10,000 Women: Investing in Women's Business Growth	Non-experimental

76	RQ 2.3	Org. change	We-Fi	2021	We-Fi Mid-Term Review	Non-experimental
77	RQ 3.1	Training design / Access	McKenzie	2021	Small Business Training to Improve Management Practices in Developing Countries: Re-assessing the evidence for "training doesn't work"	Non-experimental (meta-analysis)
78	RQ 3.1	Training design / Access	Beegle and Matulevich	2020	Adapting Skills Training To Address Constraints To Women's Participation	Non-experimental (systematic review)
79	RQ 3.1	Training design / Access	Buvinic and O'Donnell	2019	Gender Matters in Economic Empowerment Interventions: A Research Review	Non-experimental (systematic review)
80	RQ 3.1	Training design / Access	World Bank	2018	An operational guide to women's entrepreneurship programs in the World Bank	Non-experimental (descriptive)
81	RQ 3.1	Training design / Access	UN Capital Development Fund (UNCDF)	2022	Digital Financial Literacy via E-commerce: Implications for Bangladesh, Especially for Women in Business	Non-experimental (descriptive)
82	RQ 3.1	Training design / Networks	Bullough et al.	2019	High-growth Women's Entrepreneurship	Non-experimental
83	RQ 3.1	Training design / Networks	Alakaleek et al.	2024	Navigating gender and culture in constructing network ties: perceptions and behaviors of women founders in Jordanian digital businesses	Non-experimental
84	RQ 3.2	Business training / Practices	Bakhtiar et al.	2021	Business Training and Mentoring : Experimental Evidence from Women-Owned Microenterprises in Ethiopia	Experimental (RCT)
85	RQ 3.2	Business training / Practices	Alibhai et al.	2016	From Learning to Earning : An Impact Evaluation of the Digital Opportunity Trust Entrepreneurship Training	Experimental (RCT)
86	RQ 3.3	Business training / Business performance	Bakhtiar et al.	2021	Business Training and Mentoring : Experimental Evidence from Women-Owned Microenterprises in Ethiopia	Experimental (RCT)
87	RQ 3.3	Business training / Practices	Alibhai et al.	2016	From Learning to Earning : An Impact Evaluation of the Digital Opportunity Trust Entrepreneurship Training	Experimental (RCT)

88	RQ 3.2	Business training / Practices	Bastian et al.	2018	Short-Term Impacts of Improved Access to Mobile Savings, with and without Business Training: Experimental Evidence from Tanzania	Experimental (RCT)
89	RQ 3.3	Business training / Business performance	Bardasi et al.	2017	The Profits of Wisdom: The Impacts of a Business Support Program in Tanzania	Experimental (RCT)
90	RQ 3.3	Business training / Business performance	McKenzie and Puerto	2017	Growing Markets through Business Training for Female Entrepreneurs: A Market-Level Randomized Experiment in Kenya	Experimental (RCT)
91	RQ 3.3	Business training / Business performance	Brixiová and Kangoye	2015	Gender and Constraints to Entrepreneurship in Africa: New Evidence from Swaziland	Experimental (RCT)
92	RQ 3.3	Business training / Business performance	Lang and Seither	2024	Building Women's Skills for Economic Inclusion and Resilience	Experimental (RCT)
93	RQ 3.3	Business training / Business performance	Bulte et al.	2016	Do Gender and Business Trainings Affect Business Outcomes? Experimental Evidence from Vietnam	Experimental (RCT)
94	RQ 3.3	Business training / Business performance	McKenzie and Puerto	2021	Growing Markets through Business Training for Female Entrepreneurs: A Market-Level Randomized Experiment in Kenya	Experimental (RCT)
95	RQ 3.3	Business training / Business performance	ILO	2014	Effectiveness of Entrepreneurship Development interventions on Women Entrepreneurs	Non-experimental (systematic review)
96	RQ 3.3	Heuristics / Business performance	Arraiz et al.	2019	Less is More: Experimental Evidence on Heuristic-Based Business Training in Ecuador	Experimental (RCT)
97	RQ 3.3	Heuristics / Business performance	Ashraf et al.	2022	Learning to see the world's opportunities: The impact of imagery on entrepreneurial success	Experimental (RCT)
98	RQ 3.3	Heuristics / Business performance	Abebe et al.	2023	Phone-Based Financial Heuristics Training for Female Retailers in Ethiopia	Experimental (RCT)
99	RQ 3.3	Heuristics / Business performance	McKenzie and Woodruff	2023	Training Entrepreneurs	Non-experimental (systematic review)

100	RQ 3.3	Personal initiative / Business performance	Campos et al.	2017	Teaching personal initiative beats traditional training in boosting small business in West Africa	Experimental (RCT)
101	RQ 3.3	Personal initiative / Business performance	Campos et al.	2024	Long-Term and Lasting Impacts of Personal Initiative Training on Entrepreneurial Success	Experimental
102	RQ 3.3	Personal initiative / Business performance	Alibhai et al.	2019	Full Esteem Ahead? Mindset-Oriented Business Training in Ethiopia	Experimental (RCT)
103	RQ 3.3	Personal initiative / Business performance	Ubfal et al.	2022	The impact of soft-skills training for entrepreneurs in Jamaica	Experimental (RCT)
104	RQ 3.3	Personal initiative / Business performance	Shankar et al.	2015	Agency-Based Empowerment Training Enhances Sales Capacity of Female Energy Entrepreneurs in Kenya	Experimental (RCT)
105	RQ 3.3	Personal initiative / Business performance	McKenzie and Woodruff	2023	Training Entrepreneurs	Experimental (RCT)
106	RQ 3.3	Coaching / consulting / Business performance	Bardasi et al.	2017	The Profits of Wisdom: The Impacts of a Business Support Program in Tanzania	Experimental (RCT)
107	RQ 3.3	Mentoring / Business performance	Field et al.	2016	Friends at work: Can peer support stimulate female entrepreneurship?	Experimental (RCT)
108	RQ 3.3	Mentoring / Business performance	Brooks et al.	2018	Mentors or Teachers? Micro-enterprise Training in Kenya	Experimental (RCT)
109	RQ 3.3	Mentoring / Business performance	Lang and Seither	2022	The Economics of Women's Entrepreneurship: Evidence from Building Skills in Uganda	Experimental (RCT)
110	RQ 3.3	Mentoring / Business performance	Germann et al.	2023	Breaking the Glass Ceiling: Empowering Female Entrepreneurs Through Female Mentors	Experimental (RCT)
111	RQ 3.3	Mentoring / Business performance	Bakhtiar et al.	2022	Business Training and Mentoring - Experimental Evidence from Women-Owned Microenterprises in Ethiopia	Experimental (RCT)
112	RQ 3.3	Acceleration / Business performance	Avnimelech and Rechter	2023	How and why accelerators enhance female entrepreneurship	Non-experimental

113	RQ 3.3	Acceleration / Business performance	Global Accelerator Learning Initiative (GALI)	2021	Does Acceleration Work? Five years of evidence from the Global Accelerator Learning Initiative	Experimental (RCT)
114	RQ 3.3	Acceleration / Business performance	USAID	2018	Accelerating Entrepreneurs: Insights from USAID's Support of Intermediaries	Non-experimental
115	RQ 3.3	Acceleration / STEM / Business performance	IDB Lab	2024	The Rise of Women STEMpreneurs in Latin America and the Caribbean	Non-experimental (descriptive)
116	RQ 3.3	Networking / Business performance	Howell and Nanda	2023	Networking Frictions in Venture Capital, and the Gender Gap in Entrepreneurship	Non-experimental
117	RQ 3.3	Networking / Business performance	Münch et al.	2023	Stronger together: Promoting Export through Female-only SME Consortia	Experimental (RCT)
118	RQ 3.3	Networking / Business performance	IFC	2017	Evaluation Report - Bank of Palestine Strengthens Women-Owned Businesses and the Economy	Non-experimental
119	RQ 3.3	Digital / Business performance	Davies et al.	2023	Training Microentrepreneurs over Zoom	Experimental (RCT)
120	RQ 3.3	Digital / Business performance	Estefan et al.	2023	Digital Training for Micro-Entrepreneurs: Experimental Evidence from Guatemala	Experimental (RCT)
121	RQ 3.3	Digital / Business performance	Asiedu et al.	2023	Female Entrepreneurship and Professional Networks	Experimental (RCT)
122	RQ 3.3	Digital / Business performance	Cassidy et al.	2024	Testing the Promise of Digital Scaling - In-Person versus App-Based Training for Women Entrepreneurs	Experimental (RCT)
123	RQ 3.3	Digital / Business performance	Gender Innovation Lab (GIL)	2024	Online and On Point: How Can We Help Female Entrepreneurs in Indonesia Digitize?	Non-experimental
124	RQ 3.3	Training+	Buvinic et al.	2021	The Unfolding of Women's Economic Empowerment Outcomes: Time Path of Impacts in an Indonesia Trial	Experimental (RCT)
125	RQ 3.3	Training+	Valdivia	2015	Business Training Plus for Female Entrepreneurship? Short and Medium-Term Experimental Evidence from Peru	Experimental (RCT)

126	RQ 3.5	Business training / Business creation	ILO	2014	Effectiveness of Entrepreneurship Development interventions on Women Entrepreneurs	Non-experimental (systematic review)
127	RQ 3.5	Mentoring / Business creation	Gender Innovation Lab	2020	Profiting from Parity - Unlocking the Potential of Women's Businesses in Africa	Non-experimental
128	RQ 3.5	Networks / business creation	Venkatesh et al.	2017	Networks, Technology, and Entrepreneurship: A Field Quasi-experiment among Women in Rural India	Experimental (RCT)
129	RQ 3.5	Networks / Business creation	Field et al.	2016	Friends at work: Can peer support stimulate female entrepreneurship?	Experimental (RCT)
130	RQ 3.5	Networks / Business creation	Seyberth and Overwien	2024	The influence of role models on women's entrepreneurial intention and behaviour	Non-experimental
131	RQ 3.6	Business training / Business creation	ILO	2014	Effectiveness of Entrepreneurship Development interventions on Women Entrepreneurs	Non-experimental (systematic review)
132	RQ 4.1	Corporate value chains / Access	Nelson et al.	2015	A Path to Empowerment: The role of corporations in supporting women's economic progress	Non-experimental (descriptive)
133	RQ 4.1	Corporate value chains / Access	IFC	2022	Inclusive Distribution: Advancing Gender Equality in the Fast-Moving Consumer Goods Sector	Non-experimental (descriptive)
134	RQ 4.1	Corporate value chains / Access	IFC and We-Fi	2023	Inclusive Distribution and Retail: Women Entrepreneurs using E-Commerce in Egypt	Non-experimental (descriptive)
135	RQ 4.1	Public procurement / Access	Chatham House	2017	Gender-smart Procurement Policies for Driving Change	Non-experimental (descriptive)
136	RQ 4.1	Public procurement / Access	We-Fi and IFC	2021	Sourcing2Equal: Barriers and Approaches to Increase Access to Markets for WSMEs	Non-experimental (descriptive)
137	RQ 4.1	Public procurement / Access	Chin	2017	The power of procurement: How to source from women-owned businesses	Non-experimental (descriptive)
138	RQ 4.1	Digital platforms / access	IFC	2021	Digital2Equal	Non-experimental (descriptive)
139	RQ 4.1	Digital platforms / Access	World Bank and We-Fi	2019	Connecting Women-Owned SMEs to E-Commerce Platforms in MENA	Non-experimental (descriptive)

140	RQ 4.1	Digital platforms / Access	Friedson-Ridenour and Edey	2023	Helping Female Entrepreneurs Access Digital Platforms: The Importance of a Tech-Plus-Touch Approach and Other Lessons Learned	Non-experimental (descriptive)
141	RQ 4.2	Public procurement / Business performance	Hjort et al.	2020	Informational Barriers to Market Access: Experimental Evidence from Liberian Firms	Experimental (RCT)
142	RQ 4.2	Public procurement / Business performance	Hardy and Kagy	2020	It's Getting Crowded in Here: Experimental Evidence of Demand Constraints in the Gender Profit Gap	Experimental (RCT)
143	RQ 4.2	Digital platforms / Business performance	Poole and Volpe	2023	Can Online Platforms Promote Women-Led Exporting Firms?	Experimental (RCT)
144	RQ 4.2	Digital platforms / Business performance	Mohiuddin et al.	2020	Women-owned businesses in cross-border e-commerce: A diagnostic toolkit	Non-experimental (descriptive)
145	RQ 4.2	Digital platforms / Business performance	International Trade Centre (ITC)	2015	Unlocking Markets for Women to Trade	Non-experimental (descriptive)
146	RQ 4.2	Technology / Digitalization / Business performance	Menon	2015	Gender and Technology Use in Developing Countries: Evidence from Firms in Kenya	Non-experimental
147	RQ 4.2	Technology / Digitalization / Business performance	Alhorr	2024	Virtual Windows Through Glass Walls? Digitalization for Low-Mobility Female Entrepreneurs	Experimental (RCT)
148	RQ 4.2	Technology / Digitalization / Business performance	Manolova et al.	2023	Entrepreneurial responses to COVID-19: Gender, digitalization, and entrepreneurial capacity.	Non-experimental
149	RQ 4.2	Technology / Digitalization / Business performance	Cirera et al.	2024	The Role of Technology in Reducing the Gender Gap in Productivity	Non-experimental
150	RQ 4.2	Sector access / Business performance	Campos et al.	2014	Breaking the Metal Ceiling : Female Entrepreneurs Who Succeed in Male-Dominated Sectors in Uganda	Non-experimental
151	RQ 4.2	Sector access / Business performance	Gassier et al.	2022	Addressing Gender-Based Occupational Segregation: Experimental Evidence from the Republic of Congo	Experimental (RCT)

152	RQ 4.2	Sector access / Business performance	Cucagna et al.	2020	Women Entrepreneurs in Mexico: Breaking Sectoral Segmentation and Increasing Profits	Non-experimental
153	RQ 4.2	Sector access / Business performance	Bardasi et al.	2011	How do female entrepreneurs perform? Evidence from three developing regions	Non-experimental
154	RQ 4.3	Jobs / Value chains	Kalliny and Zaki	2024	Are Global Value Chains Women Friendly in Developing Countries?	Non-experimental
155	RQ 4.3	Jobs / Exports	World Bank Group and World Trade Organization	2020	Women and Trade: The role of trade in promoting gender equality	Non-experimental (descriptive)
156	RQ 4.3	Jobs / Exports	Amin and Islam	2021	Exports and Women Workers in Formal Firms	Non-experimental
157	RQ 4.5	WEE / Digital platforms	USAID	2018	Women's economic empowerment in the digital economy	Non-experimental (descriptive)
158	RQ 5.1	Corporates / Business case	The Hackett Group	2017	Supplier Diversity Study	Non-experimental (descriptive)
159	RQ 5.1	Corporates / Business case	McKinsey	2010	Rethinking how companies address social issues: McKinsey Global Survey results	Non-experimental (descriptive)
160	RQ 5.1	Corporates / Business case	IFC	2022	Inclusive Distribution: Advancing Gender Equality in the Fast-Moving Consumer Goods Sector	Non-experimental (descriptive)
161	RQ 5.1	Corporates / Business case	Vazquez and Frankel	2017	The Business Case for Global Supplier Diversity and Inclusion: The Critical Contributions of Women and Other Underutilized Suppliers to Corporate Value Chains	Non-experimental (descriptive)
162	RQ 5.1	Corporates / Business case	UN Women	2022	Procurement's Strategic Value: Why gender-responsive procurement makes business sense	Non-experimental (descriptive)
163	RQ 5.1	Corporates / Business case	Chin	2017	The power of procurement: How to source from women-owned businesses	Non-experimental (descriptive)
164	RQ 6.1	Laws/ Entrepreneurship	Hyland and Islam	2021	Gendered Laws, Informal Origins, and Subsequent Performance	Non-experimental

165	RQ 6.1	Laws/ LFP	World Bank Group	2024	Women, Business and the Law	Non-experimental
166	RQ 6.1	Laws/ LFP	Sever	2022	Gendered laws and labour force participation	Non-experimental
167	RQ 6.1	Laws/ LFP	Gonzales et al.	2015	Fair Play: More Equal Laws Boost Female Labor Force Participation	Non-experimental
168	RQ 6.1	Laws/ LFP	Hyland et al.	2020	Gendered Laws and Women in the Workforce	Non-experimental
169	RQ 6.1	Laws/ LFP	Iqbal et al.	2016	Unequal before the Law: Measuring Legal Gender Disparities across the World	Non-experimental
170	RQ 6.1	Laws/ A2F	Perrin et al.	2023	Gendered Laws and Women's Financial Inclusion	Non-experimental
171	RQ 6.1	Laws/ A2F	Bertrand and Perrin	2022	Girls Just Wanna Have Funds? The effect of women-friendly legislation on female-led firms' access to credit	Non-experimental
172	RQ 6.1	Laws/ A2F	Perrin and Weill	2022	No man, No cry? Gender equality in access to credit and financial stability	Non-experimental
173	RQ 6.1	Laws/ A2F	Becerra-Ornelas et al.	2024	Can Regulatory Policies Foster Women's Financial Inclusion? The Role of Loan Loss Provisioning	Experimental
174	RQ 6.1	Policies / Care	Rutigliano	2024	Minding Your Business or Minding Your Child? Motherhood and the Entrepreneurship Gap	Experimental
175	RQ 6.1	Policies / Care	Anukriti et al.	2023	Filling the Gaps: Childcare Laws for Women's Economic Empowerment	Non-experimental
176	RQ 6.1	Laws/ Reform	Behr and Cheney	2024	Sierra Leone's Reform Journey to Advancing Female Entrepreneurship and Financial Inclusion	Non-experimental
177	RQ 6.2	Social norms / Entrepreneurship	Bento et al.	2023	Gender Gaps in Time Use and Entrepreneurship	Non-experimental
178	RQ 6.2	Social norms / Entrepreneurship	Naaraayanan	2019	Women's Inheritance Rights and Entrepreneurship Gender Gap	Experimental
179	RQ 6.2	Social norms / Entrepreneurship	Barsoum et al.	2022	Evaluating the Effects of Entrepreneurship Edutainment in Egypt	Experimental

180	RQ 6.2	Social norms / access to resources	Aneke et al.	2017	An exploratory study of challenges faced by women entrepreneurs in the construction industry in South Africa	Non-experimental
181	RQ 6.2	Social norms / access to resources	Görg and Jäkel	2024	Beyond borders: Do gender norms and institutions affect female businesses?	Experimental
182	RQ 6.2	Social norms / access to resources	Chang et al.	2020	What works to enhance women's agency: Cross-cutting lessons from experimental and quasi-experimental studies	Non-experimental
183	RQ 6.2	Social norms / access to resources	Pierotti et al.	2023	Engaging Men for Women's Economic Empowerment: Overview of the Evidence	Non-experimental
184	RQ 6.2	Social norms / FLP	Goldstein et al.	2024	Breadwinners and Caregivers: Examining the Global Relationship between Gender Norms and Economic Behavior	Non-experimental
185	RQ 6.2	Social norms / FLP	Gulesci and Jayachandran	2023	Access to Childcare to Improve Women's Economic Empowerment	Non-experimental
186	RQ 6.3	Data	Bonfert et al.	2023	Leveraging Gender Data to Accelerate Gender Equality	Non-experimental
187	RQ 6.3	Data	Meunier et al.	2017	Women's Entrepreneurship How to Measure the Gap between New Female and Male Entrepreneurs?	Non-experimental
188	RQ 6.3	Data	Data 2X et al.	2016	Catalyzing Inclusive Financial Systems: Chile's Commitment to Women's Data	Non-experimental (descriptive)
189	RQ 6.3	Data	Alliance for Financial Inclusion	2023	A Policy Framework for Women-led MSME Access to Finance	Non-experimental (descriptive)

About We-Fi

The Women Entrepreneurs Finance Initiative (We-Fi) is a groundbreaking partnership that aims to unlock financing for women-led/owned businesses (WSMEs) in developing countries. We-Fi's partners include 14 donor governments, six multilateral development banks as implementing partners, and numerous other stakeholders in the public and private sector around the world.

We-Fi's number of active projects are rapidly growing and to date, our portfolio has encompassed 82 countries and 486 partnerships with public and private sector institutions around the world. We-Fi programs have benefitted almost 399,000 WSMEs with financial and non-financial support, and financial service providers supported by We-Fi have facilitated over $5.3 billion in financing to WSMEs.

Over half of We-Fi funds go to low income (IDA-Eligible) countries, including many facing fragile, conflict and violence situations. We-Fi takes an ecosystem approach to removing barriers to women's economic empowerment, addressing constraints and opportunities related to finance, market access, capacity and the enabling environment.

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