USAID
FROM THE AMERICAN PEOPLE

THEORIES OF CHANGE 2022 UPDATE

HIGH-GROWTH SMALL AND MEDIUM ENTERPRISE DEVELOPMENT

DECEMBER 2022

This study is made possible by the support of the American people through the United States Agency for International Development (USAID). Its contents are the sole responsibility of SSG Advisors, LLC (dba Resonance) and Integra International Government Services and do not necessarily reflect the views of USAID or the US government. It was produced in collaboration with the Bureau for Development, Democracy, and Innovation (DDI) Office of Trade and Regulatory Reform (TRR).

THEORIES OF CHANGE 2022 UPDATE

HIGH-GROWTH SMALL AND MEDIUM ENTERPRISE DEVELOPMENT

Contract Title:	LEAP III: Learning, Evaluation and Analysis Project
Contract Number:	GS-10F-083CA / 7200AA18M0004
Activity Number:	LEAP III 2022 – 1009.1073
Submitted:	December 2, 2022 – Final
Contractor:	Integra Government Services International LLC 1100 Vermont Avenue NW, Suite 750 Washington, DC 20005
USAID Office:	Center for Economics and Market Development
COR:	Katie Qutub (kqutub@usaid.gov)
PHOTO CREDIT:	USAID. *Business on Bugala Island.* August 2012.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

ANDE	Aspen Network of Development Entrepreneurs
COVID-19	Coronavirus-19
E3	Bureau for Economic Growth, Education and Environment
EMD	Center for Economics and Market Development
GDP	Gross Domestic Product
ICICI	Industrial Credit and Investment Corporation of India
IGC	International Growth Centre
KII	Key Informant Interview
LMIC	Low- or Middle-Income Country
M&E	Monitoring and Evaluation
MSME	Micro, Small, and Medium Enterprise
NDB	National Development Board
OECD	The Organization for Economic Cooperation and Development
PFI	Participating Financial Institutions
PLOS	Public Library of Science
R&D	Research and Development
SME	Small and Medium Enterprises
SMI	Small and Medium Industries Program
TCA	Trade and Competitiveness Activity
ToC	Theory of Change
TRR	Office of Trade and Regulatory Reform
USAID	United States Agency for International Development

1. EXECUTIVE SUMMARY

Small and medium enterprises (SMEs) are popular targets of donor assistance; they form the majority of the business base and are significant drivers of both gross domestic product (GDP) and employment in many developing countries. In 2017, the former USAID Bureau for Economic Growth, Education and Environment (E3) Office of Trade and Regulatory Reform (TRR) Trade and Competitiveness Activity (TCA) reviewed the latest research and interviewed SME development experts to articulate popular theories of change (ToCs) and to present available evidence supporting them with the overall objective to help USAID design activities that will best stimulate SME growth in profit and/or employment. In 2022, the USAID Center for Economics and Market Development (EMD) requested an update of the evidence to the existing ToCs and to cover additional lines of inquiry, namely discussions on the most effective ways to target recipient SMEs in developing economies, and evidence or existing gaps of interventions to support specific demographics, like women and youth, and the recovery during the COVID-19 pandemic. The analysis also provides an updated account of the debates, critiques, and demographic and contextual factors of each ToC, gaps in the evidence, and implications for project design.

1.1 INTERVENTIONS, EVIDENCE, AND IMPACT

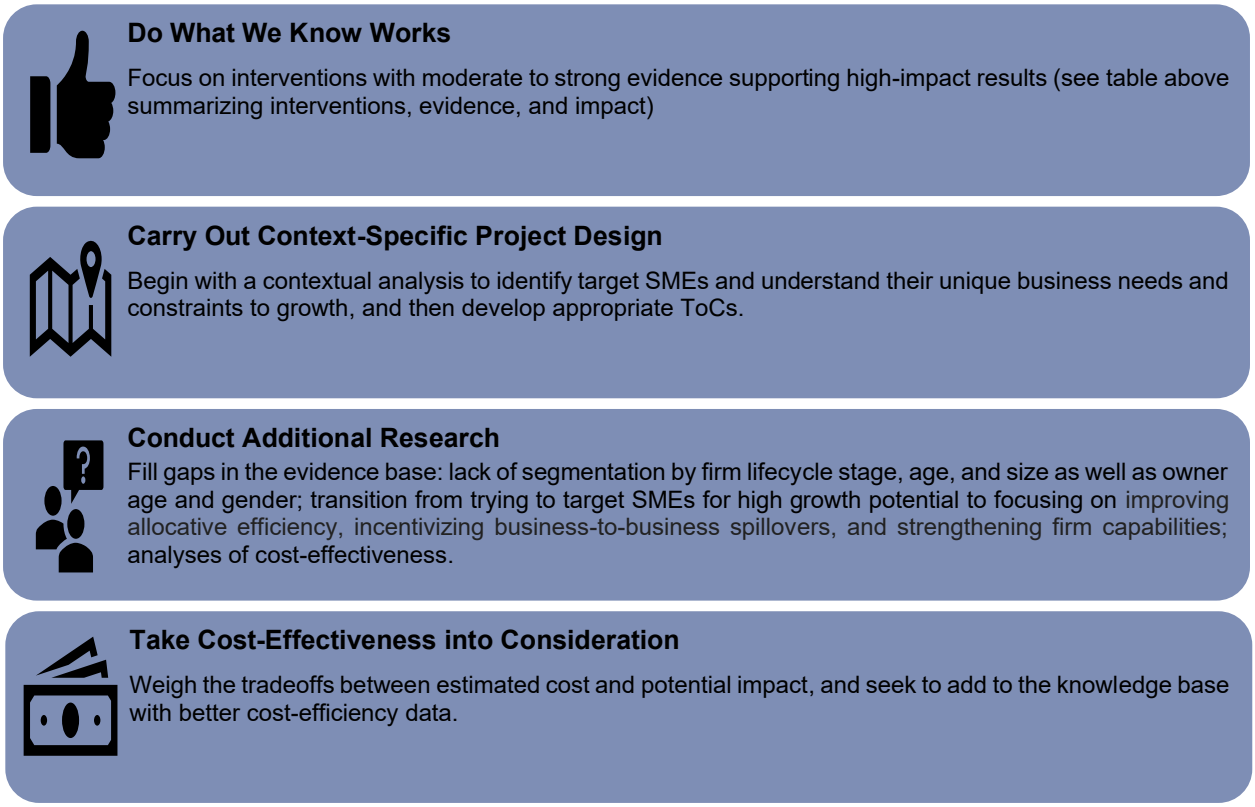
As summarized in Table 1,[1] research from the 2017 and 2022 evidence reviews reveals that the level of impact varies among different types of interventions, and significant new evidence had not been produced by 2022 to change these levels since 2017. This analysis also identifies gaps in the evidence base that make it difficult to determine the impact of other interventions conclusively. Donors should take both of these factors into consideration when designing projects.

TABLE 1: REVIEW OF INTERVENTIONS, EVIDENCE, AND IMPACT

INTERVENTION CATEGORY	INTERVENTION TYPE	LEVEL OF EVIDENCE	LEVEL OF IMPACT
BUSINESS MANAGEMENT	Training	STRONG	LOW
	Consulting Services	STRONG	HIGH
	Matching Grants	WEAK	MIXED-HIGH
ACCESS TO FINANCE	Access to Credit	MODERATE	HIGH[2]
BUSINESS REGISTRATION AND TAXES	Business Registration	WEAK	LOW
	Tax Policies and Administration	MODERATE	HIGH
MARKET ACCESS	Market Linkages	MODERATE	HIGH[3]
	Export Promotion and Support	WEAK	MIXED
INNOVATION	Product Innovation Support	WEAK	MIXED

[1] These findings summarize aggregated evidence collected from a variety of contexts. The level of evidence and/or level of impact of each of the types of intervention may look different if focused on one context.
[2] This ranking is dependent on the access to credit intervention type. Information access and collateral laws have a high impact on SME growth, while findings on credit guarantees and loan subsidies were mixed or low.
[3] Although the impact is high, market linkages must be paired with information transfer from lead firms.

FIGURE 1: GENERAL RECOMMENDATIONS



1.2 INSIGHTS AND RECOMMENDATIONS BY CATEGORY

In addition to reviewing the evidence that exists surrounding SME development interventions, this report highlights a number of recommendations for donors based on the 2017 and 2022 reviews in the below Figure 2.

FIGURE 2: RECOMMENDATIONS FOR DONORS BY INTERVENTION

BUSINESS MANAGEMENT

Business and Technical Training

- Traditional business training has positive but statistically insignificant impacts on business performance. Alternative approaches such as heuristics, kaizen methods, and tailored consulting services are proving to be more effective than classroom-style training.
- The type of training should match your goals, e.g., marketing training typically leads to greater sales and employment while finance training often results in cost-control measures that may actually decrease employment.
- Training is expensive relative to other interventions, so it should be targeted and ideally paired with access to finance initiatives.

Consulting Services

- Identifying existing constraints to the use of consulting services (e.g., information gaps, risk aversion, and credit constraints) and addressing them in program design is critical.
- Two alternative approaches to individual consulting services that are potentially more cost-effective are the group-based consulting approach and insourcing or outsourcing services for specific functions (e.g., marketing or accounting)

Matching Grants

- Programs should seek to identify and address underlying market failure(s), mitigate externalities (e.g., market distortions), and assess the potential for additionality (i.e., whether firms would have paid for the goods or services anyway) when using matching grants.

ACCESS TO CREDIT

Credit Information and Collateral Laws

- Reducing information asymmetries (e.g., via the creation or strengthening of credit bureaus, and supporting entrepreneurs to improve financial knowledge) and expanding collateral laws to include moveable assets have positive effects on SME growth.

Subsidized Loans

- Subsidized credit lines, in which financial institutions receive funds for on-lending below commercial rates, have not demonstrated a strong return on SME profitability.

Credit Guarantees

- Credit guarantees can help SMEs grow faster. However, they are also associated with an increased risk of default.
- Apply the following best practices from the World Bank, when using guarantee schemes:
- Leave credit assessments and decision-making to the private sector.
- Cap coverage ratios and delay the payout of the guarantee until the lender takes recovery actions.
- Price guarantees to consider the need for financial sustainability and risk minimization.
- Encourage the use of risk-management tools.

REGISTRATION & TAXES

Firm Registration

- Interventions increase formalization when they are costless and separate from tax obligations.
- There is limited evidence that formalization has a positive impact on SME growth.
- The benefits of formalization do not materialize automatically. Firms require additional assistance (e.g. financial information training and business development services) to realize the potential advantages of formalizing.

Tax Policies and Administration

- Simplifying the costs of tax compliance and reducing the tax burden have been shown to increase SME profitability.
- Tax policy reforms can also lead to broad SME growth.
- Limited USAID program cycles pose a challenge to passing and implementing policy reforms.

MARKET ACCESS

Market Linkages

- Market linkages programs have been shown to increase SME sales and employment, most effectively through demand-side interventions.
- Programs must go beyond basic matchmaking to include incentive-based SME capacity building.
- The use of digital tools has shown to be effective for establishing market linkages for rural or smaller SMEs.

Export Promotion and Support

- Bundled services combining counseling, planning, and trade missions are most effective when they focus on helping firms break into new markets with new products—and can have an immediate impact on SME profits and employment—but their long-term impact is less clear.

INNOVATION

Product Innovation Support

- Support for product innovation has been shown to have an overall positive effect on SME employment.
- The best ways to support innovation are by improving the enabling environment (e.g., increasing public support for innovation or ensuring a reliable intellectual property rights system), targeting capacity-building to improve SMEs' use of human and capital resources and facilitating access to finance.
- Donors should consider accelerator models to help build effective, self-sustaining innovation systems.

2. BACKGROUND

A significant amount of research has been conducted on topic areas important to the USAID Center for Economics and Market Development[4] (EMD)'s work. User-friendly evidence organized around popular theories of change (ToCs) would be highly valuable for EMD's client missions around the world and inform future activity procurement and approval processes. In 2017, EMD produced this 2017 High-Growth SME evidence review to test these popular ToCs for targeting SMEs against current evidence. In 2022, EMD requested that LEAP III provide an update of the evidence and expand the review to cover additional areas, namely discussions on the most effective ways to target recipient SMEs in developing economies, and evidence or existing gaps of interventions to support specific demographics, like women and youth, and the recovery during the COVID-19 pandemic. The analysis also provides an updated account of the debates, critiques, and demographic and contextual factors of each ToC, gaps in the evidence, and implications for project design.

In many developing countries, SMEs[5] make up the majority of enterprises, account for a substantial share of contributions to GDP, and employ a significant proportion of the workforce.[6,7] In addition, evidence shows that early-stage SMEs can be drivers for achieving economic growth outcomes, such as increased GDP, particularly in countries with a nascent private sector.[8] For these reasons, policymakers and development practitioners recognize the importance of entrepreneurship and firm development in developing-country contexts and have designed and implemented initiatives and programs focused on various SME development activities. Building the skills of SME business owners and employees is a priority for government and donor stakeholders for a variety of reasons, namely:

- Local governments rely on firms to increase the competitiveness of products or services in the global marketplace.
- Private sector actors rely on SME suppliers for high-quality products and on-time deliveries.
- Citizens depend on a successful marketplace for employment and, in some cases, poverty alleviation, via the goods and services that improve livelihoods and quality of life.
- SME business owners require highly trained workers to contribute to business success and growth.[9,10]

Despite the popularity of SME development programs and policies, theoretical frameworks that outline variables linking entrepreneurship and growth are not always well developed. The study of entrepreneurship draws from multiple academic disciplines, including economics, management, and psychology. Understanding the relationship between entrepreneurship and growth necessarily involves analysis at the level of the individual entrepreneur, at the level of the firm (formal or informal), and at the level of institutions and enabling environments. This makes research in this field a more complex undertaking than in more established fields of economic research.[11]

---

[4] Formerly known as the office Bureau for Economic Growth, Education and Environment (E3) Office of Trade and Regulatory Reform (TRR).
[5] In this report, SMEs are defined as those businesses with between 10 and 250 employees.
[6] Lopez-Acevedo and Tan. 2011.
[7] Cravo et al. 2016.
[8] Cook and Olafsen. 2016.
[9] Ibid.
[10] Cardon. 2003.
[11] Cook and Olafsen. 2016.

Moreover, very few newly established enterprises actually succeed, and SMEs often lag behind larger firms in terms of performance. Both of these outcomes are likely due to SME-specific constraints.[12,13,14] In addition, research has shown there is substantial heterogeneity among SMEs, with some performing at a subsistence level, with limited interest in becoming large firms. Factors such as these make it difficult to target and support SME development appropriately. Based on the evidence, there is only a small number of transformational SMEs that grow rapidly, become bigger, and thus have the ability to drive employment and economic growth. It is critical that policymakers, donors, and development practitioners understand how to identify SMEs with potential to become high-growth, that are most likely to benefit from targeted assistance programs, and then tailor solutions for these firms.[15] Currently, a large number of interventions designed to support SME growth allow beneficiaries to self-select into programs. A small number of rigorous evaluations are also testing various measurable firm or entrepreneur characteristics, such as ability to write business plans, demographics, intelligence, and psychometric attributes for their effectiveness in predicting high growth, but there is not enough evidence to form conclusions.

This review aims to update the 2017 High Growth SME Evidence review to include new evidence published since 2018 against the most popular TOCs in spurring SME growth, finding that not all popular ToC are valid. This update is to test these ToCs against the current evidence and to offer an account of the debates and critiques, demographic and contextual factors, gaps in the evidence, and implications for project design. This review considers SME growth in terms of increased employment[16] and/or increased profits. The SME intervention areas are organized around the following five ToC[17] categories: 1) Business Management, 2) Access to Finance, 3) Business Registration and Taxes, 4) Market Access, and 5) Innovation.[18,19] In addition, this 2022 updated report explores a sixth category, SMEs and Climate, to organize available evidence for supporting and targeting SMEs in the climate space. Finally, this 2022 updated report also presents an in-depth discussion of the current literature regarding best and most effective practices and approaches for targeting SMEs for assistance.

[12] Cook and Olafsen. 2016.
[13] Lopez-Acevedo and Tan. 2011.
[14] Cravo et al. 2016.
[15] Ayyagari et al. 2016.
[16] Per the International Labour Organization, persons in employment comprise all those of working age who were engaged in any activity for any amount of time, if only for one hour in the course of the reference week, to produce goods or provide services for pay or profit.
[17] In this report, a theory of change is defined as a description of the logical causal relationships between multiple levels of conditions or interim results needed to achieve a long-term objective. It may be visualized as a roadmap of change, and it outlines pathways or steps to get from an initial set of conditions to a desired end result. A theory of change is analogous to a USAID development hypothesis or project hypothesis.
[18] The researchers have parsed interventions into what they feel are the most appropriate categories; however, others may categorize the interventions differently.
[19] Please note that the ToCs presented in this report are meant to be general across a variety of geographies and contexts and that those applying them for intervention design should contextualize them.

3. METHODOLOGY

This updated evidence review builds on the 2017 High-Growth SME Evidence Review to include newly available evidence to further test common ToCs. Following a strict set of inclusion criteria, presented below, this review provides an organized account of published or publicly available research and studies on SME development. In addition, this report explores further lines of inquiry regarding best available evidence on supporting SMEs for specific demographic groups, like women and youth, assistance to SMEs during the COVID-19 pandemic, and the most effective ways to target SMEs for donor assistance. Specifically, this updated review explored the five following questions:

- What are the most effective ways to target recipient SMEs in developing economies?
- What evidence exists that demonstrates the impact of different SME development interventions and growth outcomes (such as employment, revenue, incomes, etc.)? What is the level of rigor of that evidence since 2017?
- What gaps exist in the evidence, both in terms of intervention areas/approaches and impact, but also in terms of the link between project inputs and outputs/outcomes for specific demographic groups, like women and youth?
- What are the common theories of change between project inputs, outputs, and outcomes when it comes to high-growth SME development? Which have the most and least evidentiary support?

To explore these questions, this updated evidence review will explore the following five areas:

1. Business Management
2. Business Registration and Taxes
3. Access to Finance
4. Market Access
5. Innovation

The report synthesizes findings from a total of 108 reports, 63 reviewed in 2017 and 45 reviewed in 2022. Most of the additional 45 reviewed reports were identified through an online search of key databases using specific search criteria or were referred to the team by USAID. Each of the 45 new reports selected for review fits within the following criteria:

- The study was published between 2017 and 2022.
- The study design takes a quasi/experimental approach.
- The study is focused on SME interventions and does not include micro- or large enterprises.
- The study is targeted at a Low- or Middle-Income (LMIC) economy.

The research team also conducted two key informant interviews (KIIs) with three practitioners at USAID in the field of SME development, which were used to validate findings from the secondary evidence review and explore additional lines of inquiry related to new topics in the SME field, including climate.

4. EFFECTIVE APPROACHES FOR TARGETING SMES

One of the key challenges facing policymakers when developing SME interventions is the highly diverse nature of these enterprises.[20] The wide variety of challenges SMEs face and their diverse needs make it difficult for governments and development practitioners to identify and target suitable interventions for different types of SMEs. Hence, a typology of SMEs that allows for a better understanding of the needs and challenges of different types of SMEs is necessary to guide more targeted policies and interventions.[21]

Historically, donors and governments have categorized SMEs by employment, turnover, or value of assets. The rationale behind these criteria was the common needs and challenges SMEs share based on their size. However, although this categorization is useful for statistical purposes, there is growing evidence of the limitations of using size as a criterion for identifying SMEs' specific needs and allocating the necessary support.[22] Over the past several years, there has been increasing awareness among policymakers and practitioners regarding the importance of other dimensions such as age, ownership, business models, and the entrepreneurs' profile and aspirations.[23] These dimensions may include critical factors that affect the performance levels of the firms or reveal aspects of vulnerability to market failures that should be considered when selecting and designing the appropriate interventions to develop their capacity.[24] Accordingly, in recent years, empirical research suggests replacing firm size as the main criterion with alternative and more policy-relevant criteria such as firm age, growth potential, and productivity.[25]

Herein, we present the main trends in the evolution of SME typologies and the most policy-relevant criteria for SME categorizations according to a recent literature review conducted by OECD. We then present a framework developed by the World Bank that introduces a typology of SME interventions by type of SME using three main criteria: age, capabilities, and growth potential. The framework also identifies the relevant interventions per type of SME under four main policy areas: firm capabilities, market, finance, and business environment/infrastructure.

4.1 TARGETING SMES FOR ASSISTANCE

The OECD recently conducted a literature review of 169 SME typologies to assess their relevance for policy-making.[26] The study reveals that several academic disciplines, including economics, psychology, management, small business, and entrepreneurship,[27][28][29][30][31][32][33] as well as policy and societal perspectives on small businesses, have influenced the evolution of SME typologies over the past several decades.[34] The review found that SME typologies generally aligned under the following three dimensions:[35] (i) organizational factors: firm age, type of ownership, and sector; (ii) behavioral factors: opportunity

[20] Raes. 2021.
[21] OECD. 2017.
[22] World Bank Group. 2019.
[23] OECD. 2017.
[24] Raes. 2021.
[25] Independent Evaluation Group. 2019.
[26] Raes. 2021.
[27] Reboud et al. 2011.
[28] Morris et al. 2018.
[29] Andersén. 2012.
[30] Stephan et al. 2015.
[31] Tang et al. 2008.
[32] D'Amboise et al. 1988.
[33] Miner. 1997.
[34] Raes. 2021.
[35] Ibid.

recognition, creation, evaluation, and exploitation, as well as strategy and motivation; and (iii) performance factors: innovation, growth, impact, and social goals.

To determine the types of SME and entrepreneurship typologies that would be most relevant for policy-makers aiming to better understand the heterogeneity of firms, the OECD used an internally developed framework based on four policy-relevant criteria.[36] The assessment result was that the articulation of typologies on high-growth, innovation, and start-ups seem to be the most promising for policy relevance.[37]

A policy brief by the World Bank in 2017[38] identified four main targeting approaches: (i) marketing and screening, (ii) judges/expert panels evaluating business proposals to assess the investment readiness of firms (applicants), (iii) psychometrics and machine learning, and (iv) incentivizing self-selection by designing interventions that are provided conditional on the participants achieving set targets.

However, the World Bank's 2019 flagship report[39] on high-growth firms in emerging economies concludes that targeting firms with the potential for high-growth episodes "may be neither feasible nor advisable." According to the study, which examines high-growth firms in 11 developing countries, there is growing evidence of the lack of robust predictors for high-growth firms. Indeed, the success rate for the aforementioned methodologies for identifying high-growth firms (including scoring by judges, predictive models, and machine learning approaches) is between 2 and 12 percent. Furthermore, the characteristics that have been used in predicting high growth (e.g., age, gender, and IQ scores) can lead to interventions that select the already better-off beneficiaries.

Consequently, the study recommends reorienting policies to support firm growth from searching for high-potential firms to improving allocative efficiency, incentivizing business-to-business spillovers, and strengthening firm capabilities.

4.2 PROPOSED SME TYPOLOGY AND FRAMEWORK FOR TARGETING INTERVENTIONS

In an attempt to introduce a more informed categorization of SMEs and better targeting of SME interventions, we use a typology of SME needs and interventions developed by the World Bank.[40] While the typology does not comprehensively cover all challenges SMEs face and the available interventions,[41] it does cover the most important types of SMEs, their range of needs, and corresponding interventions (Table 2).

[36] The framework developed included four requirements/criteria: (i) attributes of the typology should be relevant to the policy objectives pursued by the institution; (ii) typologies should be based on comparable and reliable data; (iii) relevant across OECD countries and usable in the multiple contexts of different country settings; and (iv) the typologies should be understandable and easily recognizable for both policymakers and entrepreneurs.
[37] Raes. 2021.
[38] Balantrapu. 2017.
[39] World Bank Group. 2019.
[40] Ibid.
[41] This paper limits its focus to interventions that provide direct assistance to SMEs; hence excluding broader business environment issues such as inspections, trade facilitation, tax administration, regulatory reform.

TABLE 2: SME TYPOLOGY[42]	
NEW OR YOUNG MICRO AND SMES (MSMES)	**ESTABLISHED MSMES**
New subsistence micro-businesses* - Youth, marginalized, unemployed, and/or underemployed individuals who start micro-businesses generally for reasons of self-employment. The businesses are usually low-skill, they may be engaged in simple retail activities, and they are likely to stay informal. **Growth trajectory:** Unlikely ever to grow.	**Micro-businesses* -** Micro-businesses that have been operating for some time and have often remained informal. Also increasingly includes skilled individuals often working from home, either producing and trading products through online platforms (for example, creative businesses) or providing business services (for example, coding, design) sourced through the 'gig' economy. **Growth trajectory:** Potential for growth varies; some home-based businesses can be scaled, and networked individuals can be aggregated.
New competency-based MSMEs - The establishment of small businesses by entrepreneurs who have a skillset—a technical trade, profession, or work experience—around which the business is formed. Such enterprises are found in all sectors and generally do not involve a new business model or innovation. **Growth trajectory:** Can potentially grow significantly if they have an entrepreneurial owner and/or right market conditions, although the owner may lack broad skillset to manage this growth.	**Established SMEs -** Existing SMEs older than three to five years with some scale, usually mature 'competency-based MSMEs'. They are found across the economy in all sectors, and are often family businesses. **Growth trajectory:** Most probably do not have growth aspirations, either because they provide a sufficient lifestyle to their owners or because of limited capabilities and market opportunities. Others will grow opportunistically but are not actively strategizing for it. However, their interest in growth can change, for example, when there is generational change in family business.
Start-ups - New, innovation-based businesses that aim to scale quickly and utilize new technologies and business models to do so. **Growth trajectory:** Start-ups are engineered to grow quickly and significantly.	**Established, growth-focused SME** - Existing SMEs older than 3–5 years with some scale, with growth aspirations and business model based (at least partially) on new product, business model development, or new market entry. **Growth trajectory:** Generally have growth intent and hence they may invest in innovation. Growth can occur organically (for example, through new products/new market entry) or through mergers and acquisitions or a combination.

Source: World Bank Group, 2019. Typology of Small and Medium Enterprise Needs and Interventions (Working Paper). World Bank, Washington DC. https://doi.org/10.1596/33908

[42] *Note for purposes of this evidence review, we are not considering evidence specific to micro-enterprises, but have kept this dimension in the proposed typology to demonstrate the range of types of SMEs supported in LMICs.

This typology moves beyond using firm size as the main criterion, and instead introduces a categorization based on firm age, capabilities, and growth trajectory. The paper's authors acknowledge that identifying a specific firm's growth potential *ex-ante* is unrealistic, but argue that the typology may be useful conceptually when differentiating the potential needs of SMEs and provides a starting point for developing targeting mechanisms.[43]

[43] World Bank Group. 2019.

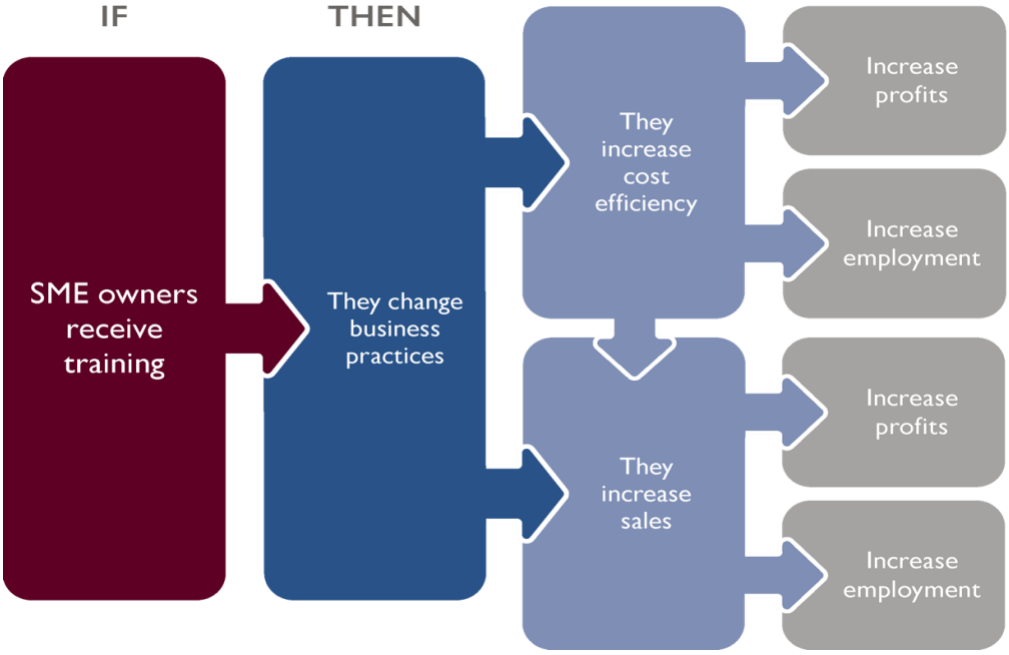
5. BUSINESS MANAGEMENT THEORIES OF CHANGE

Studies show that a lack of managerial skills and capacity among SME employees and leadership constitutes a significant constraint to firm growth and the ability of SMEs to withstand economic shocks and that management skills are a major determinant of productivity.[44,45] Therefore, one common theory among development practitioners is that building the capacity of SME owners and employees will improve the performance of their enterprises, if they acquire new skills, thus leading to an increased demand for labor, along with additional sales revenue and employment generation. Training has become one of the most common forms of support provided by donor interventions to SME owners and employees to improve business practices, core management and administrative functions, and/or technical skills. The World Bank alone invests almost $1 billion per year on skills training programs.[46] However, the literature shows that more tailored consulting services and coaching may have more significant impacts on SME growth.

Increasingly, new training and consulting services interventions are including specified selection processes designed to identify SMEs with potential for high growth, such as business plan competitions, but beneficiary self-selection is still the most common way that SMEs are chosen for business management support. However, because there is a difference in the desire of an SME owner to grow their business and the business's ability to grow, self-selection may not be the most effective way to identify high-growth SMEs.

5.1 BUSINESS AND TECHNICAL TRAINING

THEORY OF CHANGE



[44] Bruhn et al. 2013.
[45] Mano et al. 2012.
[46] Anderson et al. 2016.

PROGRAM ASSUMPTIONS

- SME owners lack skills and are aware of this, but lack the capital to acquire training commercially.
- Training is the only input participants need to implement new practices (not time, capital, or other inputs) and realize increases in sales or efficiency.
- SME owners invest in jobs and/or experience greater profit margins from efficiency and/or gains.

Business and technical training interventions can range from large conference sessions to small workshops to one-on-one training sessions. However, the studies reviewed for this analysis evaluated classroom-style learning with fixed or preplanned modules or sessions. These randomized control trials of business training courses found mixed results, in terms of impact on SME performance.[47] An earlier review of randomized evaluations of traditional business training programs revealed that whereas training leads to improvement in business practices, most studies failed to find statistically significant effects on business profits or sales.[48] In recent years, there has been a second wave of evaluations that have adopted measures to improve the precision of these estimates, including increasing the size of the sample firms trained, reducing the heterogeneity of the firms by screening the sample, and pooling multiple rounds of follow-up surveys together.[49] These measures resulted in narrower confidence intervals. A meta-analysis of the findings of these studies reveals that business training increases profits and sales on average by 5 to 10 percent.[50] Hence, although there is evidence that business training improves the performance of SMEs, the magnitude of these impacts remains too small for individual studies to detect statistically.

The existing literature shows that, in some cases, greater impacts on the performance of SMEs have been found from programs that deviate from simply focusing on teaching traditional business skills and incorporating alternative approaches such as behavioral-based rules of thumb and psychology-based personal initiative into business management training.[51] [52] For example, a study compared the impacts of a traditional accounting practices training and the impacts of a rules-of-thumb training on SME performance in the Dominican Republic (the latter approach consisting of the delivery of specific, to-the-point, business recommendations and accounting details or theory—more of a business-coaching approach).[53] The study found that the rules-of-thumb trainees changed their business practices, and their calculated revenues increased by six to 12 percentage points, but the traditional accounting practices training had no effect on business practices or firm performance.

The results of experimental studies evaluating personal initiative and heuristic training modules suggest improved performance outcomes compared to standard training programs. However, these approaches are considered to be more relevant to subsistence-level firms and microenterprises, for which drive and initiative are likely to be lacking compared to larger enterprises.[54]

The literature on the impact of business training on the performance of larger enterprises is more limited. Two alternative approaches that show promise but for which evidence is still thin are: Kaizen methods

[47] Innovations for Poverty Action. 2017.
[48] McKenzie and Woodruff. 2014.
[49] McKenzie. 2020.
[50] Ibid.
[51] Drexler et al. 2014.
[52] Alibhai et al. 2019.
[53] Drexler. 2014.
[54] McKenzie et al. 2021.

for small manufacturing firms and training provided by incubators/accelerators for high-growth potential start-ups.[55]

The Kaizen approach (which focuses on producing and quality management) was tested in a randomized control trial on 113 garment firms in Tanzania. The study split the samples into groups, comparing classroom training only with onsite training or a combination of the two, and found a significant increase in sales in the medium run for the group that combined the standard business training program with onsite Kaizen training.[56] Similar experiments evaluating the impact of combining standard ILO business training programs with basic elements of Kaizen for metal cluster firms in Ghana and a garment cluster in Vietnam also revealed positive effects on business performance, as in both cases, the firms became more competitive and were better equipped to cope with the pressure exerted by cheap imports compared to the control group.[57] Although these results signify the potential of the kaizen approach, there remains a need for more studies using substantially larger sample sizes to verify the effectiveness of this approach and the additional benefits it provides to stand-alone traditional management training programs.[58]

Regarding business accelerator programs, recent studies in Chile and Colombia have illustrated the positive impacts they can have on high-potential start-ups.[59] [60] However, evidence of the effectiveness of incubators and accelerators on the performance of SMEs in developing countries remains generally scarce and less rigorous.[61] Further research is required to identify the types of business training that have the highest impact and to determine the extent to which positive effects on performance are due to the selection of high-potential firms or the content of the programs delivered.[62]

Finally, despite the limited evidence linking general business training and SME performance, the literature has shown that the *type* of training matters and can affect SME development outcomes.[63,64] Based on randomized experiments conducted on management training programs in a number of countries, basic-level management training was shown to improve business practices and, therefore, increase profits and/or employment, although the extent of improvement on these indicators was small and varied considerably among beneficiaries, depending on their base level of management knowledge and capacity.[65,66] Beneficiaries with a lower base level of management knowledge and capacity benefited more from the basic management training and, therefore, improved their management practices to a larger extent.

DEMOGRAPHIC AND CONTEXTUAL FACTORS

Due to the heterogeneous nature of SMEs, the effect of training on business results will vary considerably among different participants, including between male and female business owners and employees.[67] Studies show that training programs for SME owners and employees result in higher impacts in business practices when the complexity of the program is matched with the experience, or sophistication, of the participants.

[55] Ibid.
[56] Higuchi et al. 2019.
[57] Sonobe and Higuchi. 2018.
[58] McKenzie. 2020.
[59] Gonzalez-Uribe and Leatherbee. 2018.
[60] González-Uribe and Reyes. 2021.
[61] McKenzie et al. 2021.
[62] Ibid.
[63] Bruhn et al., 2013.
[64] Mano et al., 2012.
[65] Bruhn et al., 2013.
[66] Mano et al., 2012.
[67] Mano et al. 2012.

That is, more experienced individuals benefit from detailed, in-depth training and, conversely, smaller and less-experienced firms benefit from clear, concise, and simple training.[68,69,70] For example, in the study from the Dominican Republic cited in the previous section, the rules-of-thumb finance training produced more pronounced improvements in business practices for clients with the lowest human capital (e.g., level of education or skills), limited *ex ante* interest in accounting or financial training, and baseline business practices in the lowest quartile.[71]

Firm and entrepreneur characteristics also affect training outcomes. In the study by Mano et al. (2012), less seasoned entrepreneurs tended to do better when they received marketing training, because it encouraged them to look beyond their existing business context and develop new perspectives on products, customers, distributors, and suppliers. Established enterprises, however, benefited more from finance and accounting skills to reduce costs and increase efficiencies within their businesses.[72,73]

The impact of training also depends on the absorptive capacity of entrepreneurs and their employees. For training activities to be effective, managers and workers must apply what they learned. The absorptive capacity of SME owners and employees is a function of existing management skills, in-house technical expertise, worker competencies, machine capabilities, and the ability to finance investments. The commitment and motivation, or the mindset shift, that leads to behavior change of owners and managers is also a key factor in ensuring that new management practices are implemented and retained within an SME's workforce.[74, 75] For women entrepreneurs, however, an additional factor limiting the impact of business training on growth and their decision-making abilities is persistent cultural and gender-related intra-household dynamics.[76]

Finally, often the entrepreneurs who have the most to gain from engaging in training may also have the most difficulty understanding the benefits. This is because they are not aware of how poorly run their businesses are.[77] Training uptake can be incentivized when trainers or training programs can clearly articulate the returns of these training programs to SME employees.[78,79]

GAPS IN THE EVIDENCE

Although there is a significant amount of research on the impacts of training for micro and small enterprises, there is much less evidence and research on the effects of training on more established companies with larger numbers of employees and capital investments and on firms considered *high-growth ventures*.[80] There are several areas that would benefit from additional evidence. These include:

- Longer term effects of training interventions beyond a year.[81]

[68] Bruhn et al. 2013.
[69] Anderson et al.2016.
[70] Drexler et al. 2014.
[71] Innovations for Poverty Action. 2017.
[72] Ibid.
[73] Anderson et al., 2016.
[74] Arráiz et al. 2013.
[75] Woodruff. 2018.
[76] Chong and Velez. 2020.
[77] McKenzie and Woodruff. 2014.
[78] Bloom et al. 2013.
[79] Anderson et al. 2016.
[80] Woodruff. 2018.
[81] Mano et al. 2012.

- Differences based on firm characteristics, including the lifecycle stage of the firm (start-up, early-stage, growth, mature); the age and size of the firm; the competitive nature of the industry and sector the SME is working in; the age and gender of the SME owner; and the SME owner's ambition level, risk-taking ability, or general skill level.[82]
- Impacts of more advanced SME training.[83]
- Impacts of alternative approaches to business training for larger enterprises.
- Impacts of soft and non-cognitive skills training on larger enterprises.[84]
- Impacts of different funding models for SME training (e.g., donor-funded training versus training paid for by SMEs; incentive-based payments).
- Specific effects and impacts of training on women and women-owned business or youth and youth-owned business. Most studies on gender-oriented training in the existing literature focus on microenterprises.
- Designing and evaluating incubator and accelerator programs.[85]

A number of training implementers collect data related to the cost of training programs, and collect impact at different periods after the training programs. However, there is a lack of public information on the cost-effectiveness of training programs as interventions for increasing SME profits and/or employment. Because training programs can be expensive, it would be extremely useful to begin analyzing and publishing the cost-effectiveness of training programs, especially when comparing them against other types of interventions.[86]

DEBATES AND CRITIQUES

Although the referenced studies reveal that SME employees and owners can improve their skills and capacities by participating in a training program, the literature, in general, has not validated the link between training and increased sales.[87,88,89] Overall, training programs produced significant improvements in entrepreneurs' skills and behaviors; however, the average effects of the training on the sales and profits of the participants' firms are economically large but statistically insignificant.[90,91,92]

IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

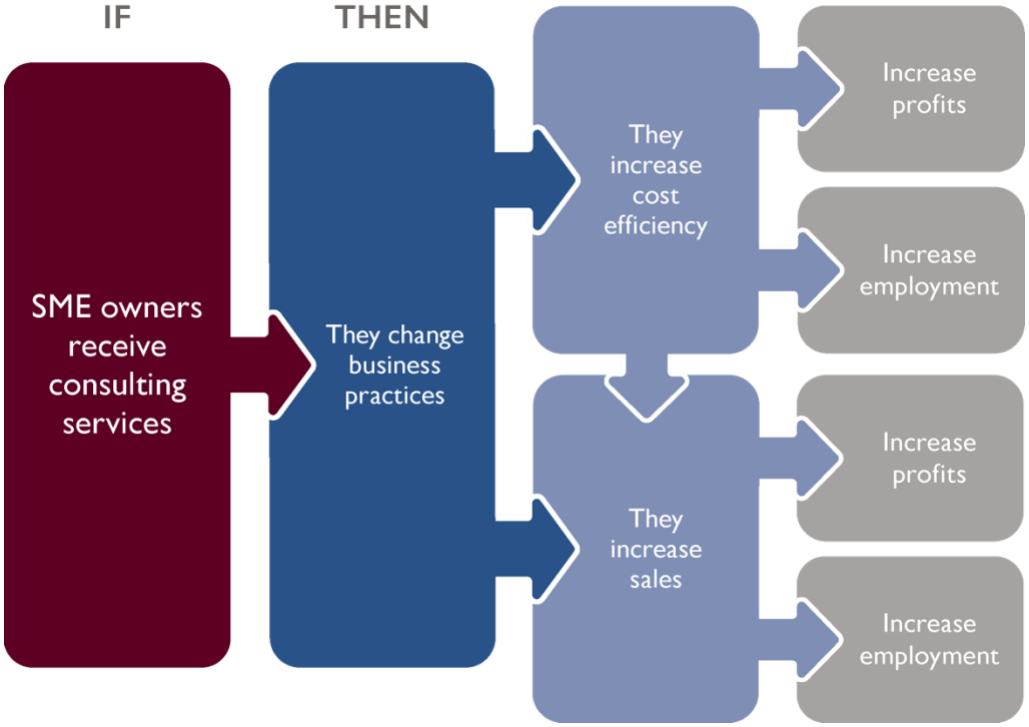
The cost of delivering training—defined as classroom-style learning with preplanned modules or sessions—can be expensive relative to other interventions, and the results of training interventions are mixed at best. Therefore, donors should consider assessing whether a training intervention is necessary before implementing training activities. After a training intervention is established as required, donors

[82] Bruhn et al. 2013.
[83] Mano et al. 2012.
[84] In this report, *soft and non-cognitive skills* are defined as a broad set of skills, behaviors, and personal qualities that enable people to effectively navigate their environment, relate well with others, perform well, and achieve their goals.
[85] McKenzie et al. 2021.
[86] Woodruff. 2018.
[87] McKenzie and Woodruff. 2014.
[88] de Mel et al. 2013.
[89] Cook and Olafsen, 2016.
[90] Mano et al. 2012.
[91] Drexler et al. 2014.
[92] Grimm and Paffhausen. 2014.

should consider the types of businesses (small, medium, established, new, owners and employees with high education levels, and others) they are targeting and then tailor the training intervention accordingly, because different types of businesses benefit from different training programs.[93] Due to the high costs of training, as a part of the training design process, donors may consider whether an access to finance component should be integrated into the training intervention, because market prices for a training program may significantly hinder SME uptake of that program.[94]

5.2 CONSULTING SERVICES

THEORY OF CHANGE



PROGRAM ASSUMPTIONS

- Employees or owners of SMEs lack skills and are aware of this need but lack capital to acquire consulting commercially.
- Consulting is the only input SME owners need to implement skills (not time, capital, or other inputs) and realize increases in sales or efficiency.
- SME owners invest in jobs and/or experience greater profit margins from efficiency and/or gains.

Although the impacts of training programs on SME growth are mixed, studies on consulting services show a stronger link to SME growth.[95] Consulting services differ from standard training in that the technical assistance is typically customized to the firm and its specific needs. Although the process may vary, generally interventions are carried out in a two-phase process: 1) consultants generate a diagnostic report

[93] Anderson et al. 2016.
[94] Ibid.
[95] Innovations for Poverty Action. 2017.

that evaluates the firm's existing management structure and outputs; and 2) consultants implement a consulting plan that advises managers and firm employees.[96]

To test whether consulting services impact SME performance, a field experiment in India analyzed textile firms that had received free services from an international consulting firm. The consulting firm trained and mentored firm employees on modern ways to manage inventory and standard operating procedures, based on the individual needs of the textile plants. Results of the intervention showed that the consultancy raised productivity by 11 percent and increased annual firm profitability by $230,000 through improvements in quality, efficiency, and inventory controls. In addition, the intervention centralized decision-making and increased the use of computers for data collection by middle management.[97] Bloom et al. (2018) conducted a follow-up study eight years later to examine the persistence of management practices adopted. The study found a lasting effect on management practices, although firms stopped using some of the management practices over time, especially when key managers left.[98]

In Mexico, a similar study was conducted on 80 firms that received subsidized support from local consulting firms.[99] The state government paid for most of the consulting fees, with beneficiary firms contributing between 10 percent and 30 percent of the cost, depending on firm size. The process was similar in nature, with a diagnostic phase first, followed by implementation. A program evaluation was conducted one year after the intervention concluded. As in the India study, the consultancy resulted in increased SME productivity. In addition, the study found a positive return on assets and entrepreneurial spirit. In the longer run, consulting services increased firm employment by 57 percent and wages by 72 percent.[100] The Mexico-based study found that the provision of consulting services to SMEs was successful, with an 80 percent increase in sales and a 120 percent increase in profits.[101]

The studies above reveal that the returns to management consulting are very high. That said, individual consulting remains expensive, and the development of the consulting services market has been slow.[102] Two more cost-effective alternatives to individual consulting services are the group-based consulting approach and insourcing or outsourcing services for specific functions (e.g., marketing or accounting). Iacovone et al. (2020) found that by "leveraging peer-learning effects, group-based consulting can be cheaper and more effective than individual interventions in improving SME performance."[103] Their study tests the effectiveness of the group-based consulting approach compared to the more expensive individual consulting approach in an experiment with 159 auto-parts firms in Colombia. It found that both resulted in similar improvements in management practices; however, the new group-based approach proved to be more cost-effective, as it was implemented at a third of the cost of the individual consulting service.[104] Although the study demonstrates the cost-effectiveness of the group-consulting approach, the sample size is not large enough to allow for recommendations on the types of firms it could suit most.[105]

The second alternative is acquiring the expertise of skilled professionals who are either hired into the firm (insourced) or externally contracted (outsourced) to perform functions such as sales, marketing, finance,

[96] Bloom et al. 2013.
[97] Ibid.
[98] Bloom et al. 2018.
[99] Bruhn et al. 2018.
[100] Ibid.
[101] Cook and Olafsen. 2016.
[102] McKenzie et al. 2021.
[103] Iacovone et al. 2021.
[104] Iacovone et al. 2019.
[105] Iacovone, et al. 2021.

or accounting.[106] Anderson and McKenzie (2020) tested this hypothesis through a randomized controlled field experiment in which 753 firms in Nigeria were split into one of five experimental groups: training, consulting, insourcing, outsourcing, and a control group. The study finds that insourcing and outsourcing interventions outperformed the personalized consulting service on a value-for-money basis by having a similar impact on business practices and growth at half the cost.[107]

It is important to note, however, that such market-based solutions are more applicable to larger firms that have several employees and high growth potential as opposed to subsistence-level firms.[108] Hence, as with consulting services, firms might still need to overcome financial constraints and uncertainty before deciding to pursue this option.[109]

GAPS IN THE EVIDENCE

Although the link between consulting services and SME performance is well established, the types of consulting services most appropriate for different types of SMEs, and associated with the greatest impact on SME growth, are less known.[110] In addition, the literature reviewed did not identify any evidence specific to the effects of consulting services on firms with different characteristics, including the lifecycle stage of the firm (start-up, early-stage, growth, mature), the age of the firm, and the age and gender of the SME owner. Therefore, we see an opportunity for further research in these areas.[111] Another knowledge gap is how to develop the markets for consulting services, which includes additional evidence on more cost-effective approaches to providing consulting services. As with the training ToC (noted earlier in this report), there are also gaps in evidence on the impact of donor-funded consulting services versus those facilitated by donor programs, although paid for directly by SMEs, along with donor programs supporting existing service providers versus providing consulting directly. Finally, as a donor colleague suggested, further research could shed light on whether sequencing consulting with other interventions, (e.g., after training) might be even more effective.

DEBATES AND CRITIQUES

One critique of consulting services interventions is that most firms will not seek such assistance on their own without additional incentives. Researchers speculate that that there may be several market failures that impede or deter SMEs from procuring consulting services, namely[112]:

- **Insufficient information.** SMEs may not have sufficient information on the business management services available and the potential return on investment. Similarly, service providers may lack information about the type or quantity of services demanded by SMEs, leading to inadequate supply and underinvestment from business management service providers.
- **Risk aversion.** SMEs may be risk-averse and may avoid investing in services with a high, but uncertain potential return. As donor experts pointed out, a related issue could be that SME owners correctly expect that consultants may propose significant changes to their business that SME owners may not be willing to make.

[106] Anderson and McKenzie. 2020.
[107] Ibid.
[108] McKenzie. 2020.
[109] Anderson and McKenzie 2020.
[110] Bruhn et al. 2013.
[111] Woodruff. 2018.
[112] Bruhn et al. 2013.

- **Credit constraints.** SMEs may face difficulties accessing credit, and lenders are reluctant to finance consulting activities that cannot be collateralized.[113,114,115,116]

In addition, the effect of *process innovation*—the implementation of a new or significantly improved production or delivery method—on employment is not straightforward. Process innovation can lead to a substitution of capital for labor, but it can also increase firm productivity, lower prices, and increase demand for an SME's products or services, leading to higher employment as an input in the firm.[117]

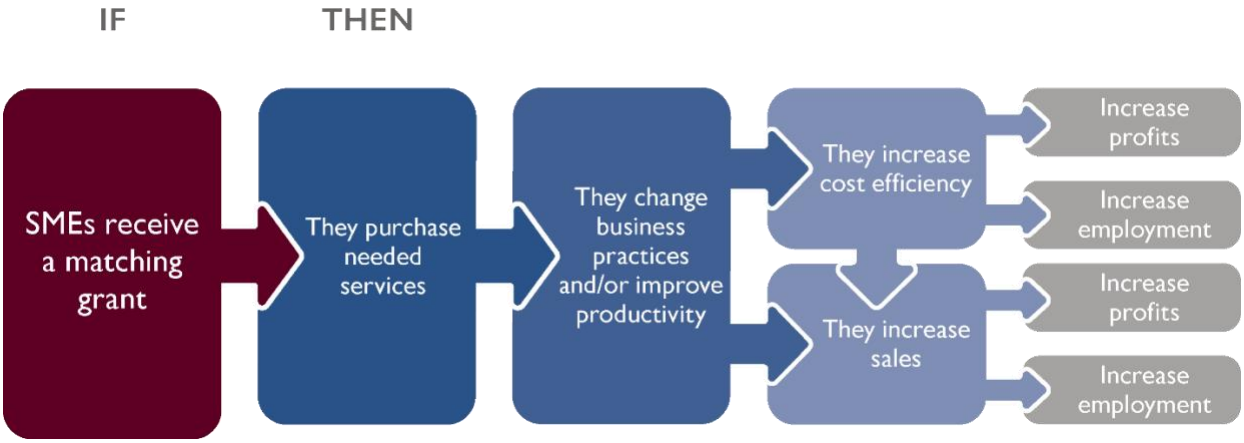
IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

Consulting services can be expensive; as exhibited in the research, however, consulting services are more likely to yield impact over standard training programs. Where possible, incorporating specialized consulting support (whether local or international) into the program design process can yield considerable returns in terms of SME growth. In addition, it is important to identify any market constraints to consulting services that exist (such as information gaps, risk aversion, and credit constraints, among others) and then tailor the intervention design to address these—for example, matchmaking activities that link business management service providers and SMEs, and incentives for business management service providers to tailor services based on SME needs.

Furthermore, in light of the emergence of more cost-effective approaches for scaling up consulting services such as group consulting, further experimentation is required to identify the types of firms it could suit best and how groups should be effectively formed.[118]

5.3 MATCHING GRANTS FOR BUSINESS MANAGEMENT SERVICES

THEORY OF CHANGE



[113] Bloom et al. 2013.
[114] Bruhn et al. 2013.
[115] Campos et al. 2012.
[116] Coste and Hristova. 2016.
[117] Castillo et al. 2011.
[118] Iacovone, et al. 2021.

PROGRAM ASSUMPTIONS

- SMEs do not have the funds or access to finance to purchase the services they need.
- Through a grant, SMEs are incentivized to purchase services they would not purchase otherwise.
- There is market failure in investment decisions, which justifies taking over financial intermediation.
- SME owners or employees wisely use the cash or in-kind grant for investments.
- SME owners invest in jobs and/or experience greater profit margins from efficiency and/or gains.

In many developing countries, matching grants programs are flourishing as alternative funding options for SMEs and are among the most common tools used to boost firm growth.[119,120] Matching grants are short-term, temporary subsidies provided to SMEs on a cost-sharing basis, with the SME providing anywhere between 10 percent and 50 percent of the cost. In addition, matching grants programs are often used to encourage SMEs to purchase specialized services—generally aimed at building entrepreneur and employee capacities and knowledge, such as training, capacity-building, marketing, and trade promotion.[121,122] Usually, firms are restricted from using matching grant funds for wages or other recurrent business expenses. Some researchers theorize—though there is no evidence yet to support this—that providing cash subsidies to SMEs directly will be more efficient, because they can choose services or equipment according to business needs. Additionally, matching grants programs are often justified on the grounds that the increased demand for services may also stimulate a competitive response from existing or new service providers and may create positive externalities, although the evidence for this is also still lacking.[123,124]

In Mexico, a study was conducted of 80 firms that received subsidized consulting from local consulting firms.[125] The state government paid for most of the consulting fees, with beneficiary firms contributing between 10 percent and 30 percent of the cost, depending on firm size. A survey conducted at the end of the program to measure the effect of the consulting services on firm performance indicated that the program led to significant increases in productivity. However, after one year of the intervention, there was no increase in sales or employment. In the longer run, three years beyond the intervention, the administrative data revealed important impacts on employment, with a 57 percent higher number of employees and a 72 percent higher total wage bill.[126] Per this evidence, the link between matching grant programs and SME growth is positive, particularly in the long run, and SMEs can achieve growth through improved firm performance and job creation.[127,128,129] However, the utility of what the firm purchases with the matching grant is significant.

[119] Innovations for Poverty Action. 2017.
[120] Campos et al. 2012.
[121] Ibid.
[122] Coste and Hristova. 2016.
[123] Campos et al. 2012.
[124] Cravo and Piza. 2016.
[125] Bruhn et al. 2018.
[126] Ibid.
[127] Campos et al. 2012.
[128] Cravo and Piza. 2016.
[129] Piza et al. 2013.

Another randomized control trial of a matching grant for firms in Yemen also found that these programs can have an additionality impact, as the study revealed that the program led to more product innovation, increased marketing activities, and more capital investment among the recipient firms.[130]

GAPS IN THE EVIDENCE

Despite the common use of matching grants by policymakers and its popularity among development practitioners, few impact studies have been successfully carried out. Because matching grants can be used to purchase many types of services and thus provide a variety of outputs, the evidence reviewed from multiple sources is generally insufficient to attribute impact.[131,132,133,134] However, based on the impact evaluations cited above, matching grants can have positive impacts on SME growth through improved firm performance, job creation, and product innovation when they are conditional on effective use of the grant.

More research is also warranted on the impacts of cash and in-kind grants on different SMEs, depending on firm-level characteristics, including the lifecycle stage of the firm (start-up, early-stage, growth, mature) and the age of the firm. Additionally, the literature reviewed did not identify any evidence specific to the effects of grants on women and women-owned business or youth and youth-owned business. Therefore, we see an opportunity for further research in this area.

DEBATES AND CRITIQUES

The main questions surrounding matching grants programs are: 1) whether the grants are necessary; and 2) whether they are the most appropriate intervention, given the context.[135] The assumption underlying the use of a matching grant program is that, by lowering the effective price paid for services, firms will purchase more of these services. It also assumes that firms will purchase enough of a service on their own, with the right grant incentives.[136,137] However, common issues with matching grant programs include the absence of:

- Demand assessments and information about existing services available on the local market.
- A discussion of the specific market failures or the generation of public economic gains that the use of a matching grant would address.
- An economic analysis of the project's costs and benefits compared with a counterfactual, without the project or the potential use of a different instrument.[138]

Implementation risks increase when donors do not adequately analyze or understand the market. In cases where SMEs are not constrained by lack of capital to purchase a service or by a lack of availability of competitive services, and where such services do not create significant positive externalities, subsidizing these services can create distortions in resource allocation. The most common criticism of matching grants is the risk of limited additionality, meaning that the grants may benefit firms that would pay for the services anyway. Additionally, if matching grants give SMEs only a temporary incentive to procure more

[130] McKenzie et al. 2017.
[131] Bruhn et al. 2018.
[132] Cravo and Piza. 2016.
[133] Coste and Hristova. 2016.
[134] Piza et al. 2013.
[135] Bruhn et al. 2013.
[136] Campos et al. 2012.
[137] Bruhn et al. 2013.
[138] Coste and Hristova. 2016.

services but do nothing to solve the inherent market failure that prevented them from using these services in the first place, the impact of the program may be limited.[139]

Related to this constraint, many matching grants projects lack monitoring and evaluation (M&E) systems to measure a matching grant's impact on the market for certain services (because few matching grant projects identify the precise market failure that is causing a lack of SME growth).[140]

IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

The specific country context and local conditions will determine the need for and design of a matching grants program. To provide an economic rationale for a matching grant intervention and to understand the underlying problem that the matching grants are intended to fix, donors must answer the following questions[141]:

- Given the large effects on productivity, why are business owners or leaders not purchasing these services themselves?[142,143]
- Are matching grants the best way to incentivize private investment to induce public gains, or could other forms of funding or credit be more effective?[144]

This implies that donors must dedicate sufficient resources during project preparation to collect information and analyze the current obstacles that may limit the use of a service, the potential for additionality and externalities, and whether grants are the best available tool to address market constraints. Inadequate economic rationales may increase the risks of: 1) low uptake by targeted beneficiaries; 2) inappropriate targeting that limits additionality compared to what firms would pay for anyway; and 3) market distortions. Conversely, well-designed projects that are adequately tailored to local circumstances and capacity result in significant additionality, sustainability, and demonstration effects.[145]

[139] Ibid.
[140] Ibid.
[141] Campos et al. 2012.
[142] Bruhn et al. 2013.
[143] Campos et al. 2012.
[144] Ibid.
[145] Coste and Hristova. 2016.

6. ACCESS TO FINANCE THEORIES OF CHANGE

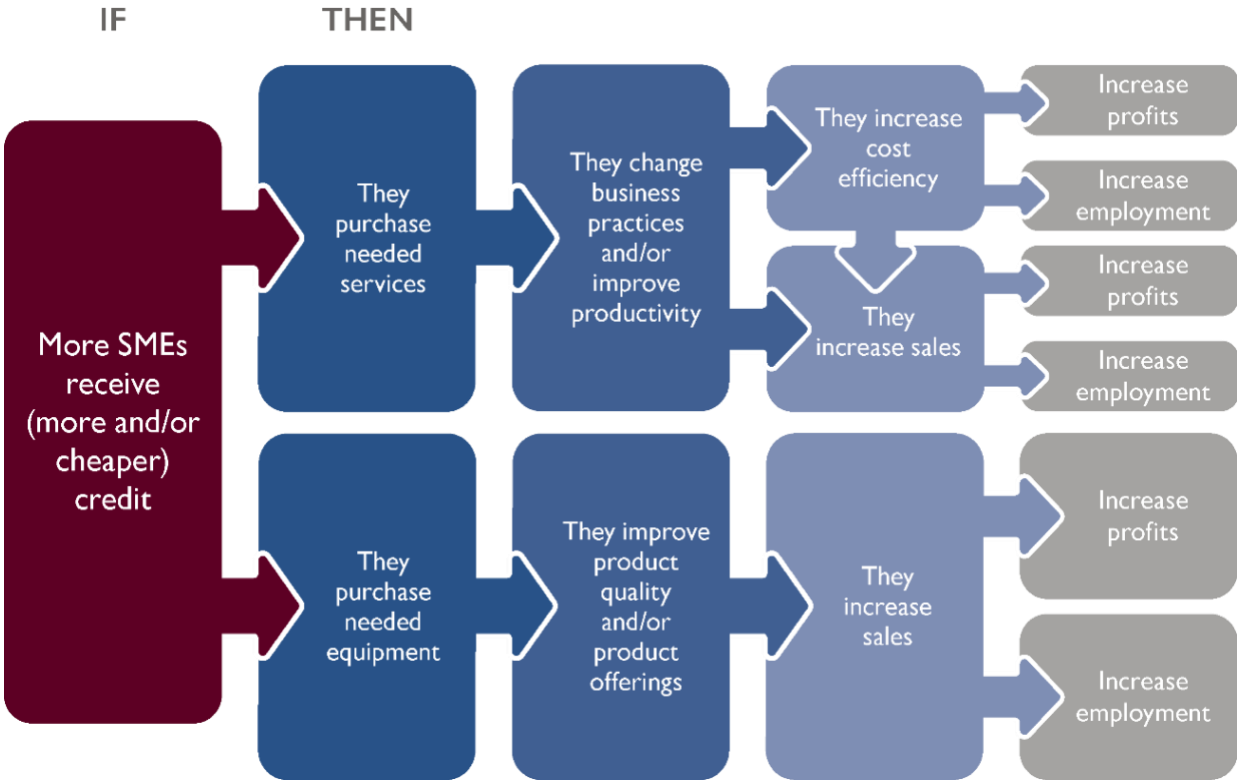
Limited access to finance for investments is one of the most serious obstacles to SME growth, and access to credit is an important determinant of firm performance.[146] The availability of credit allows firms to invest in productive assets likely to lead to productivity growth, increase production, and to hire new employees as inputs to production.[147] SMEs need working capital, as well as finance, for investment projects, where the terms match the expected chronology of the returns (e.g., the finance has the right term structure). However, banks in low-income countries generally lack the appropriate products, and the high transaction costs for lenders to process, monitor, and enforce micro and small SME loans increase interest rates, making borrowing more expensive or unavailable for SMEs, relative to larger firms.[148] Additional challenges include legal components, such as movable collateral as well as an effective system to actually repossess or foreclose on property, and informational aspects, such as credit history and probability of repayment. Another challenge is often a shallow financial system that does not, for example, factor loans based on contracts or trade credit or equity investing—all of which might benefit high-growth SMEs. As a result, SMEs often are able to only access loans with high interest rates and are not able to access longer term loans, or loans at all.

Due to these constraints, SME financing programs are common among donors and policymakers.[149,150] Over recent decades, financial institutions, governments, and donors invested considerable resources in developing new products and programs to provide SMEs with the financing they need to grow.[151] Interventions include subsidized loans, credit guarantees, and risk-sharing arrangements.[152]

[146] Loening et al. 2010.
[147] Ibid.
[148] Ayyagari et al. 2017.
[149] Ibid.
[150] Piza et al. 2013.
[151] Innovations for Poverty Action. 2017.
[152] Ibid.

6.1 ACCESS TO CREDIT

THEORY OF CHANGE[153]



PROGRAM ASSUMPTIONS

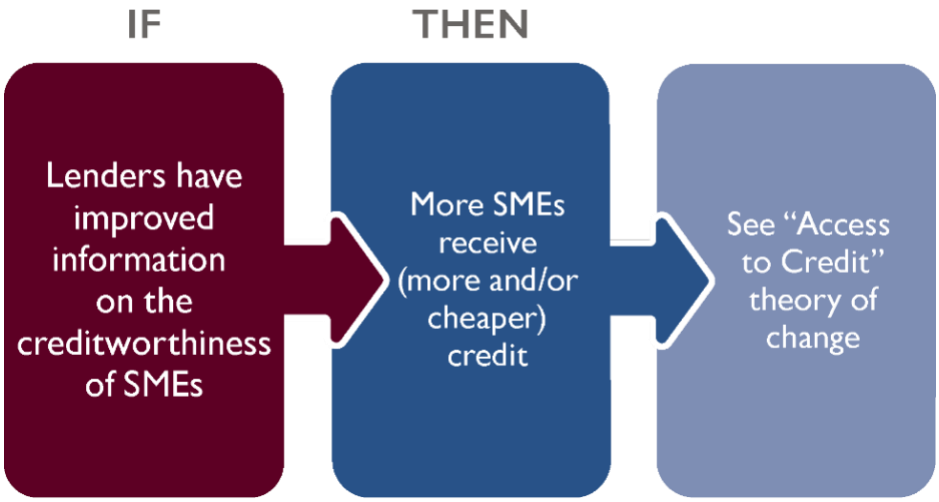
- SMEs need a loan or credit to purchase services or equipment.
- SMEs are creditworthy.
- SME owners or employees wisely use the additional financing for investments.
- SME owners invest in jobs and/or experience greater profit margins from efficiency and/or gains.

Several studies investigate the effect of access to finance interventions on SME growth. A recent study from Indonesia suggests that in addition to increased access to credit, entrepreneurs need support and information to improve their ability to obtain and use such funds to strategically develop and strengthen their business. Interventions providing access to financing should be coupled with information and training for entrepreneurs to effectively use the financing to advance their business.[154] The research finds that some of these interventions, including improved credit information and collateral law reform, can boost firm performance in areas such as sales and employment.[155]

[153] For more detail on the inputs required to get to the "More SMEs receive (more and/or cheaper) credit" phase, please review the following sections and their associated theories of change.
[154] Rita and Huruta. 2020.
[155] Cook and Olafsen. 2016.

6.2 ACCESS TO CREDIT INFORMATION

THEORY OF CHANGE



PROGRAM ASSUMPTIONS

- SMEs need a loan or credit to purchase services or equipment.
- SMEs are creditworthy.
- SME owners or employees wisely use the additional financing for investments.
- There is information asymmetry on the creditworthiness of SMEs. Lenders need more information—sometimes at a lower cost—on the creditworthiness of SMEs.
- Lenders want to provide loans to SMEs.

The evidence shows that information asymmetries restrict SMEs' access to finance and that credit information can improve financial inclusion for SMEs.[156,157] Recent studies demonstrate the need for SME owners and entrepreneurs to have access to the right information to apply for and access credit or financing options. One study demonstrated that an "investment readiness" program implemented in five Western Balkan countries, delivering information and training on how to fine-tune and pitch ideas to investors, had positive effects on SME entrepreneurs' ability to better market their products and or businesses, and receive investments two years after the program.[158] Another study in Argentina examined the effect of three government-funded SME finance programs' approach to improve access to credit for SMEs on SME performance.[159] The first program, Rate Bonus Regime (RBT), granted points on interest rates of loans that SMEs request to commercial banks; the second program, Reciprocal Guarantee Societies (SGR), improved guarantee options for SMEs; and the third program, the National Development Fund for Micro, Small, and Medium-Sized Enterprises (FONAPYME), granted credits directly with lower rates compared to market rates for investment projects for SMEs. Guilodori et al. (2018) found that all three approaches were effective in increasing the probability that SMEs either accessed credit options or

[156] Ibid.
[157] World Bank. 2014.
[158] Cusolito et al. 2019.
[159] Giuliodori et al. 2018.

increased their volume of debt if they had previously been able to access credit options. These effects were positively associated with increases in employment, average wage, and to an extent, export, particularly for young enterprises, defined as those less than five years old. Of the three programs, more profound effects were found on the RBT model that provided points on interest rates (which effectively operated as discounts) on SME performance. [160]

Such information also includes any data that helps a lender decide whether a firm is creditworthy and is

often used to generate credit scores predicting repayment on the basis of borrower characteristics.[161] Only about 50 percent of countries have credit bureaus. Recent evidence shows that policy efforts directed at introducing credit registries can reduce information asymmetries between borrowers and lenders and can improve access to finance at the firm level.[162,163,164] Several studies establish a positive link between reforms in information-sharing systems and increased access to finance. A direct link has also been established between the introduction of credit information-sharing systems and job growth.[165]

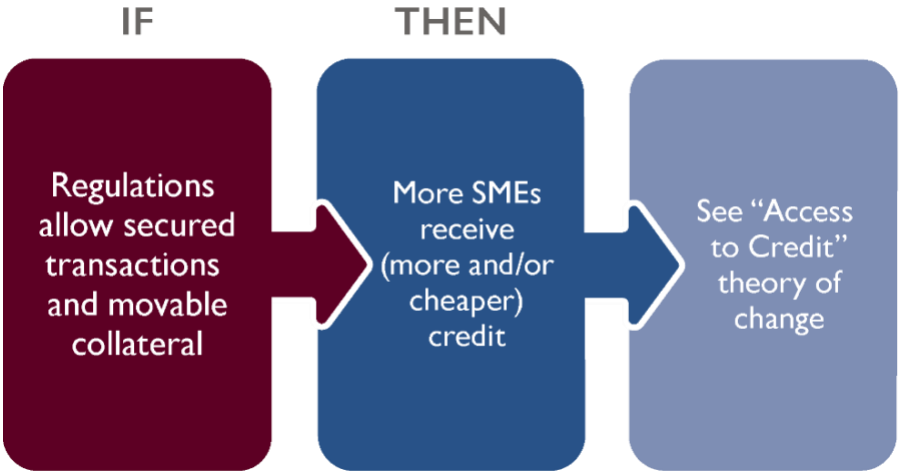
In addition to credit bureaus, banks are finding new ways to access information about potential SME borrowers. Some banks take advantage of cross-selling opportunities with SMEs by providing checking accounts, transaction banking services, and cash management services. Through these services, the banks develop relationships with the SMEs and gain information about their financial behaviors, which, in turn, leads to SME lending. For example, the World Bank found that "ICICI Bank in India currently derives most of its SME revenues through deposits and other non-lending products. However, its lending revenues are growing quickly as the deposit-only clients begin to take out loans."[166] Banks in emerging markets are also increasingly providing nonfinancial services to SMEs to improve creditworthiness. For example, banks are offering training and consulting services that can improve SME recordkeeping, allowing banks to more easily assess risk by obtaining detailed information about SME business operations, finances, and banking needs.[167]

Overall, additional borrower information (through improved information-sharing systems and credit bureaus) leads to an improvement in the efficiency of credit-allocation decisions and loan performance, which then leads to SME growth.[168]

[160] Giuliodori et al. 2018.
[161] Ibid.
[162] World Bank. 2016.
[163] Ayyagari et al. 2016.
[164] Ayyagari et al.2017.
[165] Ayyagari et al. 2016.
[166] World Bank. 2014.
[167] Ibid.
[168] Ayyagari et al. 2017.

6.3 COLLATERAL LAWS

THEORY OF CHANGE



PROGRAM ASSUMPTIONS

- SMEs need a loan or credit to purchase services or equipment.
- SMEs are creditworthy.
- SME owners or employees wisely use the additional financing for investments.
- The current collateral-based lending systems present barriers to SMEs in accessing credit.
- SMEs want to collateralize their movable assets.
- Movable collateral is commercially viable collateral for lenders.
- Lenders are willing to accept movable assets as collateral.

To compensate for missing information on the creditworthiness of SMEs and because of the general risk in SME lending, lenders tend to ask for collateral to guarantee a loan. Data from World Bank enterprise surveys shows that around 79 percent of loans or lines of credit require some form of collateral. Movable assets, as opposed to fixed assets, such as land or buildings, often account for most of an SME's capital stock. For example, in the developing world, 78 percent of the capital stock of businesses is in movable assets, such as machinery, equipment, or receivables, and only 22 percent is in immovable property.[169] However, lenders are often unable to accept movable assets as collateral because of nonexistent or outdated secured transaction laws and collateral registries. Many legal systems place unnecessary restrictions on collateral, leaving lenders unsure whether a loan agreement will be enforced by the courts.[170] Even with appropriate systems in place, uptake may be slow, since lenders must develop new products, learn to evaluate new types of collateral, and develop new practices for collection and liquidation.

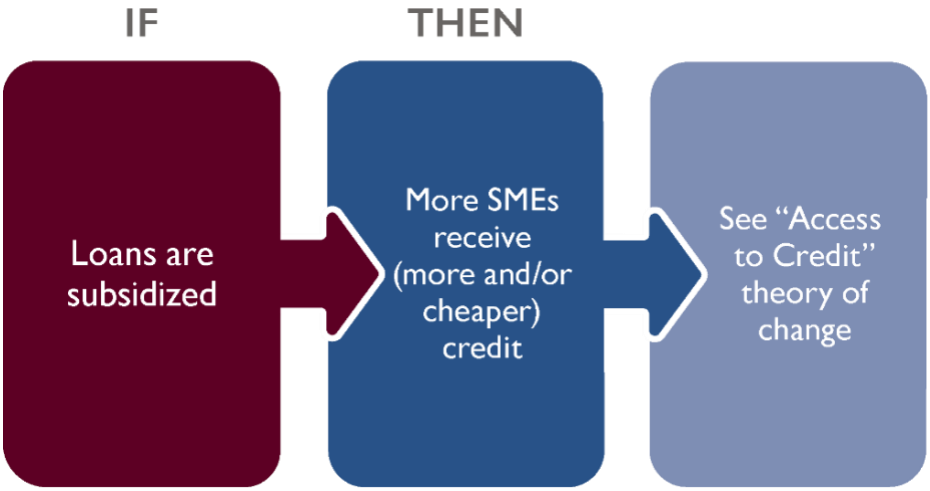
[169] World Bank. 2014.
[170] Ibid.

According to the evidence, collateral system reforms can lead to greater lending, especially for smaller and younger firms, and firms with women owners.[171][172] A recent study of the m-PESA mobile money system in Kenya found that mobile money can help uncollateralized SMEs become more transparent to potential lenders and financially integrated.[173]

Research also found that, after reforms enlarging collateral menus were passed in several Eastern European countries to include movable assets (e.g., machinery and equipment), firms in movable-intensive sectors borrowed more, invested more in fixed assets, hired more workers, and became more efficient and profitable.[174,175] Thus, the expansion of collateral laws to include movable assets can have positive impacts on SME employment growth, efficiency, and profitability.

6.4 SUBSIDIZED LOANS

THEORY OF CHANGE



PROGRAM ASSUMPTIONS

- SMEs need a loan or credit to purchase services or equipment.
- SMEs are creditworthy.
- SME owners or employees wisely use the additional financing for investments.
- SME owners experience greater profit margins from sales efficiency and gains (i.e., all other market conditions are favorable).
- SME owners hire more workers to realize sales gains.
- The subsidy is sufficient to change lenders' practices in lending to SMEs.

In subsidized loan programs, a subsidy compensates for the lower returns to lenders from lending to less profitable SMEs that previously could not get financing. Economic theory would suggest that access to

[171] Ayyagari et al. 2017.
[172] Brixiova et al. 2020.
[173] Dalton et al. 2019.
[174] Campello and Larrain. 2016.
[175] Ayyagari et al. 2017.

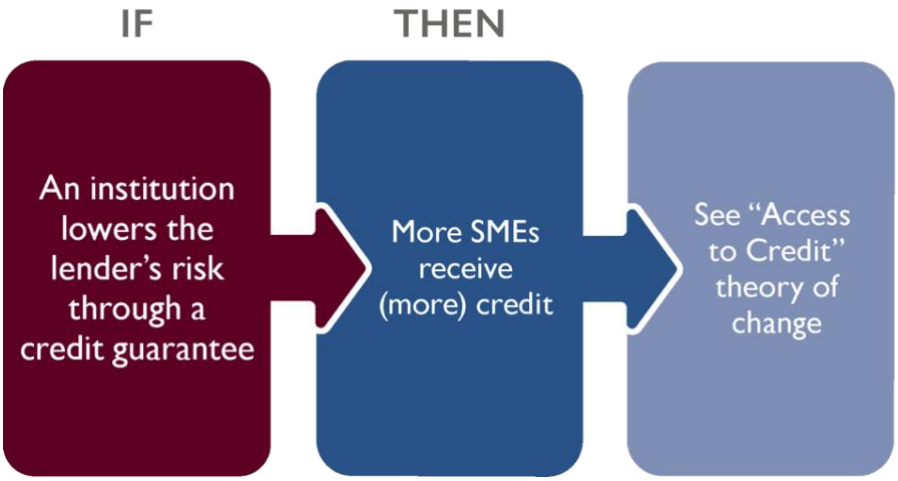
subsidized credit should lead to higher SME growth, which is why subsidized credit lines and loans are popular.[176,177]

Between 1979 and 1991, the World Bank provided Sri Lanka with $110 million in financing for SMEs through a series of four credit programs, known as the Small and Medium Industries (SMI) program. The World Bank did not lend the funds directly; rather, the program operated through an autonomous body known as the National Development Board (NDB). The NDB provided capital to Participating Financial Institutions (PFIs), which then retailed the loanable funds to firms. Under the program, firms would approach the participating credit institutions and apply for a loan. On approval, the firm's application would be forwarded to the NDB, which, in turn, would approve the loan and consequently refinance the PFI. A 10-year study of the program showed that, although receiving the subsidized loan did lead to higher levels of investment for financially constrained firms, the firms did not increase their profits any more nor become more economically efficient than those firms that received a loan without the subsidy.[178]

In this updated review, there have been many studies published — both experimental and observational — that examine the effect of government subsidized loans via COVID-19 support packages to SMEs, but these are all focused on SMEs in high-income countries, mostly in the European Union, and do not cover such assistance to lower and middle-income countries, which are the focus of this review. There is a gap in the evidence to understand if and how such assistance may have benefited SMEs in developing economies to withstand shocks and recover from the COVID-19 pandemic and its global effects.

6.5 CREDIT GUARANTEES

THEORY OF CHANGE



PROGRAM ASSUMPTIONS

- SMEs need a loan or credit to purchase services or equipment.
- SMEs are creditworthy.
- SME owners or employees wisely use the additional financing for investments.

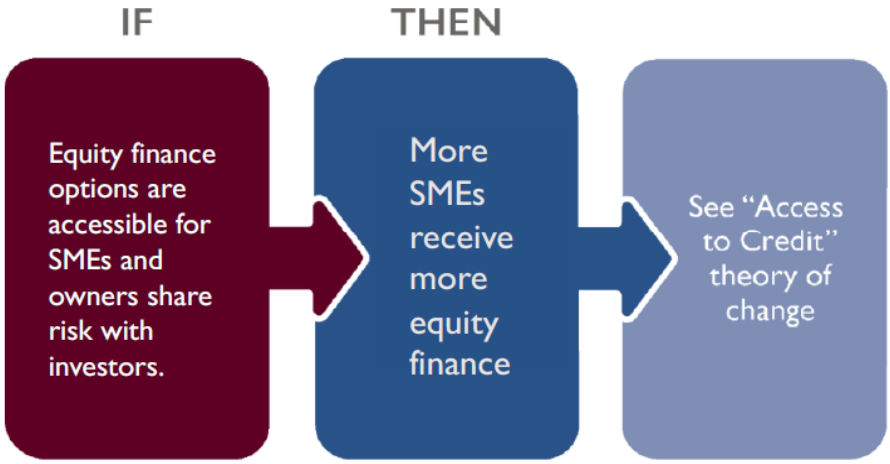
[176] Aivazian and Santor. 2003.
[177] Cravo and Piza. 2016.
[178] Aivazian and Santor. 2003.

- Lenders would not have issued the loans without the credit guarantees.
- The guarantee is sufficient to lower lenders' risk profiles in lending to SMEs.

Donors and policymakers can encourage banks to lend to SMEs by taking on some of the credit risk through guarantees, either for a portfolio of loans or for individual loans. Risk-sharing arrangements, in which a donor or institutions reimburse a bank for a portion of the principal losses incurred on defaulted loans, can increase lending to SMEs. They do this by lowering the amount of collateral that an SME needs to pledge to receive a loan, because the guarantor provides part of the collateral. According to the research, credit guarantees can help SMEs grow more rapidly in terms of capital growth; however, the loan guarantee also increases the probability of default.[179] An aforementioned study examining the effects of three government-funded SME finance programs in Argentina aimed at improving access to credit for SMEs found that delivering discounts via bonus points on interest rates had a stronger effect on improving SME overall performance, although all three programs had a significant and positive effect on performance.[180] The study authors suggest further research to explore and better understand why one approach over the other had stronger effects on business performance.

6.6 ACCESS TO EQUITY FINANCE

THEORY OF CHANGE



PROGRAM ASSUMPTIONS

- SMEs need finance options.
- SMEs are investment-worthy.
- SME owners or employees wisely use the additional financing for investments.
- SME owners invest in jobs and/or experience greater profit margins from efficiency and/or gains.

[179] World Bank. 2014.
[180] Giulodori et al. 2018.

- SME owners share risk with private equity investors. Private equity financing can allow firms to take on more risk in investment, because it allows the firm to share the risk with a private equity investor. Other advantages of private equity include:
    - It can provide financing that is longer-term relative to debt instruments, particularly for riskier and more opaque firms, because banks often offer such borrowers shorter term loans, which then need to be renewed or renegotiated.[181]
    - It can allow firms to grow more quickly, since equity does not need to be paid back right away, so any increased revenues as a result of equity investments can be reinvested into the company.
    - Investors are more willing to take on higher risks and to work with entrepreneurs who may not meet all the requirements that banks demand.
    - Investors, as partial owners of the firm, may use their own networks and expertise to support growth.

Recent research has emerged that sheds light on factors influencing SME owners' willingness to pursue private equity as a financing option and demonstrates that alternative forms of financing (private equity, angel investors, venture capital) can positively influence profit growth of certain types of SMEs.[182][183][184]

Ibidunni et al (2018) assessed the outcomes of 233 technology-based SME owners' financing strategies in Lagos State, Nigeria using a survey-based experimental study design[185]. They found that venture capital and business donations significantly influence profit growth of technology-based SMEs, compared to personal savings and bank loans, which did not have a significant effect on profit growth. While venture capital and business donations did have a significant positive effect on profit growth, they did not have a significant effect on sales or employee growth. Ibidunni et al (2018) also found that technology-based firm owners can enhance their access to financing options, particularly bank loans, venture capital, and business loans, through capacity building in entrepreneurial competencies, such as acquiring the right skills and attitude, such as their innovativeness, willingness to take risk, and levels of independence. The authors found a positive significant effect on SME owners' skills in accessing business loans, venture capital, and business donations, whereas SME owners' attitudes only had a significantly positive effect on their ability to access venture capital and business donations.

Using a discrete choice experiment with SMEs in Nairobi to understand owners' financing preferences, Kimani (2020) finds that interest rates are the most important attributes, followed by form of collateral and speed of accessibility. The most preferred source of financing among small enterprise owners was found to be mobile banking, Savings and Credit Cooperative Organizations, and then finally, commercial banks.

[181] Ibid.
[182] Biney. 2018.
[183] Kimani. 2020.
[184] Ibidunni et al. 2018.
[185] The survey instrument was adapted from Robb and Coleman (2010). Robb, A. and Coleman, S. (2010). Financing strategies of new technology-based firms: a comparison of women- and men-owned firms. *J. Technol. Manag. Innov.,* 5(1): 30-50.

At the national level, Biney (2018) applied both propensity score matching and difference-in-difference estimation techniques to assess the effects of venture capital financing on SME growth in Ghana and used panel data to understand the enabling factors that drive venture capital investments. The results show a significant, positive association between venture capital financing and SMEs' growth and suggest that GDP growth rate, labor market rigidities, capital gains taxes and institutional quality are the key drivers of venture capital investments in Ghana. The findings also show that certain socio-economic factors, such as the owners' gender, experience, geographical location, business plan, social networks and interest rate charges influence SME owners' ability to obtain venture capital financing, whereas other factors, such as the owners' age, marital status, educational attainment, firm size and age, legal status, and sector do not have a significant effect on ability to obtain venture capital funding. For example, women SME owners were less likely to seek and obtain venture capital financing than men, as women owners prefer to use internal financing options compared to external ones.

This recent research is promising and contributes to the evidence base on equity finance models for SMEs.

DEMOGRAPHIC AND CONTEXT FACTORS

Evidence suggests that women-owned firms tend to be fewer and smaller than firms owned by men and that they tend to grow at a slower rate.[186] Several factors, including type of business, managerial skills, regulatory environment, and others, may spur these differences, but access to financial services also matters. There is a demonstrable gender gap in access to finance, which can be explained in two dimensions[187]:

- Gender-based bias or discrimination.[188][189]
- Differences in women's education level, income level, formal employment involvement, access to land or other forms of collateral, and other aspects of creditworthiness.[190][191]

A recent study from Turkey found evidence of bias and discrimination among loan officers toward women compared to men applying for credit; the study found that 35 percent of the loan officers were biased against female applicants, with women receiving loan amounts $14,000 lower on average compared with men with similar applicant profiles. The authors conclude that loan officers may use gender bias as a heuristic device, given limited information and risk aversion.[192] Another study found that the effect of corruption is more likely to negatively affect SMEs that otherwise would enjoy favorable access to finance, such as men-owned SMEs or larger firms, compared to women-owned and smaller firms, highlighting that gender-based biases can negatively impact both men and women-owned SMEs.[193] In contexts where gender bias or discrimination is relevant, interventions should consider anti-discriminatory programs or competition-enhancing strategies.[194]

In a study of SMEs in Eswatini, Lesotho, and Zimbabwe, Brixiova et al. (2020) found that land ownership was linked to overall women's entrepreneurial sales performance. However, it was less critical for sales

[186] Bruhn and McKenzie. 2009.
[187] World Bank. 2014.
[188] Alibhai et al. 2019.
[189] Amin and Motta. 2021.
[190] World Bank. 2014.
[191] Brixiova et al. 2020.
[192] Alibhai et al. 2019.
[193] Amin and Motta. 2021.
[194] Beck et al. 2011.

growth and innovation when women entrepreneurs had access to short-term loans for working capital. This evidence suggests that developing economies would benefit from removing obstacles to women's land tenure and enabling financial institutions to lend against movable collateral, particularly for women entrepreneurs who face disproportionate normative and structural barriers to accessing land and other forms of collateral.[195]

If differences in the dimensions of education, income, access to collateral, or employment for women are the main cause of the gap in access to finance, interventions should aim to improve these binding constraints and engage with gender and/or inclusivity specialists to design targeted approaches. For instance, interventions aimed at increasing access to finance for women-owned SMEs may also need to include management consulting services or financial training.

Access to credit issues for SMEs may, in some contexts, be due to a lack of competition in the banking system. With lack of competition, there is no incentive for banks to engage new customers, such as SMEs, and they will choose to remain liquid or invest in government securities. If the root cause of a lack of access to credit for SMEs is a lack of competition in the banking system, the earlier referenced ToCs may not have any impact.

GAPS IN THE EVIDENCE

Access to credit interventions are becoming more popular within development policies and programming; however, they can be very expensive and there is limited research on the cost-effectiveness of these interventions compared to other types of interventions. Additionally, the literature largely focuses on debt for SMEs, but some SMEs may require other sources of financing, such as private equity. However, the effect of debt versus equity financing on SME growth in developing countries has not been widely or rigorously analyzed until recently, there is a need for additional evidence. In addition, there are several new access to credit models emerging, including fintech applications, blended finance, convertible debt, provision of technical assistance to banks for new loan products, and angel investor networks, to name a few, and their impacts have not yet been thoroughly studied.

Finally, although women's access to finance has been researched, the literature reviewed did not identify any evidence specific to the effects of access to credit on youth and youth-owned business or on other firm characteristics, including the lifecycle stage of the firm (start-up, early-stage, growth, mature), the age and size of the firm, and the industry and sector the SME is working in.[196] Therefore, we see an opportunity for further research in this area.

DEBATES AND CRITIQUES

The literature shows that SMEs have more difficulty accessing finance than larger firms and suggests that providing access to finance through some of the means outlined earlier may be necessary for SME growth, but may not be sufficient in isolation. Financial interventions were more effective if they were combined with business training or capacity building activities.[197,198]

- **Subsidized loans.** The evidence that subsidized loan interventions lead to SME growth is weak, because studies find that SMEs receiving subsidized loans do not experience faster growth over

[195] Brixiova et al. 2020.
[196] Ayyagari et al. 2017.
[197] Cook and Olafsen. 2016.
[198] World Bank. 2014.

the sample period than those that received a loan without the subsidy.[199] These findings may be a result of SMEs' access to cheaper capital, which can lead to overinvestment and, according to one source, "Firms may have viewed the program as a one-off government program and thus deliberately overinvested in equipment for fear that they would miss the opportunity in the future."[200]

- **Credit guarantees**. One of the common challenges outlined in the research regarding credit guarantees and risk-sharing arrangements is that, depending on the context and individual lender, this intervention may not lead to an increase in lending to SMEs. Instead, banks may use these credit guarantees to lower the risk on loans they would have issued in the absence of the credit guarantees. Additionally, although guarantees may increase the probability of default, it is unclear whether SMEs receiving those loans are *aware* that their loan is guaranteed, which may increase this probability. However, the higher probability of default may reflect the riskier, but potentially more profitable, investments made by the firms because of the loans. The investments may be beneficial from an economic policy perspective and could justify the loss of some guarantee costs. On the other hand, guarantee schemes also lower the repayment incentives of firms if they are aware of the guarantee, and the schemes need to be designed carefully and managed effectively to prevent large-scale losses.[201] Moreover, guarantees can inhibit uptake of collateral-lending reforms. Recent work in Colombia found that banks preferred guaranteed lending to the hard work of developing the collateral-lending market.[202]

IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

Donors may consider directing resources toward supporting the provision of an environment conducive to lending, because that seems to be one of the most critical success factors for driving access to finance and, in turn, SME growth. In the design of programming, donors should propose interventions to ensure that the legal and regulatory environment for lending is strong, an effective credit bureau is operational, and the securitization and the realization of (movable) collateral are efficient.[203,204] Additionally, focusing on innovations within financial institutions to help SMEs access credit, including better screening mechanisms, closer relationships between lenders and borrowers, and more flexible credit products, can all result in increased credit for SMEs.[205] Donors should also continue to support the expansion of the evidence base to further build upon recent research linking equity finance models to SME growth and performance. While recent research is promising,[206207208] more robust evidence is needed to test potential models and determine effective approaches. Finally, donors should consider pairing access to finance activities with other types of interventions, such as consulting services or technical assistance, particularly for women and women-owned businesses.

There may also be a role for government and donors to directly encourage lending to SMEs through guarantee funds, though emphasis should be placed on working with banks to incentivize long-term lending

[199] Aivazian and Santor. 2003.
[200] Ibid.
[201] World Bank. 2014.
[202] USAID. 2018.
[203] World Bank. 2014.
[204] Ibid.
[205] Innovations for Poverty Action. 2017.
[206] Biney. 2018.
[207] Kimani. 2020.
[208] Ibidunni et al. 2018.

(to continue after the guarantee program has been completed). Credit guarantees and risk-sharing arrangements are difficult to design and, on their own, do not necessarily ensure an increase in bank lending to SMEs. If these activities are to be implemented, the World Bank has provided a series of best practices for credit guarantees, based on the experience of a number of researchers and practitioners:

- Leave credit assessments and decision-making to the private sector.
- Cap coverage ratios and delay the payout of the guarantee until recovery actions are taken by the lender so as to minimize moral hazard problems.
- Price guarantees to consider the need for financial sustainability and risk minimization.
- Encourage the use of risk-management tools.[209]

[209] World Bank. 2014.

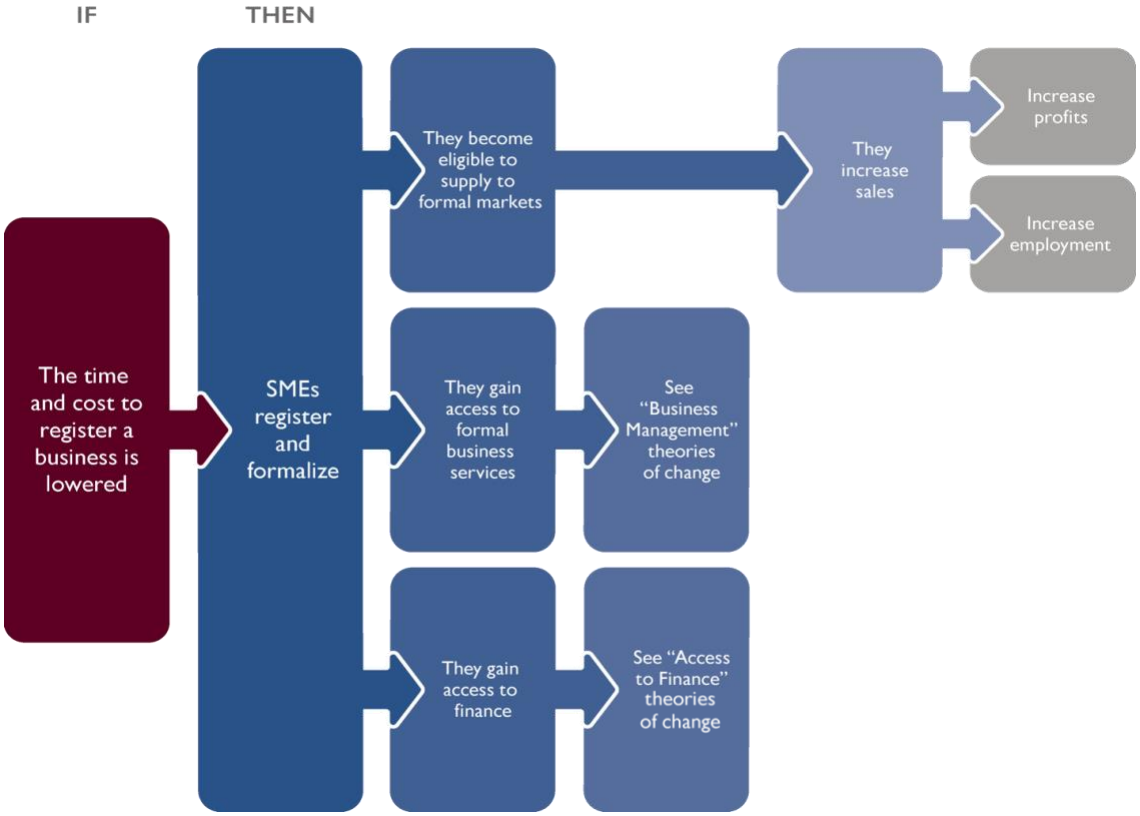
7. BUSINESS REGISTRATION AND TAXES THEORIES OF CHANGE

"A thriving and vibrant SME sector (characterized by a high rate of entry of new and innovative entrepreneurial firms and exit of less successful ones) […] with environments that promote ease of entry and exit due to a low administrative burden, have sound contract enforcement mechanisms, effective property rights registration procedures, strong creditors' rights protections, low tax burden on new and small firms, and more flexible labor markets."[210] Numerous policy and legal factors can erode the capacity of SMEs to create employment opportunities, foster innovation, sustain themselves, and increase profits. Even when the policy and legal instruments themselves are supportive of SMEs, their enforcement and implementation may be inadequate or inefficient.

Excessive business regulations can deter and/or prevent SMEs from growing into larger, more productive firms.[211,212] Therefore, successful enabling environment interventions, such as those related to firm registration, tax administration, and tax policy reform, which relieve constraints faced by SMEs, may lead to significant SME growth, particularly for high-growth SMEs.

7.1 BUSINESS REGISTRATION

THEORY OF CHANGE



[210] Cook and Olafsen. 2016.
[211] Beck et al. 2005.
[212] Ayyagari et al. 2017.

PROGRAM ASSUMPTIONS

- Employees or owners of SMEs lack awareness of the requirements for registration.
- Fees or time burdens of registration are the only factors discouraging SME owners from registering, i.e., SME owners want to grow, and the benefits of formality[213] outweigh the costs for SME owners.
- By formalizing, SMEs become eligible for government-sponsored business management and other services.
- SME owners invest in jobs and/or experience greater profit margins from gains.

A majority of firms in developing countries operate informally and are not registered with their national or local government, nor do they pay taxes. Local governments often see the formalization of SMEs as an opportunity to increase tax revenue and to improve the productivity of firms. Formalization can also make SMEs eligible to access government-sponsored business development services and can allow for bank accounts and loans to be opened in the firm's name rather than in the owner's name. As a result, governments and development practitioners have implemented several interventions with the goal of transitioning informal firms to the formal sector.[214] To encourage this SME formalization, governments and other actors have put in place policy reforms, including the removal of financial and logistical constraints of business registration and the simplification of registration processes. However, many SMEs choose to remain informal, since they see the costs of formalization as exceeding the benefits.[215]

In general, formalization may help the government generate domestic taxes, but it is unclear whether interventions to encourage formalization lead to increased SME formalization and growth. First, the limited available evidence remains inconclusive regarding the effectiveness of interventions adopted to increase formalization rates. Some studies have indicated that interventions focused on increasing the benefits of formalization are more promising and likely to induce firms to formalize, compared to interventions focused on simply reducing costs or increasing enforcement.[216] One experiment found that coupling tax registration and business registration interventions can lower the demand for formalization, as there was significantly higher demand among the targeted informal firms for obtaining a formal status when it was separated from tax obligations.[217]

Second, concerning the impact of formalization on firm performance, a general trend found in the literature is that the associated benefits for SMEs are limited and take time to materialize.[218] [219] [220]Only a limited number of studies in the literature link formalization with an increase in profits.[221] Moreover, the firms that demonstrate growth are generally a subset of the sample targeted, which are already more established or profitable. According to one study, the subset of firms that chose to formalize and benefited from the process were those that were already generating higher profits than their informal

[213] In this report, *formal businesses* are defined as those that are registered with the government.
[214] World Bank. 2016.
[215] Benhassine et al. 2015.
[216] Floridi et al. 2020.
[217] Campos at al. 2018.
[218] Floridi et al. 2021.
[219] McCaig and Nanowski. 2018.
[220] Berkel. 2018.
[221] de Mel et al. 2013.

counterparts.[222] For small-scale and subsistence enterprises, on the other hand, the evidence suggests that costs of formalization usually outweigh the benefits.[223]

There is growing evidence, however, that benefits of formalization do not materialize automatically, and that firms require additional assistance to realize them.[224] [225] In Malawi, a randomized experiment by Campos, Goldstein, and McKenzie (2018) found that business registration alone had no impact on access to formal markets or firm performance. However, combining registration support with bank information session increases the use of formal financial services, and resulted in increases in firm revenues by 20 percent and profits by 15 percent.[226] Furthermore, a 2021 meta-analysis study that examines the literature on the impact of business formalization on firm performance also reveals that in order to unlock the growth potential of newly formalized firms, business registration interventions need to be supplemented with bank information sessions, training, and business development services.[227]

DEMOGRAPHIC AND CONTEXT FACTORS

Firm registration and the results of formalization are very context-specific. It is likely that impacts of firm registration on the growth of the SME are heavily influenced by the types of regulations in a country affecting SMEs and by the enforcement of those regulations.

Some literature also investigates the characteristics of firms that benefit the most from formalization. For example, high-growth SMEs tend to benefit more from formalization than firms that are not growing and do not expect to grow in the future.[228] In other words, formalization is a consequence of firm growth—not vice versa. This may account for why many women-owned SMEs remain in the informal sector, since women entrepreneurs often pursue business ventures with low-growth potential. Additionally, the informal sector may offer an environment that is conducive to improving the autonomy of women SME owners.[229] A randomized experiment in Malawi finds that women business owners have substantially lower treatment effects on obtaining business registration certificates than their men counterparts. The two main reasons cited are that women are significantly more likely to need their spouses' permission to register, and that women-owned firms have a higher rate of business closure.[230] Nevertheless, the overall effect for women is still positive, and allows for assessing the impact of formalization interventions on business performance. The same study examines the gender differential impacts on business performance and finds that, similar to the experience of the men-owned firms, combining business registration support with bank information sessions is also effective in increasing women entrepreneurs' sales and profits.[231]

---

[222] Boly. 2018.
[223] Bruhn and McKenzie. 2018.
[224] Campos et al. 2018.
[225] Floridi et al. 2021.
[226] Campos et al. 2018.
[227] The meta-analysis study by Floridi et al, (2021) uses meta-regression analysis (MRA) to synthesize the empirical literature and consolidate the available evidence. A meta-dataset of 1,271 estimates derived from 20 studies available until October 2019. The criteria for studies included were: focusing on enterprises switching formality status, investigating treatment effects on the performance of informal enterprises, and employing regression analysis.
[228] Cook and Olafsen. 2016.
[229] Minniti and Naudé. 2010.
[230] Campos et al. 2018.
[231] Campos et al., 2019.

GAPS IN THE EVIDENCE

The empirical literature providing evidence on the formalization of informal firms is limited and recent. Research has yet to prove that formalization leads to SME growth and whether the resources and potential growth experienced through the formal sector outweigh the costs of remaining in the informal sector for most SMEs. Additionally, more research is required to understand which types of informal businesses (women- versus men-owned, high-growth versus low-growth, or SMEs at various stages of their lifecycle, among others) would be most interested in growth and formalization. Finally, the literature reviewed did not identify any evidence specific to the effects of firm registration on youth and youth-owned business. Therefore, we see an opportunity for further research in this area.

DEBATES AND CRITIQUES

Because many of the studies review the process of getting informal firms to register—but not the outcomes or impacts of registration—it remains difficult to determine whether formalization alone leads to profitability, increased sales, or increased employment.

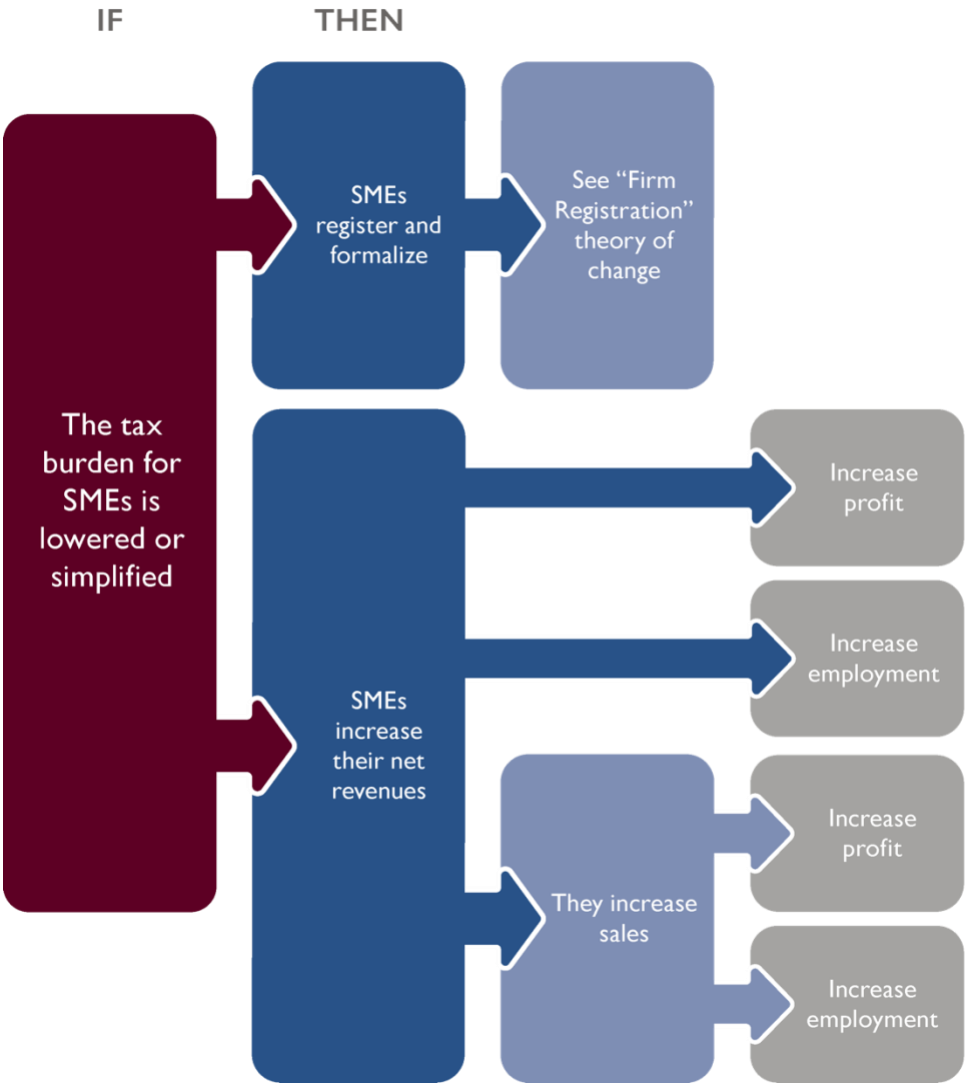
IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

Since the benefits of SME participation in the formal versus informal sector are not fully understood, and researchers cannot yet validate whether formalization leads to SME growth, donors working on SME development programs should carefully analyze all possible outcomes of formalization on SMEs before investing in policy reforms that reduce business registration constraints for SMEs or in SME development programs that encourage formalization.[232] One promising and worthwhile area of research is interventions that focus on maximizing the potential benefits of formalization through providing business development services and access to finance training.

[232] Benhassine et al. 2015.

7.2 TAX POLICIES AND ADMINISTRATION

THEORY OF CHANGE



PROGRAM ASSUMPTIONS

- The tax burden or compliance costs for SMEs are the main factor inhibiting their growth.
- The tax burden and compliance costs for SMEs can be lowered or simplified.
- SME owners invest in jobs and/or experience greater profit margins from gains.

Tax rates and the administrative costs of tax compliance are key concerns of business. Studies suggest that high compliance costs can contribute to a business's decision to operate informally. This is particularly relevant for SMEs, which tend to face disproportionately high compliance costs. Based on the literature, simplifying the costs of tax compliance and reducing the tax burden, including its ex ante uncertainty, is a proven method to increase SME profitability.[233] For example, in a Ugandan study, a 10 percent decrease

[233] Bruhn. 2011.

in taxes on firms is associated with a 15 percent increase in annual firm sales.[234] Additionally, the SIMPLES program in Brazil benefits small companies by consolidating municipal, state, and federal taxes (tax on industrial products, tax on services, employer's social security contributions, and more) into one simple tax. Through the tax consolidation process, the government offers exemptions and helps small businesses to reduce and predict their tax burden. This program has resulted in revenue increases of 37 percent among SMEs.[235,236]

The evidence also suggests that reforms to firm tax policies result in the growth of the SME sector as a whole. A study of 118 economies found that a 10 percent reduction in administrative costs associated with taxation increased annual business entry by 3 percent.[237]

GAPS IN EVIDENCE

Some country case studies suggest that reducing tax compliance costs can lead to more formal firms and higher sales. However, there is currently a need for more rigorous evidence to support this.[238]

In addition, the literature reviewed did not identify any evidence specific to the effects of tax policy or administration interventions on firms with different characteristics, including the lifecycle stage of the firm (start-up, early-stage, growth, mature), the age of the firm, and the age and gender of the SME owner. Therefore, we see an opportunity for further research in these areas.

DEBATES AND CRITIQUES

Although tax reform can spur SME growth, the research shows that special tax regimes for SMEs that include simplified procedures and lower tax rates may provide some incentives for firms to stay small.[239]

IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

Even though tax reforms are proven to positively impact SME profitability and growth of the SME sector in general, reforms can be challenging to pass and implement within a donor program cycle. Additionally, governments need to balance lower tax rates with tax revenue goals, which may make the case for reform more complicated. However, donors may consider advising host countries on tangible, field-tested interventions, such as the SIMPLES regime used in Brazil, to promote reform while improving SME profitability in the formal sector.

[234] Fisman and Svensson. 2007.
[235] Bruhn. 2011.
[236] The research did not stipulate whether this was net revenue or revenue after taxes.
[237] World Bank. 2016.
[238] Bruhn. 2011.
[239] Bruhn and Loeprick. 2014.

8. MARKET ACCESS THEORIES OF CHANGE

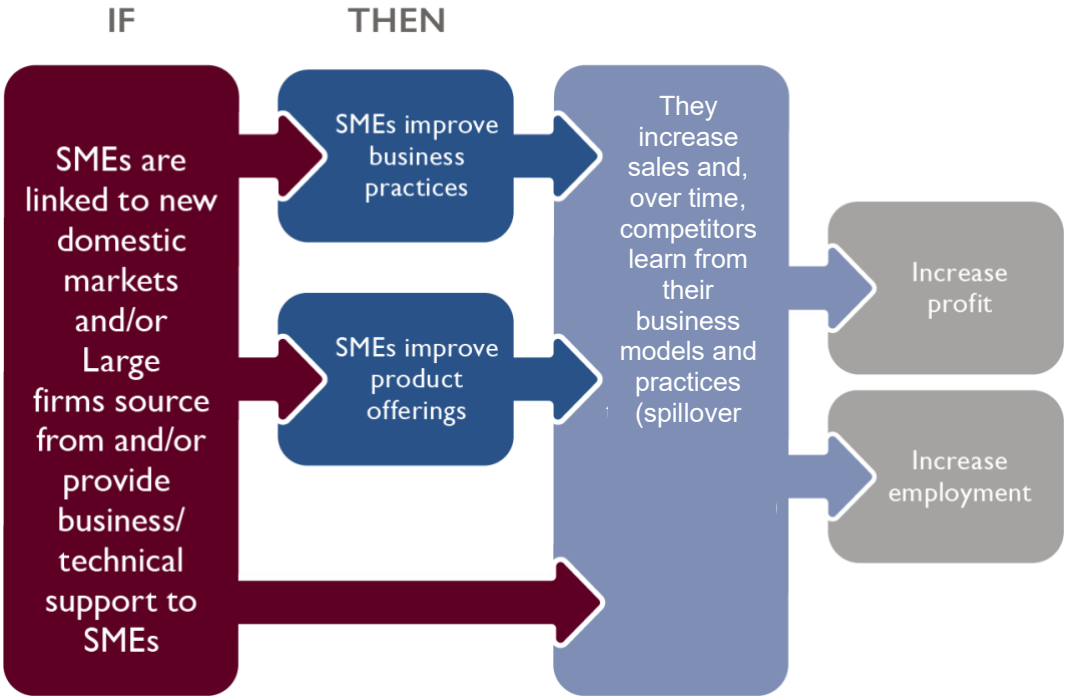
Reaching new markets (either domestic or international) can provide SMEs with opportunities to scale. However, entering these markets can be a formidable challenge. SMEs struggle to access information about market opportunities, and potential clients do not know how to easily find SMEs that meet their needs. Moreover, many market opportunities are out of reach for SMEs, due to legal and financial constraints, along with high quality standards.[240,241]

In comparing market access with other ToC categories, a review by Innovations for Poverty Action (2017) suggests that profit, quality, and productivity increases are generally much larger than corresponding results from microcredit access or business training programs. This suggests that increasing market access may be relatively more important to SME growth in developing countries.[242]

As with the business management ToCs, beneficiary self-selection is still the most common way that SMEs are chosen for support accessing markets. However, self-selection may not be the most effective method for identifying high-growth SMEs for support. There may be alternative ways to select beneficiary firms by testing for various measurable firm or entrepreneur characteristics.

8.1 MARKET LINKAGES

THEORY OF CHANGE



[240] Innovations for Poverty Action. 2017.
[241] Ibid.
[242] Ibid.

PROGRAM ASSUMPTIONS

- SMEs want to be linked to new domestic markets.
- SMEs can meet the needs of new markets beyond an initial transaction.
- The SMEs are operating in supportive, enabling environments, with policies such as trade liberalization and stable macroeconomics.
- Large firms want to source from and/or support SMEs.
- Market linkages incentivize SMEs to improve their products and/or their business practices.
- SME owners invest in jobs and/or experience greater profit margins from efficiency and/or gains.

According to the literature, a market linkages approach (supporting the development of long-term business relationships between SME suppliers and larger buyer firms) positively benefits both the SME and the large buyer firm. Through this approach, SMEs can achieve a stable market for their products and services, while the large buyer firms expand their base of suppliers of quality products and services. The evidence suggests that market linkages programs increase SME sales and employment and that these programs positively affect SME sustainability. In the case of buyer firms, a market linkages approach contributes to increased sales and positively affects their ability to export.[243]

Additionally, demand-side supplier development interventions (designed to engage buyer firms to support and build the capacity of SME suppliers) appear to be the most effective market linkages approach in achieving positive and persistent effects on SME employment and profit.[244] The goal of these supplier development programs is to promote mutually beneficial, long-term commercial relations between large buying firms, potential exporters, and local SME suppliers, with the aim of increasing competitiveness.[245] Through these programs, large firms contribute to strengthening the management and technical skills of SME suppliers, according to areas that the large firms wish to develop.[246]

DEMOGRAPHIC AND CONTEXTUAL FACTORS

Market size may be an important indicator for the success of a market linkages program and resulting SME growth. Low levels of economic density and interaction mean small, scattered levels of demand, which result naturally in small, localized production.[247] This then inhibits the ability of SMEs to operate and grow, since missing or incomplete market information limits partnerships between large firms and SMEs. Two recent studies provide evidence that digital tools, such as social media and mobile phones, help to bridge this gap for SMEs in smaller or more rural areas to establish market linkages in a wider range of markets and is linked to positive growth.[248][249]

Additionally, although market linkages have positive impacts on SME growth in all contexts, supplier development programs tend to work better in more advanced markets with supportive enabling

[243] Arráiz et al. 2013.
[244] Innovations for Poverty Action. 2017.
[245] Arráiz et al. 2013.
[246] Ibid.
[247] Loening et al. 2010.
[248] Jensen and Miller. 2018.
[249] Borah et al. 2022.

environments and appropriate policies, such as trade liberalization, macroeconomic and political stability, and encouragement of foreign direct investment.[250]

GAPS IN THE EVIDENCE

One popular theory is that market linkages incentivize SMEs to learn and improve their products and their business practices. One recent study found evidence to support that entrepreneur and owner participation in interfirm business networks was positively associated with key elements of firm performance, namely growth, profits, inputs, and peer-to-peer learning/exchange.[251] However, there is limited research on the impact of domestic market linkages on an upgrading response among targeted SMEs. There is also limited research on the cost-effectiveness of market linkages interventions compared to other types of interventions. As a result, more research should be considered to determine the costs of market linkages interventions and to explore outputs related to new SME products and business practices.

Interventions to create market linkages have focused on international markets, public procurement, and building SME capacity to supply to larger firms, rather than fostering SME access and capacity for domestic, commercial end-markets. Exceptions to this are more recent studies that have begun to examine domestic market linkages and growth for SMEs. For example, although it is lower quality evidence due to a small sample size, Jensen and Miller (2018) used a natural experiment to examine the effect of mobile phones on SME growth and market linkages in two fishing villages in India, finding a positive effect on the use of digital tools for expanding local markets for SMEs in rural areas.[252] However, more research is needed on interventions that support SMEs seeking to directly sell products and services domestically.

Finally, the literature did not identify any evidence specific to the effects of market linkages or supplier development programs on firms with different characteristics, including the lifecycle stage of the firm (start-up, early-stage, growth, mature), the age of the firm, and the age and gender of the SME owner. Therefore, we see an opportunity for further research in these areas.

DEBATES AND CRITIQUES

Although the link between market linkages programs and SME growth is strong, the research shows that, when a large firm is simply connected to or "matched" with a local SME, the underlying problems are not likely to be resolved.[253] Larger buyer firms often complain that local SMEs lack information, experience, and the human and financial resources to implement the management and technology changes required to do business with them, and they find that SME products or services do not meet their procurement standards. Therefore, even when a large buyer connects with an SME, the SME may still lack absorptive capacity and the ability to complete orders on time and at cost or to meet quality requirements.[254]

IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

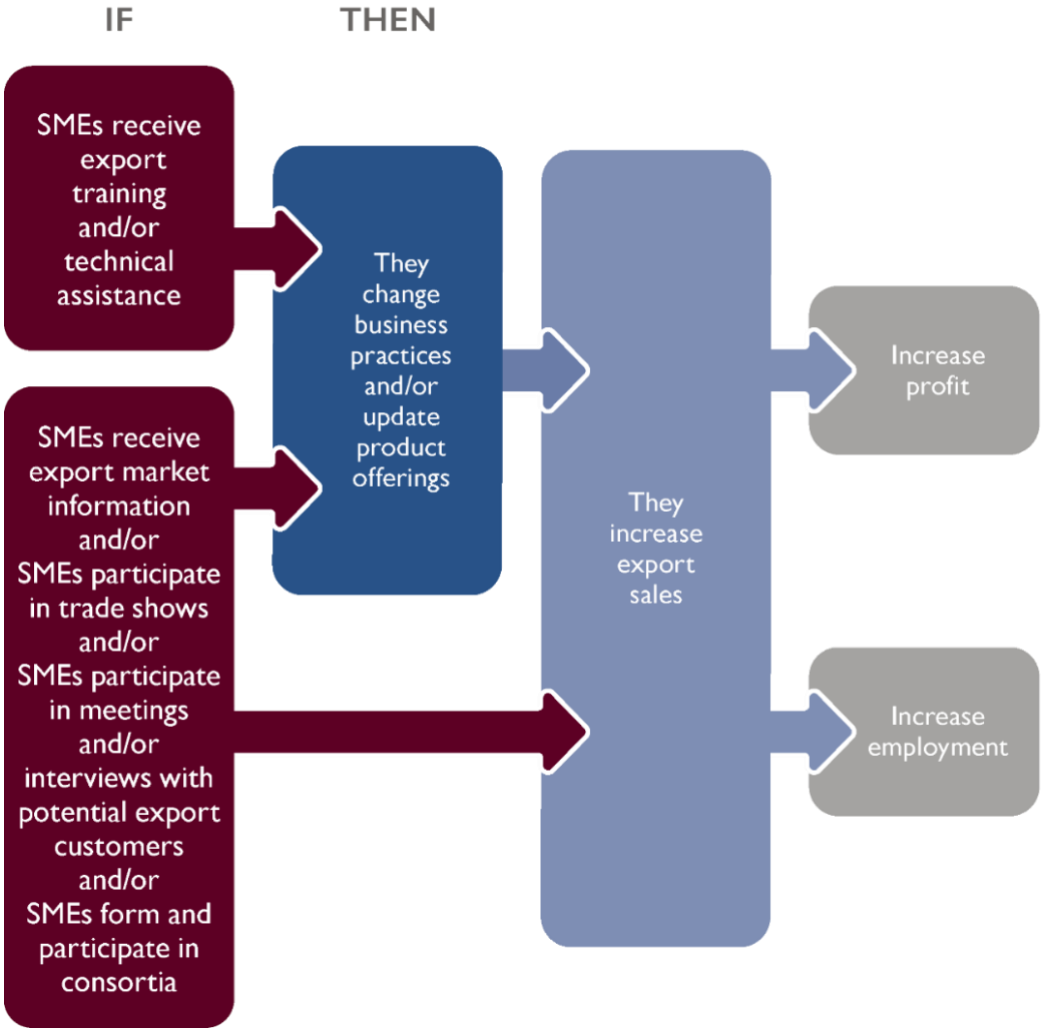
Simple information-sharing or matchmaking programs between SME suppliers and large buyers are not sufficient, because they do not address some of the underlying capacity issues that large firms identify in local SMEs. When designing market linkages programs, donors should consider exploring incentive-based

[250] Arráiz et al. 2013.
[251] Cai and Szeidl. 2018.
[252] Jensen and Miller. 2018.
[253] Innovations for Poverty Action, 2017.
[254] Arráiz et al., 2013.

SME capacity-development programs, including components, such as payments to consultants when SMEs acquire national and international certifications, that are supported and/or sponsored by large firms.[255]

8.2 EXPORT PROMOTION AND SUPPORT

THEORY OF CHANGE



PROGRAM ASSUMPTIONS

- SMEs want to begin exporting, increase their exports, or expand into new export markets.
- SMEs are able to absorb and implement export promotion and support activities and can meet the demand specifications of export markets without any additional intervention.
- Increasing their exports contributes to SMEs' higher overall revenues.
- SME owners invest in jobs and/or experience greater profit margins from efficiency and/or gains.

[255] Ibid.

The theory that access to high-income export markets can drive SME growth in developing economies is one of the motivations behind the significant development resources flowing to export promotion initiatives around the world.[256,257] For example, the World Trade Organization–led Aid for Trade initiative secured $48 billion in annual commitments to help developing countries overcome trade-related constraints. And, over recent decades, several developing countries established national trade and export promotion organizations with the purpose of helping firms overcome export barriers.[258,259]

SMEs face a variety of obstacles and barriers when entering export markets, with information asymmetries being the most frequent and severe.[260,261] Interventions supporting export promotion and access to external markets are addressing some of these obstacles through:[262]

- Training on the export process.
- Co-financing technical assistance for market prospection, export plan development, promotion, product development, firm development, and foreign subsidiary creation.
- Providing information on market opportunities, market intelligence, and counseling services.
- Arranging meetings and interviews with potential customers.
- Coordinating and organizing trade missions, shows, and fairs.
- Co-financing SME participation in trade missions, shows, and fairs.
- Sponsoring the creation of export consortia to enhance the competitive position of SMEs in international markets.[263,264,265]

Undertaking any one of these interventions in isolation assumes that the other obstacles are not binding.

The research suggests that SMEs' identification of and adaptation to external markets generates exports as part of increased production, which, in turn, may improve firm profits and employment creation.[266] This is because exporting can entail quality upgrading, better technical skills, efficiencies, and increased productivity.[267,268] A review of a program in Egypt that provided rug producers with access to export opportunities found that the supported SMEs increased profits and productivity. The study also suggested that increases in product quality were due to "learning by exporting."[269] A recent study in South Africa shows that market orientation and proactiveness of entrepreneurs are significant elements that lead to the improved export capacities and performance of South African SMEs.[270] Another study in Malaysia found that innovativeness is a determinant of export performance among SMEs, and only certain factors

[256] Innovations for Poverty Action. 2017.
[257] Atkin et al. 2016.
[258] Ibid.
[259] Carballo and Volpe Martincus. 2010.
[260] Ibid.
[261] Ibid.
[262] Cravo and Piza. 2016.
[263] Carballo and Volpe Martincus. 2010.
[264] Cadot et al. 2015.
[265] Ibid.
[266] Cravo and Piza. 2016.
[267] Innovations for Poverty Action. 2017.
[268] Atkin et al. 2016.
[269] Innovations for Poverty Action. 2017.
[270] Robb and Stephens. 2021.

of learning orientation, such as managerial commitment, were positively associated with innovativeness, but other factors were not.[271]

However, evidence on the impact of export promotion initiatives on SME growth over the long term is limited.[272] A study of an export promotion project in Tunisia shows that, while the beneficiary firms' total exports exceed temporarily the control group's total exports, one year after treatment, the differential in growth rates of total exports is no longer significant. Three years after treatment, export levels are no longer significantly different.[273]

DEMOGRAPHIC AND CONTEXT FACTORS

The literature suggests that export promotion activities are effective in helping SMEs to increase their exports by facilitating an expansion of the *extensive margin* (the number of types of products exported and the number of countries served) but that these activities do not have a consistently significant impact on SMEs' *intensive margin* of exports (the volume of products exported).[274,275] These results suggest that export promotion is most effective in helping firms break into new markets with new products. It is also consistent with the fact that, absent assistance, SMEs are likely to face more significant information gaps when attempting to enter new export markets abroad versus exporting to countries within their destination markets.[276]

GAPS IN THE EVIDENCE

Export promotion interventions are increasing in popularity, but the scarcity of rigorous evaluations makes it difficult to assess their benefits to SME growth and cost-effectiveness. In addition, the lack of evidence establishing the impact of specific or disaggregated export promotion activities on SME growth inhibits the ability to improve the design of future export promotion interventions.[277,278,279]

The literature reviewed did not identify any evidence specific to the effects of export promotion and support interventions on firms with different characteristics, including the lifecycle stage of the firm (start-up, early-stage, growth, mature), the age of the firm, and the age and gender of the SME owner. Therefore, we see an opportunity for further research in these areas.

DEBATES AND CRITIQUES

There have been attempts to assess the overall impact of different export promotion activities. However, the evidence on the relative and comparative effectiveness of different types of support initiatives is scarce.[280] The findings that do exist suggest that market prospection and promotional activities correlate more significantly with export outcomes.[281,282]

---

[271] Ismail et al. 2018.
[272] Cadot et al. 2015.
[273] Ibid.
[274] Carballo and Volpe Martincus. 2010.
[275] Ibid.
[276] Ibid.
[277] Cadot et al. 2015.
[278] Ibid.
[279] Atkin et al. 2016.
[280] Carballo and Volpe Martincus. 2010.
[281] Cadot et al. 2015.
[282] Ibid.

Additionally, bundled services combining counseling, export planning, and trade missions and fairs that build buyer-seller relationships with foreign partners are more effective for export outcomes than isolated assistance actions (for example, trade missions and fairs alone).[283]

IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

Findings suggest that SMEs supported by export promotion activities increase exports by facilitating an expansion of the extensive margin, but these activities do not have a consistent, significant impact on SMEs' intensive margin of exports.[284,285] Thus, donor assistance may be more successful in helping firms overcome hurdles to break into new product or geographic markets than in ramping up export volumes to their existing markets.[286]

Donors should also consider bundled services combining counseling, export planning, trade missions and fairs that build buyer-seller relationships with foreign partners. This is particularly true, because (per the research on market linkages in the earlier chapter) the promotion of buyer-seller market linkages between suppliers and international buyers is likely to have an impact on SME growth. It should be acknowledged, however, that a strategy based on a combination of support services might be costly.[287] Donors supporting research on the impacts of specific interventions could contribute to global knowledge by also tracking the cost of these interventions.

[283] Carballo and Volpe Martincus. 2010.
[284] Ibid.
[285] Ibid.
[286] Cadot et al. 2015.
[287] Carballo and Volpe Martincus. 2010.

9. INNOVATION THEORIES OF CHANGE

Innovation is a key element of competition and driving efficiency within markets.[288] However, on average, SMEs are less innovative than large enterprises and they innovate in a different way. SMEs command fewer resources, have less research and development (R&D), and generally face more uncertainties and barriers to innovation.

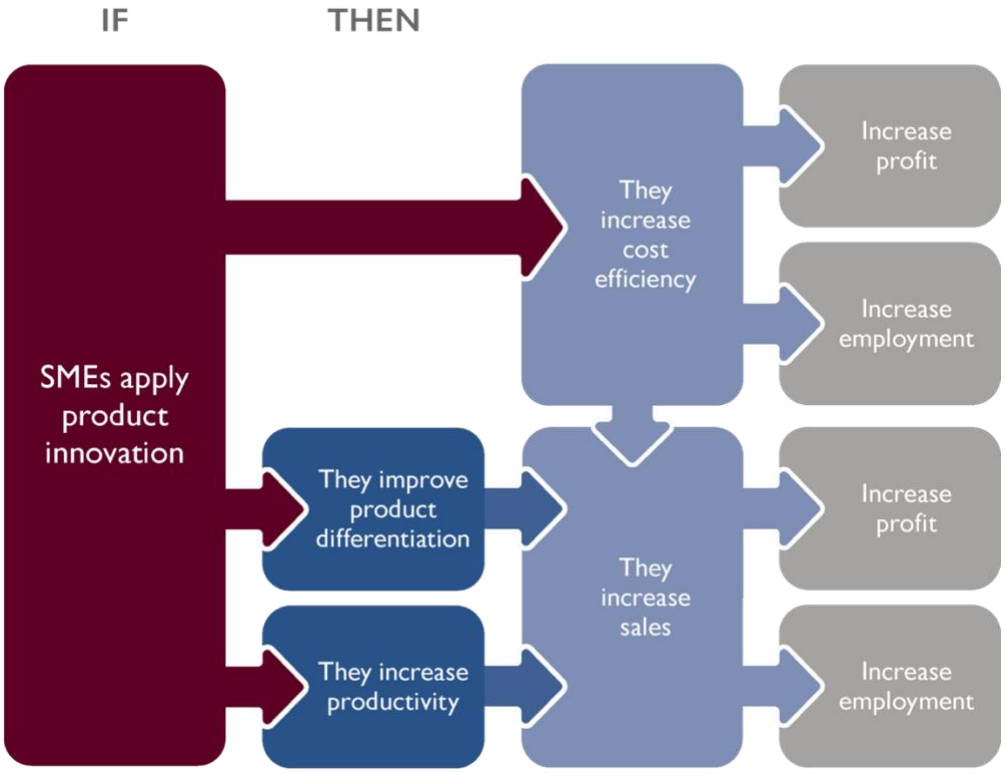
Because innovation is vital for increasing productivity and contributing to overall economic growth,[289] governments and donors are supporting interventions that foster a sound business environment, help SMEs to develop and use their internal strategic resources effectively, and build an innovation system that is effective in the commercialization of research and includes a large range of SMEs. The aim is to strengthen the innovation capacity of SMEs, including supporting R&D programs. In addition, the rationale for supporting SMEs by encouraging R&D is that high-growth SMEs are often characterized as more R&D-intensive than less rapidly growing or average firms and they demonstrate a certain level of innovativeness.[290,291,292,293,294]

For the purposes of this report, we define *innovation* as involving the creation or re-engineering of products or services to meet new market demand. Although innovation can be considered an outcome of other SME development inputs or interventions (such as business management or finance), we focus this section on interventions that explicitly target product innovation.

[288] Castillo et al. 2011.
[289] Piza et al. 2013.
[290] Ibid.
[291] Castillo et al., 2011.
[292] Crespi et al. 2010.
[293] Cravo and Piza. 2016.
[294] Maldonado-Guzman et al. 2019.

9.1 PRODUCT INNOVATION SUPPORT

THEORY OF CHANGE



PROGRAM ASSUMPTIONS

- SME owners want to apply product innovations.
- SME owners are able to absorb interventions and apply product innovations.
- Product innovations are valued by the market.
- SME owners invest in jobs and/or experience greater profit margins from efficiency and/or gains.

The evidence shows that applying technological advances leads to more effective use of productive resources. The transformation of new ideas into new economic solutions (new products and services) is the basis of sustainable competitive advantages for firms. Furthermore, several cross-country studies demonstrate a virtuous circle on a national level, in which R&D spending, innovation, productivity, and per capita income mutually reinforce each other and lead to long-term, sustained growth.[295] A recent 2019 study in Mexico found a positive association between innovation capabilities in processing, production, marketing, and management systems with SME business performance and growth.[296]

Although the aim of innovation programs is not often to create jobs, they are implemented assuming that they do—or at least that they do not destroy—jobs. The empirical evidence seems to support the

[295] Crespi and Zuniga. 2010.
[296] Maldonado-Guzman et al. 2019.

hypothesis that innovation has an overall positive effect on employment, but that different effects should be expected from different types of innovation, as we explain in the following sections.[297]

DEMOGRAPHIC AND CONTEXT FACTORS

For SMEs, *innovation* often implies uncertain or delayed rewards, and innovation risks tend to be exacerbated in the context of developing countries, where the path to scale is already difficult.[298] Interventions designed to support innovation should be customized based on the country context, the specificities of a country's policies or agencies established to promote innovation, and SME innovative behavior. At least three dimensions are important to keep in mind:

- Public support, which has increased innovation efforts in SMEs in some countries.
- The role of intellectual property rights in firms' decisions to invest in innovation.[299]
- Access to finance for innovation, which is often a product of the overall business environment.[300]

Aside from business environment issues, such as investor protection, firms may face severe financing constraints on innovative investments because of information asymmetries. Firms seeking to make new inventions through R&D frequently have better information about the likelihood of success and the nature of the completed project than potential lenders. In addition, because inventions can be easy to imitate, firms may be reluctant to disclose much information about their projects, making it difficult to find financing. Therefore, the availability of non-bank financing, especially venture capital or angel investment, may be critical in fostering innovation. Venture capital firms and angel investors address information asymmetry problems by intensively scrutinizing firms before providing capital and by then monitoring them afterward.[301]

Several recent studies have examined which types of capital or assistance have positive effects on SME innovation capabilities.[302][303][304][305][306] A study of Serbian SMEs demonstrated that three key components of intellectual capital - namely renewal capital, internal relational capital, and structural capital[307] - have statistically significant positive effects on overall innovative performance in Serbian companies.[308] Another recent study in Mexico found a direct and positive relationship between relational capital[309] and critical strategic orientations (market, entrepreneurial, learning, and technology) and an indirect relationship between relational capital and innovation through market orientation and entrepreneurial orientation.[310] A 2022 study by Yao and Yang published in PLOS One found that digital development and promotion of digital finance yield a significantly positive impact on SMEs' ability to innovate by alleviating corporate

[297] Castillo et al. 2011.
[298] Cook and Olafsen. 2016.
[299] Crespi and Zuniga. 2010.
[300] Cook and Olafsen. 2016.
[301] World Bank. 2014.
[302] Anwar and Ali Shah. 2018.
[303] Kijkasiwat and Pheunsane. 2020.
[304] Cabrilo et al. 2019.
[305] Ramirez-Solis et al. 2022.
[306] Yao and Yang. 2022.
[307] The study defines renewal capital as the firm's resources for renewing what it knows and can do, and ability to acquire new information, develop skills, and apply learnings; internal relational capital as the value embedded in the network of intrafirm relations; and structural capital as a firm's structural features of production, embedded in processes, systems, solutions, databases, patents and intellectual properties, organizational culture and climate of collaboration.
[308] Cabrilo et al. 2019
[309] The study defines relational capital as the set of "all relationships, power relationships, and cooperation established between firms, institutions, and people stemming from a strong sense of belonging and highly developed cooperation capacity" (Ramirez-Solis et al. 2022).
[310] Ramirez-Solis et al. 2022.

financing constraints.[311] Finally, a study in Pakistan found that financial networking, business networking, and political networking significantly and positively contribute to business model innovation. The study authors advise that owners and managers of young, medium-sized firms, defined as those who started operations within the last 10 years and with less than 250 employees, are advised to focus on building relationship with external partners, financial institutions, and government officials to create an effective business model and survive in a turbulent market.[312]

GAPS IN THE EVIDENCE

Overall, the results of innovation appear to be positive. However, the comparative effects of different types of innovation interventions on SME growth are not well researched. Identifying which innovation interventions have the most impact on SME growth will be important.

Although innovation seems to positively impact SME profit and employment rates, productivity, and income, innovation and R&D investment can be prohibitively expensive (both in terms of financial costs and of necessary human capital) and may require longer time horizons to demonstrate results.[313] Several new studies provide evidence for factors that support or enable strong business innovation capacities, such as relational capital, structural capital, market sensing capability, and digital finance.

Studies show that the probability of innovation increases with the size of the firm and with the human capital of its workers.[314] Firm size and financial capital can either moderate or mediate the impact of innovation on firm performance, suggesting that both factors should be considered prior to introducing innovation as a means to enhance performance. However, the literature reviewed did not identify any evidence specific to the effects of innovation interventions on firms with different characteristics, including the lifecycle stage of the firm (start-up, early-stage, growth, mature), the age of the firm, and the age and gender of the SME owner. Therefore, we see an opportunity for further research in these areas.

DEBATES AND CRITIQUES

The effect of innovation on employment is not straightforward. Innovation is often seen as a potential threat to employment, particularly when technological change may lead to the substitution of labor with capital. Over time, the discussion of this relationship has shifted, considering how different types of innovations under different market conditions may produce varied effects on employment and employment composition. For instance, *product innovation* (the introduction of a good or service that is new or has significantly improved characteristics or intended uses) can open up new markets for a firm and can increase market share for innovators, without generating new employment.[315]

IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

Donors can support innovation in SMEs by helping to foster a sound business environment (including public support for innovation and a reliable intellectual property rights system), helping SMEs to develop and use their human and capital resources effectively, alleviating financial constraints to build innovation capacities, and building an innovation system that can commercialize R&D and include a large range of SMEs. Since the availability of financing may be critical for fostering innovation, we also recommend that innovation interventions are provided in conjunction with appropriate access to finance, particularly those

[311] Yao and Yang. 2022.
[312] Anwar and Ali Shah. 2018.
[313] Crespi and Zuniga. 2010.
[314] Benavente and Lauterbach. 2008.
[315] Castillo et al. 2011.

that recent evidence has shown to support innovation capacity. Donors should also consider accelerator models, which can reduce the risk, enhance the impact, and speed up the process of technology innovation by building the capacity of entrepreneurs and connecting them to markets, finance, and other key innovation actors.

10. INTERSECTION OF CLIMATE CHANGE AND SMES

Since the publication of the 2017 High Growth SME Evidence review, the intersection between climate change and SMEs has become increasingly important. According to the World Bank, SMEs significantly contribute to most economies, particularly in developing countries, and account for the majority of businesses worldwide.[316] In addition, SMEs "represent about 90% of businesses and more than 50% of employment worldwide."[317] When considering the growing negative impacts of climate change, SMEs are positioned to play a unique role in both mitigating adverse contributions to climate change and adapting to avoid negative impacts. Reaching both national and international climate goals is impossible without SMEs participating in this effort.[318]

Climate change is disproportionately impacting developing economies. Some reasons for this being that developing countries are likely to experience fragility when it comes to food and water security, weak health care systems, stalled economic growth, and human displacement, among other factors.[319] Within the context of climate change, supporting the growth of SMEs to better adapt to and mitigate climate change would position nations to be more resilient to the negative impacts, as SMEs account for the majority of businesses and employment opportunities.

CLIMATE CHANGE MITIGATION AND ADAPTATION

Promoting the growth of SMEs within the context of climate change can happen within two overarching sectors; climate change mitigation and climate change adaptation. Mitigation refers to actions that reduce, limit, or eliminate contributions to climate change and its effects, such as reducing sources of greenhouse gas emissions or slowing deforestation.[320] Adaptation refers to shifts made to life or operation of business due to actual or expected climate related changes.[321] Although SMEs are capable of adopting practices that support both climate change adaptation and mitigation, we found extremely limited to no experimental evidence to propose a ToC to support SME growth within this context. Instead, this section will discuss approaches to reframe these considerations for donors to support SME growth within the context of climate change.

DEMOGRAPHIC AND CONTEXT FACTORS

Although we found several studies that present observational findings on SME growth in the context of climate change, only one study presented experimental evidence. We found one article that illustrates how SMEs can be supported within developing countries in their efforts at climate change adaptation.

GAPS IN THE EVIDENCE

As previously noted, there is limited experimental evidence to support SME growth in the context of climate change. One experimental study ran scenario-based experiments to determine what would

[316] World Bank. 2022.
[317] Ibid.
[318] United Nations Climate Change. 2021.
[319] USGLC. 2021.
[320] NASA. 2022.
[321] Ibid.

encourage companies in Indonesia to participate in collective risk reduction around flooding.[322] This evidence touched on themes of adaptation and risk reduction. However, we cannot draw conclusions or propose a validated TOC based on one study alone. More evidence is needed.

IMPLICATIONS AND RECOMMENDATIONS FOR DONORS

In addition to there being a general lack of experimental or quasi-experimental evidence available, the nature of SME growth and the intersection of climate change is a vast landscape.[323] Even if evidence had been abundant, the framing of supporting SME growth in the context of climate change is extremely broad. The subsectors within the intersections of climate change and SME growth are extensive. The following are just some directions in which research could be focused, among others:

- Green Finance
- Strengthening the business enabling environment (within the context of climate change)
- Tax incentives for SMEs to adopt greener business practices
- Mitigative and adaptive practices in business operations
    - Adopting clean energy
    - Green agriculture practices
    - Water management
    - Recycling

Given the range of approaches for SMEs can participate in mitigating and adapting to climate change, it would be useful to identify more specific theories of change. For example, supporting SMEs in effective risk management practices and procedures would support SME growth in the context of climate change and the uncertainty it poses on SMEs around the world. From discussions with key informants, this focus on risk identification, prevention, mitigation, and adaptation was noted as having the potential to effectively support SME growth in the context of climate change.

Given the significant gaps in evidence, the vast nature of the climate change sector, and critiques on how best to approach supporting SME growth within the context of climate change, the recommendations are as follows.

- Allocate resources toward conducting experimental or quasi-experimental studies on supporting SME growth through the interaction of Climate Change.
- Reframe thinking about the intersection of Climate Change and SME growth within the context of subsectors in order to develop more targeted and relevant ToCs.
- Create a greater focus on risk management and the intersection with SME growth.

[322] Neise et al. 2018.
[323] Vast in the sense that there are a range of topics to consider, not vast in amount of experimental/quasi-experimental evidence.

11. CONCLUSIONS AND RECOMMENDATIONS

This report summarizes how SME development interventions may affect SME growth outcomes, including firm productivity, profits, and employment, while analyzing how these outcomes vary depending on a range of factors, including firm characteristics (e.g., age and size of the firm and education levels of the owners), policy environments, market dynamics, and time horizons, to name a few. Several intervention types have the most significant impact on SME growth and should be considered for future development programming. Following is a summary of these findings[324]:

TABLE 3: SUMMARY OF FINDINGS BY INTERVENTION AND EVIDENCE

INTERVENTION CATEGORY	INTERVENTION TYPE	LEVEL OF EVIDENCE	LEVEL OF IMPACT
BUSINESS MANAGEMENT	Training	STRONG	LOW
	Consulting Services	STRONG	HIGH
	Matching Grants	WEAK	MIXED-HIGH
ACCESS TO FINANCE	Access to Credit	MODERATE	HIGH[325]
BUSINESS REGISTRATION AND TAXES	Business Registration	WEAK	LOW
	Tax Policies and Administration	MODERATE	HIGH
MARKET ACCESS	Market Linkages	MODERATE	HIGH[326]
	Export Promotion and Support	WEAK	MIXED
INNOVATION	Product Innovation Support	WEAK	MIXED

In addition to reviewing the evidence that exists surrounding SME development interventions, this report highlights several recommendations for donors:

- **Do what we know works.** Based on the summary table, there is strong evidence that consulting services have a high impact on SME growth in profit and/or employment. There is also moderate evidence that certain interventions to boost credit, simplify tax policies, and improve market linkages have high impact. Donors should consider supporting these interventions over classroom-based business training.
- **Carry out context-specific project design.** Project design should start with an assessment to understand the actual constraints to SME growth, the demands of new or growing SMEs, and the characteristics of the targeted SMEs and SME owners, and then articulate an appropriate ToC. In addition, the SME project design should:

[324] These findings summarize aggregated evidence collected from a variety of contexts. The level of evidence and/or level of impact of each of the types of intervention may look different if focused on one context.
[325] This ranking is dependent on the access to credit intervention type. Information access and collateral laws have a high impact on SME growth, while findings on credit guarantees and loan subsidies were mixed or low.
[326] Although the impact is high, market linkages must be paired with information transfer from lead firms.

    - Lay out the assumptions for the intervention and its design.
    - Clearly identify the target group.
    - Evaluate the aspects of the ToC that have not previously been well-researched.
- **Conduct additional research.** There are ample opportunities for more research and evidence in each ToC explored in this report, with additional research warranted in a number of areas that are either more nascent in practice or are not covered extensively in the literature by experimental approaches. This includes:
    - The impact of advanced training, matching grants, private equity, financial technology applications, domestic end-market linkages, export promotion, business formalization, the reduction of tax compliance, and product and process innovation on SME growth.
    - The impact of interventions on firms with different characteristics, including the lifecycle stage of the firm (start-up, early-stage, growth, mature), the age of the firm, and the gender and age of the owner.
    - Effective approaches for supporting SME growth while navigating risk management, particularly in the context of climate change and other potential sources of key risk (including but not limited to global health, political or economic crises, corruption, etc.).

High-growth firms have been shown to be a key factor for economic growth and structural change, and because of this, these firms have drawn growing attention from policymakers and academics. However, knowledge about these firms is still scattered, and little knowledge is available regarding differences among countries, which has yielded little success in targeting SMEs based on their growth potential. Previous interventions targeting SMEs based on their high growth potential have not demonstrated larger impacts, which the literature has begun to acknowledge. Following the World Bank's 2019 flagship report, it will be important for future research to reorient policies and practices for targeting SMEs away from problematic indicators of potential growth, but towards improving allocative efficiency, incentivizing business-to-business spillovers, and strengthening firm capabilities.[327]

- **Take cost-effectiveness into consideration.** Project design should also consider the trade-offs between cost and impact of specific interventions on the target group and should adopt only the most cost-effective interventions. However, there is a lack of publicly available analysis and comparison on the cost-effectiveness of different interventions. Implementers often collect data on the cost of interventions and sometimes collect data on their impact, but they do not analyze data for the cost per job created or cost per percentage point increase in revenue. Therefore, research publishing this data would add much to global understanding of SME development interventions. In addition, with improved methods for identifying and selecting high-growth SMEs, donor programs could target funding toward those SMEs most likely to experience growth.

[327] World Bank. 2019.

ANNEX 1: BIBLIOGRAPHY

TABLE 4: LIST OF EVIDENCE	
CITATION	**STRENGTH OF RESEARCH[328]**
Aga, G., D. Francis, and J. Meza. "SMEs, Age, and Jobs." World Bank Policy Research Working Paper 7493. Washington, DC: World Bank, 2015.	High
Aivazian, V., and E. Santor. "Financial constraints and investment: assessing the impact of a World Bank credit program on small and medium enterprises in Sri Lanka." *Canadian Journal of Economics/Revue canadienne d'économique*, vol. 41 (2) (2003), 475–500.	High
Alibhai, S., N. Buehren, M. Frese, M. Goldstein, S. Papineni, and K. Wolf. "Full Esteem Ahead? Mindset-oriented business training in Ethiopia." World Bank Policy Research Working Paper no. 8892. Washington, DC: World Bank, 2019.	Moderate
Alibhai, S., A. Donald, M. Goldstein, A. Oguz, A. Pankov, and F. Strobbe. "Gender Bias in SME Lending: Experimental Evidence from Turkey." World Bank Policy Research Working Paper no. 9100. Washington, DC: World Bank, 2019.	Moderate
Alshanty, A. and O. Emeagwali. "Market-sensing capability, knowledge creation and innovation: The moderating role of entrepreneurial-orientation." *Journal of Innovation and Knowledge*, vol 4(3), 171-178. 2019.	Moderate
Amin, M. and V. Motta. "The Impact of Corruption on SMEs' Access to Finance: Evidence Using Firm-Level Survey Data from Developing Countries." World Bank Group Policy Research Working Paper no. 9812. Washington, DC: World Bank, 2021.	High
Anderson, S.J., R. Chandy, and B. Zia. "Pathways to Profits: Identifying Separate Channels of Small Firm Growth through Business Training." Policy Research Working Paper 7774, 2016.	Moderate
Anderson, S., and D. McKenzie. "Improving Business Practices and the Boundary of the Entrepreneur: A Randomized Experiment Comparing Training, Consulting, Insourcing and Outsourcing." Mimeo, 2020.	Moderate
Anwar, M. and S. Ali Shah. "Managerial networking and business model innovation: an empirical study of new ventures in an emerging economy." *Journal of Small Business and Entrepreneurship*, vol 32 (3), 265-286. 2020.	Moderate
Arráiz, I., F. Henríquez, and R. Stucchiet. Supplier development programs & firm performance: evidence from Chile." *Small Business Economics*, vol. 41 (1) (2013), 277–293.	Moderate
"Assessing Firm-Support Programs in Brazil. Office of Evaluation and Oversight (OVE)." Inter-American Development Bank & Inter-American Investment Corporation, 2017.	Moderate

[328] Department for International Development. 2014.

Aterido, R., T. Beck., and L. Iacovone. "Gender and Finance in Sub-Saharan Africa: Are Women Disadvantaged?" Policy Research Working Paper WPS 5571. Washington, DC: World Bank, 2011.	High
Atkin, D., A.K. Khandelwal, and A. Osman. "Exporting and Firm Performance: Evidence from a Randomized Experiment." *The Quarterly Journal of Economics*, vol. 132 (2) (2016), 551–615.	Moderate
Ayyagari, M., A. Demirguc-Kunt, and V. Maksimovic. "SME Finance." World Bank Policy Research Working Paper 8241, 2017.	High
Ayyagari, M., A. Demirguc-Kunt, and V. Maksimovic. "Who creates jobs in developing countries?" *Small Business Economics*, vol. 43(1) (2014), 75–99.	High
Ayyagari, M., P. Juarros, M. Peria, and S. Singh. "Access to Finance and Job Growth: Firm-Level Evidence across Developing Countries." World Bank Policy Research Working Paper 6704, 2016.	High
Ayyagari, M., T. Beck, and A. Demirguc-Kunt. "Small and medium enterprises across the globe." *Small Business Economics*, vol. 29 (2007), 415–434.	Low
Beck, T., A. Demirguc-Kunt, and V. Maksimovic. "Financial and Legal Constraints to Growth: Does Firm Size Matter?" *The Journal of Finance*, vol 60 (1) (2005), 137–177.	Moderate
Beck, T., P. Behr, and A. Madestam. "Sex and Credit: Is There a Gender Bias in Lending?" European Banking Center Discussion Paper No. 2011-027, 2011.	Moderate
Benavente, J.M., and R. Lauterbach. "Technological innovation and employment: complements or substitutes?" *The European Journal of Development Research*, vol 20 (2) (2008), 318–329.	High
Benhassine, N., D. McKenzie, V. Pouliquen, and M. Santini. "Does inducing informal firms to formalize make sense? Experimental evidence from Benin." *Journal of Public Economics*, vol. 157 (2018), 1–14.	Moderate
Benhassine, N., D. McKenzie, V. Pouliquen, and M. Santini. "Finding a Path to Formalization in Benin: Early Results after the Introduction of the Entreprenant Legal Status." World Bank Policy Research Working Paper 7510. Washington, DC: World Bank, 2015.	Moderate
Bennett, J. "Informal firms in developing countries: Entrepreneurial stepping stone or consolation prize?" *Small Business Economics*, vol. 34 (1) (2010), 53–63.	Moderate
Berkel H. The costs and benefits of formalization for firms. WIDER Working Paper 2018/159). Helsinki: UNU-WIDER, 2018.	Moderate
Biney, C. "Impact of Venture Capital Financing on SMEs' Growth and Development in Ghana." Lincoln University, Dissertation. 2018.	Moderate
Bloom, N., B. Eifert, A. Mahajan, D. McKenzie, and J. Roberts. "Does management matter? Evidence from India." *The Quarterly Journal of Economics*, vol. 128(1) (2013), 1–51.	Moderate

Bloom, N., A. Mahajan, D. McKenzie, and J. Roberts. "Do Management Interventions Last? Evidence from India." World Bank Policy Research Working Paper no. 8339. Washington, DC: World Bank, 2018.	Moderate
Boly, A. "On the Short- and Medium-Term Effects of Formalisation: Panel Evidence from Vietnam," The Journal of Development Studies, vol 54 (4) (2018), 641-65	Moderate
Borah, P., S. Iqbal, S. and S. Akhtar. "Linking social media usage and SMEs' sustainable performance: The role of digital leadership and innovation capabilities." *Technology in Society*, vol 68, 101900. 2022.	Moderate
Brixiova, Z., T. Kangoye, and F. Tregenna. "Enterprising Women in Southern Africa: When Does Land Ownership Matter?" *Journal of Family and Economic Issues,* vol 41 (2020), 37-51.	Moderate
Bruhn, M. "License to sell: the effect of business registration reform on entrepreneurial activity in Mexico." World Bank Policy Research Working Paper 4538. Washington, DC: World Bank, 2008.	High
Bruhn, M. "Reforming business taxes: what is the effect on private sector development?" Viewpoint: Public Policy for the Private Sector. Note No. 330. Washington, DC: World Bank, 2011.	Moderate
Bruhn, M., D. Karlan, and A. Schoar. "The impact of consulting services on small and medium enterprises." World Bank Policy Research Working Paper 6508. Washington, DC: World Bank, 2013.	High
Bruhn, M., D. Karlan, and A. Schoar. "The impact of consulting services on small and medium enterprises: Evidence from a randomized trial in Mexico." *Journal of Political Economy*, 126(2) (2018), 635-687.	High
Bruhn, M., D. Karlan, and A. Schoar. "What Capital is Missing in Developing Countries?" Field Experiments in Firms. Session Chair: John Van Reenen. Massachusetts Institute of Technology, 2010.	Moderate
Bruhn, M., and D. McKenzie. "In Pursuit of Balance: Randomization in Practice in Development Field Experiments." *American Economic Journal: Applied Economics*, vol. 1 (4) (2009), 200–232.	Moderate
Bruhn, M., and J. Loeprick. "Small Business Tax policy, Informality, and Tax evasion - Evidence from Georgia." Policy Research Working Paper WPS 7010, Impact Evaluation Series. Washington, DC: World Bank Group, 2014.	High
Cabrilo, S., A. Kianto, and B. Milic. "The effect of IC components on innovation performance in Serbian companies." *VINE Journal of Information and Knowledge Management Systems,* vol 28 (3), 448-466. 2018.	Low
Cadot, O., A.M. Fernandes, J. Gourdon, and A. Mattoo. "Are the Benefits of Export Support Durable? Evidence from Tunisia." *Journal of International Economics*, vol. 97(2) (2015), 310–324.	High
Cai, J. and A. Szeidl. "Interfirm Relationships and Business Performance." *The Quarterly Journal of Economics,* vol 133(3), 1229-1282. 2018.	High

Campello, M., and M. Larrain. "Enlarging the Contracting Space: Collateral Menus, Access to Credit, and Economic Activity." *Review of Financial Studies*, vol. 29 (2016), 349–383.	Moderate
Campos F., M. Goldstein, and D. McKenzie. How Should the Government Bring Small Firms into the Formal System?" World Bank Policy Research Working Paper 8601, 2018.	High
Campos, F., A. Coville, A. Fernandes, M. Goldstein, and D. McKenzie. "Learning from the Experiments that Never Happened." World Bank Policy Research Working Paper 6296, 2012.	Moderate
Campos, F., M. Goldstein, and D. McKenzie. "Short-Term Impacts of Formalization Assistance and a Bank Information Session on Business Registration and Access to Finance in Malawi." Policy Research Working Paper 7183, 2015.	Moderate
Carballo, J., and C. Volpe Martincus. "Export Promotion: Bundled Services Work Better." *The World Economy*. Washington, DC: Inter-American Development Bank, 2010.	Moderate
Carballo, J., and C. Volpe Martincus. "Is Export Promotion Effective in Developing Countries? Firm-Level Evidence on the Intensive and the Extensive Margins of Exports." *Journal of International Economics*, vol. 76 (1) (2010), 89–106.	Moderate
Cardon, M. "Contingent Labor as an Enabler of Entrepreneurial Growth." *Human Resource Management*, 42 (2003), 357–373.	Moderate
Castillo, V., A. Maffioli, S. Rojo, and R. Stucchi. "Innovation policy and employment: Evidence from an impact evaluation in Argentina." Technical Notes No. IDB-TN-341. Washington, DC: Inter-American Development Bank, 2011.	Moderate
Chong, A., and I. Velez. "Business training for women entrepreneurs in the Kyrgyz Republic: evidence from a randomised controlled trial." *Journal of Development Effectiveness,* vol. 12 (2) (2020), 151-163.	Moderate
Cook, P., and E. Olafsen. "Growth Entrepreneurship in Developing Countries: A Preliminary Literature Review." Washington, DC: World Bank, 2016.	Moderate
Coste, A., and D. Hristova. "How to Make Grants a Better Match for Private Sector Development: Review of World Bank Matching Grants Projects." Washington, DC: World Bank, 2016.	Low
Cravo, T., A. Gourlay, and B. Becker. "SMEs and Regional Economic Growth in Brazil." Loughborough University, 2010.	Moderate
Cravo, T., and C. Piza. "The Impact of Business Support Services for Small and Medium Enterprises on Firm Performance in Low- and Middle-Income countries: A Meta-Analysis." The Campbell Collaboration, 2016.	Moderate

Crespi, G., and P. Zuniga. "Innovation and Productivity: Evidence from Six Latin American Countries." IDB Working Paper No. 74, 2010.	Moderate
Cusolito, A., E. Dautovic, and D. McKenzie. "Can Government Intervention Make Firms More Investment-Ready? A Randomized Experiment in the Western Balkans." World Bank Group Policy Research Working Paper no. 8541. Washington, DC: World Bank, 2018.	Moderate
Dabla-Norris, E., F. Misch., D. Cleary, and M. Khwaja. "The quality of tax administration and firm performance: evidence from developing countries," *International Tax and Public Finance,* vol 27(3), (2020), 514-551.	Low
Dalton, P., H. Pamuk, R. Ramrattan, D. van Soest, and B. Uras. "Trasparency and Financial Inclusion: Experimental Evidence from Mobile Money." CentER Discussion Paper no. 2018-042. 2019.	High
de Giorgi, G., and A. Rahman. "SME Registration Evidence from a Randomized Controlled Trial in Bangladesh." World Bank Policy Research Working Paper 6382, 2013.	Moderate
de Mel, S., D. McKenzie, and C. Woodruff. "The demand for, and consequences of, formalization among informal firms in Sri Lanka." *American Economic Journal: Applied Economics*, vol. 5(2) (2013), 122–150.	Moderate
"Doing Business 2016: Measuring Regulatory Quality and Efficiency." World Bank. DOI: 10.1596/978-1-4648-0667-4. Washington, DC: World Bank, 2016.	High
Dollar, D., M. Hallward-Driemeier, and T. Mengistae. "Investment climate and firm performance in developing economies." *Economic Development and Cultural Change*, vol. 54 (1) (2005), 1–31.	Moderate
Farrell, D. "The Hidden Dangers of the Informal Economy." *McKinsey Quarterly*, vol. 3 (2004), 26–37.	Moderate
Fisman, R., and J. Svensson. "Are Corruption and Taxation Really Harmful to Growth? Firm-Level Evidence." *Journal of Development Economics*, vol. 83 (1) (2007), 63–75.	Moderate
"From Laws to Loans: Opportunities and Challenges in Achieving the Promise of Secured Lending Reforms," USAID, 2018.	Moderate
"Global Financial Development Report 2014: Financial Inclusion." World Bank. DOI:10.1596/978-0-8213-9985-9. Washington, DC: World Bank, 2014.	High
Gonzalez-Uribe, J., and M. Leatherbee. "The Effects of Business Accelerators on Venture Performance: Evidence from Start-Up Chile." *The Review of Financial Studies,* 31(4) (2018)1566–1603.	Moderate

González-Uribe, J., and S. Reyes, "Identifying and boosting "Gazelles": Evidence from business accelerators." *Journal of Financial Economics* 139 (2021) 260–287.	Moderate
Grimm, M., and A.L. Paffhausen. "Do Interventions Targeted at Micro-Entrepreneurs and Small and Medium-Sized Firms Create Jobs?" Discussion Paper No. 8191, 2014.	Moderate
Grimm, M., and A.L. Paffhausen. "Interventions for employment creation in micro, small and medium-sized enterprises in low-and middle-income countries: A Systematic Review." The Campbell Collaboration, 2013.	Moderate
Giuliodori, D., S. Guinazu, J. Correa, I. Butler, A. Rodriguez, and E. Tacsir. "Finance Programs for SMEs, Access to Credit and Performance of Firms: Evidence from Argentina." MPRA Paper 83524. University Library of Munich, Germany. 2018.	High
Higuchi, Y., E. P. Mhede, and T. Sonobe. "Short- and medium-run impacts of management training: An experiment in Tanzania." World Development 114 (2019) 220–236	Moderate
Iacovone, L., W. Maloney, D. McKenzie. "Improving Management with Individual and Group-Based Consulting Results from a Randomized Experiment in Colombia." World Bank Policy Research Working Paper 8854 Washington, DC: World Bank, 2019	Moderate
Ibidunni, A., O. Kehinde, O. Ibidunni, M. Olokundun, F. Olubusayo, O. Salau, T. Borishade, and P. Fred. "Data on the relationships between financing strategies, entrepreneurial competencies and business growth of technology-based SMEs in Nigeria." Data in Brief, vol 18, 988-991. 2018.	Moderate
Ismail, M., R. Hamid, Z. Senik, A. Othman, and N. Juhdi. "SMEs' Export Performance: The Effect of Learning Orientation and Innovativeness." *Jurnal Pengurusan*, vol 54, 3-14. 2018.	Low
Jensen, R. and N. Miller. "Market Integration, Demand, and the Growth of Firms: Evidence from a Natural Experiment in India." *American Economic Review*, vol 108 (12), 3583-3625. 2018.	Low
Kijkasiwat, P. "The influence of behavioral factors on SMEs' owners intention to adopt private finance." *Journal of Behavioral and Experimental Finance*, vol 30, 100476. 2021.	Moderate
Kijkasiwat, P. and P. Pheunsane. "Innovation and Firm Performance: The Moderating and Mediating Roles of Firm Size and Small and Medium Enterprise Finance." *Journal of Risk and Financial Management*, vol 13(5), 97. 2020.	Moderate
Kimani, S. "Financing preferences of micro, small and medium enterprises in Kenya: A discrete choice experiment." BBSE Research Products. 2020.	Moderate

Lelarge, C., D. Sraer, and D. Thesmar. "Entrepreneurship and Credit Constraints: Evidence from a French Loan Guarantee Program." *International Differences in Entrepreneurship*. University of Chicago Press, 2010, 243–273.	Moderate
Levy, D.L. "Political Contestation in Global Production Networks." *Academy of Management Review*, vol 33 (2008), 943–963.	Moderate
Loening, J., B. Rijkers, and M. Soderbom. "A rural-urban comparison of manufacturing enterprise performance in Ethiopia." *World Development*, vol. 38 (9) (2010), 1278–1296.	Moderate
Lopez-Acevedo, G., and H.W. Tan. "Impact Evaluation of Small and Medium Enterprise Programs in Latin America and the Caribbean." World Bank, 2011.	High
Maldonado-Guzman, G., J. Garza-Reyes, S. Pinzon-Castro, and V. Kumar. "Innovation Capabilities and Performance: Are they truly linked in SMEs?" *International Journal of Innovation Science,* vol 11(1), 48-62. 2020.	Low
Maloney, W.F. "Informality Revisited." *World Development*, vol 32 (7) (2004), 1159–1178.	Low
Mano, Y., A. Iddrisu, Y. Yoshino, and T. Sonobe. "How can micro and small enterprises in Sub-Saharan Africa become more productive? The impacts of experimental basic managerial training." *World Development*, vol. 40(3) (2012), 458–468.	Moderate
McCaig, B., and J. Nanowski. "Business Formalisation in Vietnam." *The Journal of Development Studies*, vol 55(5), (2018), 805–821.	Moderate
McKenzie, D. "Small Business Training to Improve Management Practices in Developing Countries: Reassessing the Evidence for 'Training Doesn't Work'." World Bank Policy Research Working Paper 9408. Washington, DC: World Bank, 2020.	Moderate
McKenzie, D., N. Assaf, and A. P. Cusolito. "The additionality impact of a matching grant programme for small firms: experimental evidence from Yemen." *Journal of Development Effectiveness* 9(1) (2017), 1-14.	Low
McKenzie, D., and C. Woodruff. "What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World?" World Bank Research Observer, 2014.	Moderate
McKenzie, D., and C. Woodruff. "Business Practices in Small Firms in Developing Countries." *Management Science*, vol. 63 (9) (2015), 2967–2981	Moderate
McKenzie, D., and Y.S. Sakho. "Does it pay firms to register for taxes? The impact of formality on firm profitability." *Journal of Development Economics*, vol. 91 (2010), 15–24.	High

Minniti, M., and W. Naudé. "What do we know about the patterns and determinants of female entrepreneurship across countries?" *The European Journal of Development Research*, vol. 22 (2) (2010), 1–12.	Moderate
Neise, Thomas, and Javier Revilla Diez. "Firms' Contribution to Flood Risk Reduction – Scenario-Based Experiments from Jakarta and Semarang, Indonesia." *Procedia Engineering,* vol. 212, 2018, pp. 567–574., https://doi.org/10.1016/j.proeng.2018.01.073.	High
Piza, C., T. Cravo, L. Taylor, L. Gonzalez, I. Musse, I. Furatdo, A.C. Seirra, and S. Abdelnour. "Protocol for a Systematic Review: The Impacts of Business Support Services for Small and Medium Enterprises on Firm Performance in Low- and Middle-Income Countries: A Systematic Review." The Campbell Collaboration, 2013.	High
Rand, N., and N. Torm. "The Benefits of Formalization: Evidence from Vietnamese Manufacturing SMEs." *World Development*, vol. 40 (5) (2012), 983–998.	Moderate
Ramirez-Solis, E., J. Llonch-Andreu, and A. Malpica-Romero. "Relational capital and strategic orientations as antecedents of innovation: evidence from Mexican SMEs." *Journal of Innovation and Entrepreneurship,* vol 11, 2022.	Moderate
Rita, M. and A. Huruta. "Financing Access and SME Performance: A Case Study from Batik SME in Indonesia." *International Journal of Innovation, Creativity, and Change*, vol 12 (12). 2020.	Low
Roa, M., A. Villegas, and I. Garron. "Effects of interest rate caps on microcredit: evidence from a natural experiment in Bolivia." Conference Paper presented at LACEA-LAMES 2019, IFABS Medellín 2019, and Bolivia Conference on Development Economics 2020. 2020.	Moderate
Robb, C. and A. Stephens. "The Effects of Market Orientation and Proactive Orientation on the Export Performance of South African SMEs." *Journal of Global Marketing,* vol 34 (5), 392-410. 2021.	High
"Small and Medium Enterprise Program, Five Years in Review: 2011–2016." Innovations for Poverty Action, 2017.	Moderate
Sonobe, T., and Y. Higuchi. "The impact of management training on small enterprises in developing countries: Lessons from Ghana, Tanzania, and Vietnam." ILO Policy Brief No. 9, 2018.	Moderate
Tamvada, P. "Entrepreneurship and Welfare." *Small Business Economics*, vol. 34 (1) (2010), 65–79.	Moderate

Tan, H. "Evaluating SME support programs in Chile using panel firm data." World Bank Policy Research Working Paper 5082. Washington, DC: World Bank, 2009.	High
Woodruff, C. "Addressing constraints to small and growing businesses." Aspen Network of Development Entrepreneurs (ANDE) and International Growth Centre (IGC). London School of Economics Working Paper, 2018.	Moderate
Yao, L. and X. Yang. "Can digital finance boost SME innovation by easing financing constraints? Evidence from Chinese GEM-listed companies." *PLOS One,* vol 17 (3), e0264647. 2022.	High

REFERENCES

Aivazian, V., and E. Santor. "Financial constraints and investment: assessing the impact of a World Bank credit program on small and medium enterprises in Sri Lanka." *Canadian Journal of Economics/Revue canadienne d'économique*, vol. 41 (2) (2003), 475–500.

Alibhai, S., N. Buehren, M. Frese, M. Goldstein, S. Papineni, and K. Wolf. "Full Esteem Ahead? Mindset-oriented business training in Ethiopia." World Bank Policy Research Working Paper no. 8892. Washington, DC: World Bank, 2019.

Andersén, J. (2012), A resource-based taxonomy of manufacturing MSMEs, http://dx.doi.org/10.1108/13552551211201394

Anderson, S.J., R. Chandy, and B. Zia. "Pathways to Profits: Identifying Separate Channels of Small Firm Growth through Business Training." Policy Research Working Paper 7774, 2016.

Anderson, S., and D. McKenzie. "Improving Business Practices and the Boundary of the Entrepreneur: A Randomized Experiment Comparing Training, Consulting, Insourcing and Outsourcing." Mimeo, 2020.

Arráiz, I., F. Henríquez, and R. Stucchiet. "Supplier development programs & firm performance: evidence from Chile." *Small Business Economics*, vol. 41 (1) (2013), 277–293.

Atkin, D., A.K. Khandelwal, and A. Osman. "Exporting and Firm Performance: Evidence from a Randomized Experiment." *The Quarterly Journal of Economics*, vol. 132 (2) (2016), 551–615.

Ayyagari M., A. Demirguc-Kunt, and V. Maksimovic. "SME Finance." World Bank Policy Research Working Paper 8241, 2017.

Ayyagari, M., P. Juarros, et al. "Access to Finance and Job Growth: Firm-Level Evidence across Developing Countries." World Bank Policy Research Working Paper 6704, 2016.

Balantrapu, T. "Cluster Brief: Targeting Firms with High Growth Potential in Developing Countries." World Bank Group Trade Competitiveness, Cluster Brief. Washington, D.C: World Bank Group. 2017.

Beck, T., P. Behr, and A. Madestam. "Sex and Credit: Is There a Gender Bias in Lending?" European Banking Center Discussion Paper
No. 2011-027, 2011.

Beck, T., A. Demirguc-Kunt, and V. Maksimovic. "Financial and Legal Constraints to Growth: Does Firm Size Matter?" *The Journal of Finance*, vol 60 (1) (2005), 137–177.

Benavente, J.M., and R. Lauterbach. "Technological innovation and employment: complements or substitutes?" *The European Journal of Development Research*, vol 20 (2) (2008), 318–329.

Benhassine N., D. McKenzie, et al. "Finding a Path to Formalization in Benin: Early Results after the Introduction of the Entreprenant Legal Status." World Bank Policy Research Working Paper 7510. Washington, DC: World Bank, 2015.

Berkel H. "The costs and benefits of formalization for firms." WIDER Working Paper 2018/159). Helsinki: UNU-WIDER, 2018.

Bloom N., B. Eifert, et al. "Does management matter? Evidence from India." *The Quarterly Journal of Economics*, vol. 128(1) (2013), 1–51.

Bloom, N., A. Mahajan, D. McKenzie, and J. Roberts. "Do Management Interventions Last? Evidence from India." World Bank Policy Research Working Paper no. 8339. Washington, DC: World Bank, 2018.

Boly, A. "On the Short- and Medium-Term Effects of Formalisation: Panel Evidence from Vietnam," *The Journal of Development Studies*, vol 54 (4) (2018), 641-65

Bruhn, M. "Reforming business taxes: what is the effect on private sector development?" Viewpoint: Public Policy for the Private Sector. Note No. 330. Washington, DC: World Bank, 2011.

Bruhn, M., D. Karlan, and A. Schoar. "The impact of consulting services on small and medium enterprises." World Bank Policy Research Working Paper 6508. Washington, DC: World Bank, 2013.

Bruhn, M., D. Karlan, and A. Schoar. "The impact of consulting services on small and medium enterprises: Evidence from a randomized trial in Mexico." *Journal of Political Economy*, 126(2) (2018), 635-687.

Bruhn, M., and D. McKenzie. "Entry Regulation and the Formalization of Microenterprises in Developing Countries." PEDL Policy Insight Series 2, 2018.

Bruhn, M., and D. McKenzie. "In Pursuit of Balance: Randomization in Practice in Development Field Experiments." *American Economic Journal: Applied Economics*, vol. 1 (4) (2009), 200–232.

Cadot, O., A.M. Fernandes, et al. "Are the Benefits of Export Support Durable? Evidence from Tunisia." *Journal of International Economics*, vol. 97(2) (2015), 310–324.

Campello, M., and M. Larrain. "Enlarging the Contracting Space: Collateral Menus, Access to Credit, and Economic Activity." *Review of Financial Studies*, vol. 29 (2016), 349–383.

Campos F., A. Coville, et al. "Learning from the Experiments that Never Happened." World Bank Policy Research Working Paper 6296, 2012.

Campos F., M. Goldstein, and D. McKenzie. "Impacts of formal business registration in Malawi." International Initiative for Impact Evaluation, Impact Evaluation Report 86, 2019.

Campos F., M. Goldstein, and D. McKenzie. "How Should the Government Bring Small Firms into the Formal System?" World Bank Policy Research Working Paper 8601, 2018.

Carballo, J., and C. Volpe Martincus. "Export Promotion: Bundled Services Work Better." *The World Economy*. Washington, DC: Inter-American Development Bank, 2010.

Cardon, M. "Contingent Labor as an Enabler of Entrepreneurial Growth." *Human Resource Management*, 42 (2003), 357–373.

Castillo, V., A. Maffioli, et al. "Innovation policy and employment: Evidence from an impact evaluation in Argentina." Technical Notes No. IDB-TN-341. Washington, DC: Inter-American Development Bank, 2011.

Chong, A., and I. Velez. "Business training for women entrepreneurs in the Kyrgyz Republic: evidence from a randomised controlled trial." Journal of Development Effectiveness, vol. 12 (2) (2020), 151-163.

"Climate Change Adaptation and Mitigation." *NASA*, NASA, 18 July 2022, https://climate.nasa.gov/solutions/adaptation-mitigation/.

"Climate Change and the Developing World: A Disproportionate Impact." *USGLC*, U.S. Global Leadership Coalition, 2 Mar. 2021, https://www.usglc.org/blog/climate-change-and-the-developing-world-a-disproportionate-impact/.

Cook, P., and E. Olafsen. "Growth Entrepreneurship in Developing Countries: A Preliminary Literature Review." Washington, DC: World Bank, 2016.

Coste, A., and D. Hristova. "How to Make Grants a Better Match for Private Sector Development: Review of World Bank Matching Grants Projects." Washington, DC: World Bank, 2016.

Cravo, T., and C. Piza. "The Impact of Business Support Services for Small and Medium Enterprises on Firm Performance in Low- and Middle-Income countries: A Systematic Review." The Campbell Collaboration, 2016.

Crespi, G., and P. Zuniga. "Innovation and Productivity: Evidence from Six Latin American Countries." IDB Working Paper No. 74, 2010.

D'Amboise, G. and M. Muldowney (1988), "Management Theory for Small Business: Attempts and Requirements," *The Academy of Management Review*, Vol. 13/2, p. 226, http://dx.doi.org/10.2307/258574

de Mel, S., D. McKenzie, and C. Woodruff. "The demand for, and consequences of, formalization among informal firms in Sri Lanka." *American Economic Journal: Applied Economics*, vol. 5(2) (2013), 122–150.

"Doing Business 2016: Measuring Regulatory Quality and Efficiency." DOI: 10.1596/978-1-4648-0667-4. Washington, DC: World Bank, 2016.

Drexler, A., G. Fischer, and A. Schoar. "Keeping It Simple: Financial Literacy and Rules of Thumb." American Economic Journal: Applied Economics, 6 (2) (2014): 1–31.

Filion, L. (2000), "Entrepreneurial typologies: are they really useful?", No. 2000-15, http://expertise.hec.ca/chaire_entrepreneuriat/wp-content/uploads/2000-15-typtypologies_useful.pdf.

Fisman, R. and J. Svensson. "Are Corruption and Taxation Really Harmful to Growth? Firm-Level Evidence." *Journal of Development Economics*, vol. 83 (1) (2007), 63–75.

Floridi, A., B. A. Demena, and N. Wagner. "Shedding light on the shadows of informality: A meta-analysis of formalization interventions targeted at informal firms." Labour Economics, vol 67, 2020.

Floridi, A., B. A. Demena, and N. Wagner. "The bright side of formalization policies! Meta-analysis of the benefits of policy-induced versus self-induced formalization." Applied Economic Letters, vol 28 (20), 2021.

"From Laws to Loans: Opportunities and Challenges in Achieving the Promise of Secured Lending Reforms." USAID, 2018.

"Global Financial Development Report 2014: Financial Inclusion." DOI:10.1596/978-0-8213-9985-9. Washington, DC: World Bank, 2014.

Gonzalez-Uribe, J., and M. Leatherbee. "The Effects of Business Accelerators on Venture Performance: Evidence from Start-Up Chile." *The Review of Financial Studies*, 31(4) (2018)1566–1603.

González-Uribe, J., and S. Reyes, "Identifying and boosting "Gazelles": Evidence from business accelerators." *Journal of Financial Economics* 139 (2021) 260–287.

Grimm, M., and A.L. Paffhausen. "Do Interventions Targeted at Micro-Entrepreneurs and Small and Medium-Sized Firms Create Jobs?" Discussion Paper No. 8191, 2014.

Higuchi, Y., E. P. Mhede, and T. Sonobe. "Short- and medium-run impacts of management training: An experiment in Tanzania." World Development 114 (2019) 220–236

"How to Note: Assessing the Strength of Evidence." Department for International Development. March 2014.

Iacovone, L., W. Maloney, D. McKenzie. "Firms & Trade Improving management practices through individual and group consulting: Evidence from Colombia." *VoxDev,* 2021.

Iacovone, L., W. Maloney, D. McKenzie. "Improving Management with Individual and Group-Based Consulting Results from a Randomized Experiment in Colombia." World Bank Policy Research Working Paper 8854 Washington, DC: World Bank, 2019.

Independent Evaluation Group. 2019. World Bank Group Support for Small and Medium Enterprises: A Synthesis of Evaluative Findings. World Bank, Washington, DC. https://openknowledge.worldbank.org/handle/10986/32536

Loening, J., B. Rijkers, and M. Soderbom. "A rural-urban comparison of manufacturing enterprise performance in Ethiopia." *World Development*, vol. 38 (9) (2010), 1278–1296.

Lopez-Acevedo, G., and H.W. Tan. "Impact Evaluation of Small and Medium Enterprise Programs in Latin America and the Caribbean." World Bank, 2011.

Mano, Y., A. Iddrisu, et. al. "How can micro and small enterprises in Sub-Saharan Africa become more productive? The impacts of experimental basic managerial training." *World Development*, 40(3) (2012), 458–468.

McCaig, B., and J. Nanowski. "Business Formalisation in Vietnam." *The Journal of Development Studies,* vol 55(5), (2018), 805–821.

McKenzie, D. "Small Business Training to Improve Management Practices in Developing Countries : Reassessing the Evidence for 'Training Doesn't Work'." World Bank Policy Research Working Paper 9408. Washington, DC: World Bank, 2020.

McKenzie, D., N. Assaf, and A. P. Cusolito. "The additionality impact of a matching grant programme for small firms: experimental evidence from Yemen." *Journal of Development Effectiveness* 9(1) (2017), 1-14.

McKenzie, D., and C. Woodruff. "What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World?" World Bank Research Observer, 2014.

McKenzie, D., C. Woodruff, K. Bjorvatn, M. Bruhn, J. Cai, J. GonzalezUribe, S. Quinn, T. Sonobe, and M. Valdivia. "Training Entrepreneurs." VoxDevLit, 1(2), August 2021.

Miner, J. (1997), "A psychological typology and its relationship to entrepreneurial success", Entrepreneurship & Regional Development, Vol. 9/4, pp. 319-334, http://dx.doi.org/10.1080/0898562970000018.

Minniti, M., and W. Naudé. "What do we know about the patterns and determinants of female entrepreneurship across countries?" *The European Journal of Development Research*, vol. 22 (2) (2010), 1–12.

Morris, M. et al. (2018), "Distinguishing Types of Entrepreneurial Ventures: An Identity-Based Perspective," *Journal of Small Business Management,* Vol. 56/3, pp. 453-474, http://dx.doi.org/10.1111/jsbm.12272

Neise, Thomas, and Javier Revilla Diez. "Firms' Contribution to Flood Risk Reduction – Scenario-Based Experiments from Jakarta and Semarang, Indonesia." *Procedia Engineering*, vol. 212, 2018, pp. 567–574., https://doi.org/10.1016/j.proeng.2018.01.073.

OECD (2017). Enhancing the Contributions of SMEs in a Global and Digitalised Economy, OECD,

https://www.oecd.org/mcm/documents/C-MIN-2017-8-EN.pdf.

Piza, C., T. Cravo, et al. "Protocol for a Systematic Review: The Impacts of Business Support Services for Small and Medium Enterprises on Firm Performance in Low- and Middle-Income Countries: A Systematic Review." The Campbell Collaboration, 2013.

Raes, S. (2021), "Understanding SME heterogeneity: Towards policy relevant typologies for SMEs and entrepreneurship: An OECD Strategy for SMEs and Entrepreneurship", OECD SME and Entrepreneurship Papers, No. 28, OECD Publishing, Paris, https://doi.org/10.1787/c7074049-en

Reboud, S., T. Mazzarol and D. Clark (2011), In Search of the 'SME Ordinaire' - Towards a Taxonomy, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2123981

"Small and Medium-Sized Enterprises Are Crucial for Climate Action in South-East Asia." *Unfccc.int*, United Nations Climate Change, 20 July 2021, https://unfccc.int/news/small-and-medium-sized-enterprises-are-crucial-for-climate-action-in-south-east-asia.

"Small and Medium Enterprise Program, Five Years in Review: 2011–2016." Innovations for Poverty Action, 2017.

Sonobe, T., and Y. Higuchi. "The impact of management training on small enterprises in developing countries: Lessons from Ghana, Tanzania, and Vietnam." ILO Policy Brief No. 9, 2018.

Stephan, U., M. Hart and C. Drews (2015), Understanding Motivations for Entrepreneurship A Review of Recent Research Evidence, Enterprise Research Centre, Birmingham, https://www.enterpriseresearch.ac.uk/wp-content/uploads/2015/02/Understanding- Motivations-for Entrepreneurship-Rapid-evidence-assessment-paper..pdf

Tang, J., Z. Tang and F. Lohrke (2008), "Developing an entrepreneurial typology: the roles of entrepreneurial alertness and attributional style", *International Entrepreneurship and Management Journal*, Vol. 4/3, pp. 273-294, http://dx.doi.org/10.1007/s11365-007-0041-4

Woodruff, C. "Addressing constraints to small and growing businesses." Aspen Network of Development Entrepreneurs (ANDE) and International Growth Centre (IGC). London School of Economics Working Paper, 2018.

World Bank Group, 2019. Typology of Small and Medium Enterprise Needs and Interventions (Working Paper). World Bank, Washington, DC. https://doi.org/10.1596/33908

"World Bank SME Finance: Development News, Research, Data." *World Bank*, 2022, https://www.worldbank.org/en/topic/smefinance.