

Financing Local Green Enterprises

Closing the funding gap for sustainable MSMEs
in developing countries



“LEGEND OF THE LITTLE HUMMINGBIRD, A NATIVE AMERICAN TALE

Native American legend tells the tale of the hummingbird. One day, there was a huge forest fire. All the terrified animals helplessly watched as the disaster unfolded. Only the hummingbird decided to take action.

It set off to get a few drops of water in its beak to throw on the fire. After a moment, the armadillo, annoyed by its own helplessness, said to the hummingbird.

“Hummingbird! Are you out of your mind? Do you think with these drops of water, you will extinguish the fire?”

“I know,” answered the hummingbird, “but I’m doing my part. That’s all I can do.”

Co-authors

Ludovic Suttor-Sorel (Finance Watch), Nicolas Solonakis (consultant; Université Bordeaux-Montaigne)

Contributors

Stuart Worsley, Chris Hopkins (Green Economy Coalition). The paper draws on collaborative research conducted by GEC members: Caribbean Natural Resources Institute (Trinidad and Tobago), Advocates Coalition for Development and Environment (Uganda), Development Alternatives (India), Trade and Industrial Policy Strategies (South Africa), Libélula (Peru), Foro Nacional Internacional (Peru), Innovations Environnement Développement Afrique (Senegal) and the International Union for Conservation of Nature (Senegal).

Editors

Julia Symon, Thierry Philipponnat, Ben Cuzzupe

Cover photo

Adobe Stock / Vaclav

We are grateful to the Members of Finance Watch and of the Green Economy Coalition for their invaluable input and feedback. We also want to thank Michael Franz (GetInvest, GIZ) and Sebastian Von Wolff (GIZ) for their insights.

This publication is financed by the European Commission through the “civil society participation for sustainable finance reforms: global coverage” project, through the Department for International Partnerships (DG INTPA)



**Co-funded by
the European Union**

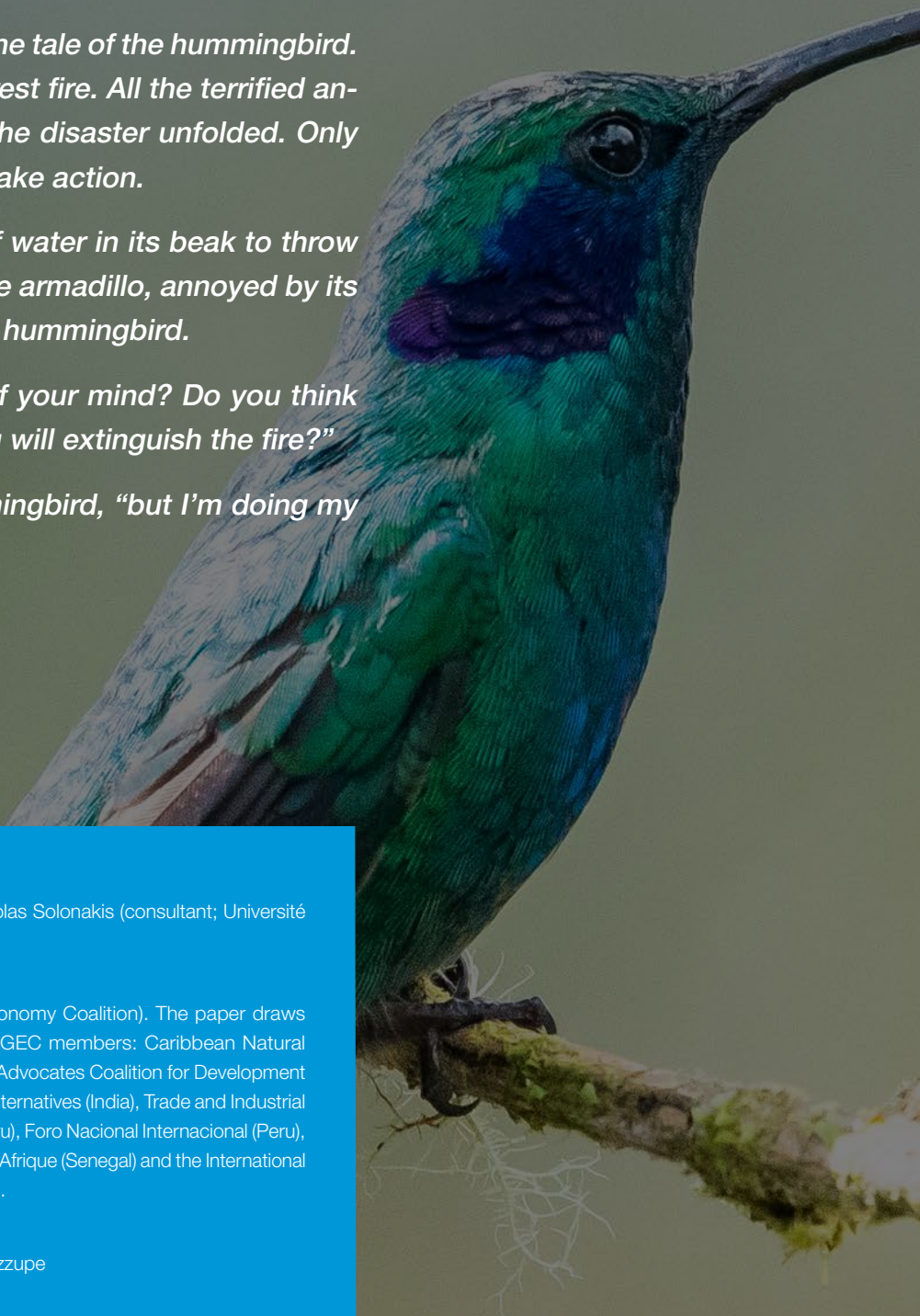


Table of contents

Executive summary	4
Key Recommendations	6
Introduction	10
Hummingbirds: is small beautiful?	11
I. MSMEs & LGEs in context	14
1. Definitions, legal status and classification	14
2. Number of MSMEs and size distribution	16
3. MSMEs contribution to total employment & GDP	18
4. Level of informality	18
5. Sectoral distribution	19
6. MSMEs in economic and environmental policy	20
II. Identifying key barriers	22
1. Typology & cross-country survey	22
1.1. External barriers	22
1.2. Internal barriers	24
2. Focal points: determinants of LGEs' lack of funding	26
2.1. Financial barriers	28
2.2. Information and capacity gap	30
2.3. Regulatory mismatches	30
2.4. Informality – match or mismatch?	31
III. Bridging gaps to support LGEs & green MSMEs	35
1. Bridging the trust gap	36
2. Bridging the information and capacity gaps	40
3. Bridging the financing ecosystem gap	46
4. Fixing regulatory mismatches	54

Executive summary

Micro, Small, and Medium Enterprises (MSMEs) represent the backbones of developing and emerging economies, and are largely concentrated in the secondary sector.¹ Whilst the MSME sector accounts for 20% to 65% of the GDP of some countries, it represents up to 90% of some countries' employment. In many emerging and developing economies, microenterprises account for the largest part of MSME number and employment (up to 99%).² Micro and small enterprises make up the largest share in terms of turnover.

MSMEs have a great potential to conduct sustainable activities but often lack supportive legislation. Most countries still lack a proper legal status of “green MSME”, a definition and classification system of “sustainable” economic activities³, and support mechanisms for local green enterprises (LGEs)⁴ or towards the greening of MSMEs. Another major reality of MSMEs which impacts how they operate, their potential, and how reforms should be tailored to support them, is the high proportion of firms operating within the so-called informal sector or informal economy.

As a major characteristic of emerging and developing economies, informality⁵ has mixed impacts and varies in intensity from one country to another – representing up to 96% of a country's employment and 50% of its GDP.⁶ Informality is both a symptom of, and a response to, hindered development and lack of access to formal sources of finance. On the one hand, informality can be a choice for MSMEs confronted with high taxes, complex regulations and lack of access to formal sources of finance. In India, this choice has been made by the 47.6 million unregistered MSMEs out of a total of 55.8 million.⁷ On the other hand, informality limits MSMEs' performance and growth, their ability to claim property rights that could serve as collateral, and access to formal sources of finance as they do not comply with basic legal requirements.⁸

Meanwhile, informality is a reality that needs to be taken into account in building more environmentally sustainable and resilient economies. The informal economy is closely tied to the state of the environment. As many poor people depend on natural resources to support their informal economic activities (e.g. farming, fishery, forestry, crafts), they are particularly vulnerable to the impacts of climate change and environmental degradation, which exacerbate the poverty cycle. Whilst the informal economy will not vanish any time soon as it acts as a safety net against extreme poverty⁹, it is consequently very important to include the informal sector in development and inclusive green economy strategies.

Access to formal sources of finance varies among countries but is the most stringent issue for green MSMEs and LGEs, particularly in the small- and medium-enterprises segments.

-
- 1 MSME activity is mainly concentrated in the secondary sector, in particular in trade, manufacturing, and construction.
 - 2 With the notable exception of South Africa where small enterprises represent the major share of MSMEs
 - 3 Sustainability should be understood as comprising environmental, social and economic dimensions.
 - 4 Local green enterprises are formal and informal MSMEs delivering environmental and social benefits to their communities.
 - 5 Informality is an umbrella term for a variety of unregulated activities that stay above or beyond the law.
 - 6 Among the surveyed countries, Senegal has the highest percentage of informal employment (96%), while South Africa has the lowest (31.5%); in terms of GDP, however, the highest level of informality is reached by Peru (47.5%, but with significant margin of error), and the lowest by Mongolia (15.1%).
 - 7 [World Bank \(2018\)](#)
 - 8 E.g. they do not comply to the criteria imposed to banks by anti-money laundering regulations
 - 9 The complex reality behind informality, and its participation in the resilience of societies, should nuance frequent incautious appeals to ‘fighting informality’ or ambition to bring informal activities to negligible quantities.

A significant MSME financing gap exists¹⁰, which is mostly accounted for by the SME segment and varies from one case study country to another – from 5% to 20% of GDP. On top of this existing financing gap, MSMEs need access to additional finance to transition to sustainable business models and to build resilience to natural disasters and slow-onset climate impacts (e.g. droughts or rising sea levels) – the so-called MSME green funding gap.

A set of internal and external barriers explain the persistence of these financing gaps.

1. Informality and the consequent dominance of informal sources of finance such as friends, family and moneylenders. Whilst informality often rhymes with collateral-free practices, informal moneylenders are often associated with usurious interest rates and unregulated aggressive debt collection practices.

2. Financial barriers, such as very high or inappropriate collateral requirements of banks, insufficient external credit guarantees, ticket size mismatches¹¹, cumbersome procedures and also prohibitive interest rates. Whilst high business interest rates can be partly explained by financial institutions (FIs) risk aversion towards high failure rates of MSMEs, other factors pertain to availability and cost of capital in an economy, such as a country's characteristics (e.g. size, political stability, growth prospect, GDP per capita) and its position and integration within the global economic and financial system. Over- or under-development of some sources of finance can also participate in these MSMEs financing gaps.

3. Information and capacity gaps in the form of a lack of access to MSMEs' credit information by FIs, a lack of knowledge and interest by FIs to take into account ESG criteria, MSMEs' lack of information about existing financial opportunities and services (such as credit guarantee schemes, technical assistance), and a lack of business skills and financial literacy.

4. Regulatory mismatches, such as a lack of supportive regulations (e.g. legal status for green MSME, classification of sustainable economic activities, green labels, appropriate energy regulations – e.g. licensing, tariff, mini-grid regulations), the complexity of the present regulations (e.g. formal registration, tax and tariffs), or unintended adverse effects of existing regulations (e.g. subsidies biased towards large enterprises).

Whilst many of these barriers can be overcome by improving national regulations, the unequal and challenging integration of developing and emerging countries in the global economy also plays a significant role. National policymakers and international donors, such as the EU and its Member States, could help overcome the above mentioned barriers, fix mismatches and close the related gaps.

In this report, Finance Watch and Green Economy Coalition compile the findings of seven case studies conducted in developing and emerging countries and make a series of recommendations that could improve financing opportunities for green MSMEs in these countries.

10 The MSME finance gap has been estimated at about 5.2 Tn \$ worldwide (2017). It represents the difference between current supply of credit to MSME and potential demand which can potentially be addressed by financial institutions. The potential demand is estimated by taking the MSME equilibrium lending in developed economies according to the industry, age, and size categories, and applying this benchmark to MSMEs in developing countries.

11 Transaction costs per loan being relatively constant, small loans are generally less attractive for commercial banks which are able to earn higher returns on bigger loans in other core markets (e.g. lending to large firms and holding high-yielding sovereign debt).

Key Recommendations

National policymakers are key in increasing financial flows towards creditworthy local green enterprises (LGEs), and in “greening” existing MSMEs in developing and emerging countries. Meanwhile, and following the “policy first” principle enshrined in the new European strategy “Neighbourhood, Development and International Cooperation Instrument” (NDICI - Global Europe), the Union and its Member States can do a lot to support such development.

Supported by the European Union, its Member States and development finance institutions (DFIs), national policymakers should develop dedicated **green MSMEs master plans** as part of their development and/or inclusive green economy strategies. These plans would include, at least, the following reforms.

A. Bridging the trust gap

Commercial banks and other financial institutions (FIs) are often reluctant to fund MSMEs. In cause, a general perception of this sector as risky due to high rates of failure, but also lack of credit histories, collaterals, and/or external credit guarantees. Whilst the legitimate part of the FIs’ risk aversion relates to high failure rates amongst MSMEs, two mechanisms can help reduce the undue share of risk aversion from financial institutions:

1

Ensuring MSMEs can pledge movable assets as collateral

National policymakers should ensure they have an **advanced secured transaction framework** that governs the creation, priority, and enforcement of pledge over all types of assets. Crucially, this must include **movable assets**, which represent the largest share of MSMEs’ capital stock. When collateral rights are split into diverse pieces of legislation, they should be integrated into a new comprehensive law to increase transparency and predictability for creditors. Equally important, establish **modern collateral registries** that act as centralised registration mechanisms for interests in fixed and movable assets, with online public access.

2

Improving & greening credit guarantee schemes (CGSs)

National policymakers should **evaluate and improve existing CGSs** with a focus on reach, efficiency, and additionality. Further to this, they should add **environmental commitments in CGSs mandates** to favour green MSMEs and incentivise environmentally-friendly behaviour amongst MSMEs. Where CGSs are lacking or insufficiently funded, development finance institutions (DFIs) and international donors should help establish such **green credit guarantee schemes** (see recommendation 6). If concerns remain amongst banks over the use of movable assets as collateral, make use of dedicated credit guarantee schemes such as the Second Loss Partial Credit Guarantee established by the World Bank.

B. Bridging the information and capacity gap

The information and capacity gap revolves around three dimensions. Firstly, financial institutions often lack information on MSMEs' financial health but also on their environmental and social impacts. Secondly, MSMEs lack knowledge about existing financial services, support mechanisms, and regulations. Finally, MSMEs often suffer from a lack of skills (in areas such as business, finance, and environment) which hamper their viability and creditworthiness. Three sets of policies could help bridging this gap:

3

Creating a robust, but simplified chain of ESG information

On top of **legal status for green MSMEs**, national policymakers should establish **green taxonomies** that classify sustainable economic activities. Drawing on the design of existing ones to more easily attract international green finance, these taxonomies should be adapted to local and regional realities. Second, **corporate sustainability reporting rules** should require large companies – and smaller companies in high-risk sectors – to report on their risks, opportunities and impacts on the environment (i.e. double materiality). **MSMEs should be subject to lesser requirements** that allow assessment of taxonomy alignment. Lastly, **minimum standards for sustainability-related financial instruments and products** could be set up.

4

Making credit information sharing more granular and green

Where credit bureaus and registries exist, national policymakers can bridge the information gap by **eliminating minimum loan thresholds** for being included in databases, and **reporting negative and positive credit information**. This would allow MSMEs to establish a positive credit history that can be used as “reputational collateral” to access credit. Where it is lacking, policymakers should **initiate digital data-sharing platforms** between financial institutions and data producers, therefore facilitating credit scoring and the sharing of **ESG information** on borrowers (supported by 3.).

5

Establishing MSMEs agency as a one-stop-shop

Where it does not exist, national policymakers should establish an MSMEs' one-stop-shop with liaison offices spread around the country. It would be tasked to **increase MSMEs' awareness and use of existing support mechanisms** such as credit guarantee schemes or group lending programs, **provide technical assistance and training** which can lower failure and loan rejection rates, and **facilitate business registration** (e.g. information, benefits of formal registration, partnership with business organisations and act as registration desk). Lastly, these agencies should **support the creation of a pipeline of bankable green projects** by acting as green economy incubators and certifiers of taxonomy alignment.

C. Bridging the financing ecosystem gap

Whilst financial institutions can be incentivised to lend more to MSMEs via the bridging of existing trust, information and capacity gaps, some countries might face a more fundamental problem – an imbalanced financial ecosystem which can take the forms of an over- or an under-development of a type of financial source. Taking into account the local context and the level of competences, relevant actors should:

6

Unleash DFIs' potential

The excessive risk aversion of Development finance institutions (DFIs) creates a critical gap in development finance. Consequently, investment remains mostly focused on senior loans for medium and large enterprises in medium-income countries. To increase DFIs' risk-taking support (e.g. via mezzanine loans, guarantees, equity) towards green MSMEs and low-income countries (LICs), we suggest:

- **Revising DFIs' mandate to include lending targets** towards green MSMEs and LICs. DFIs that have such targets tend to reach them. DFIs' return on assets being often low, their current margin of manoeuvre to increase risk-taking appears small. Creating lending targets could therefore require increased support for DFIs' risk-taking capacity (cf. next point).
- **Setting up joint green MSMEs financing facilities** as off-balance sheet funds capitalised by donor equity and supported by public guarantees. By supporting DFIs' risk-taking, such facilities could unleash their potential to support green MSMEs, especially in LICs. Negotiators of the UNFCCC and the CBD could set up such a facility as a standalone vehicle, as part of the Global Environment Facility, or by reinforcing the MSME pilot programme of the Green Climate Fund and easing its accreditation requirements. European DFIs could also set up a European green MSMEs co-investment vehicle by drawing on the support from the European Fund for Sustainable Development Plus (EFSD+) and the External Action Guarantee (EAG).
- **Participating in national dialogues** to facilitate alignment of DFIs investment and technical assistance with national development and environmental priorities. Involving national authorities, EU delegations, MSMEs representatives, financial institutions and DFIs in structured national dialogues can facilitate the creation, or revision, of national inclusive green economy strategies composed of reforms supporting green activities and enterprises and improving the investment climate, and of grants, technical assistance and strategic investments.

7 Improve consumer protection to reduce irresponsible lending

Avoiding irresponsible lending which leads to over-indebtedness, requires national policymakers to establish regulation(s) that expands to a broad scope of credit products and includes: **minimum criteria for creditworthiness assessment; interest rate caps** at levels that protect consumers from predatory practices without reducing lending rates to creditworthy MSMEs; **minimum criteria for pre-contractual information** and **harmonised forbearance measures**.

To avoid an uneven playing field which favours less regulated non-financial entities, national policymakers should, in particular, establish a **unique framework for microfinance loans that applies to all microfinance lenders** (e.g. commercial banks, microfinance institutions, cooperative banks and financial NGOs). This framework should cover at least the definition of microfinance loans, methodology for creditworthiness assessment, pricing of loans, and harmonisation of caps on interest rates and repayment obligations.

8 Improve the quality of public spending and reduce the cost of debt

National policymakers should establish **advanced fiscal rules which differentiate between current and future-oriented expenditures**, on top of efficient public financial and debt management legal frameworks which can reduce debt servicing costs by increasing investors' confidence. Furthermore, **independent fiscal councils** should be tasked with monitoring public budgets, debt sustainability, forecasting macroeconomic variables, but also estimating funding gaps.

Introduction

Debates on the transition to a more sustainable economy often overlook the role of micro, small, and medium enterprises (MSMEs). It has become commonplace for global economic policy thinking to emphasise the necessity to develop mechanisms to support the transition towards a more sustainable economy. Yet, this debate often ignores micro, small, and medium enterprises (MSMEs), particularly in emerging and developing countries (EDC) where they are unable to follow, let alone contribute to the pace of the transition, or are simply out of the reach of economic and financial mechanisms designed to support such a transition. On top of that, MSMEs have been severely affected by the consequences of the COVID19 pandemic.¹²

While being major engines of economic development at local level and of critical importance to sustainable practices in the value chain, MSMEs largely remain neglected by economic and financial policies, which are only seldomly tailored to appropriately take into account the constraints of smaller size businesses. Meanwhile, MSMEs worldwide represent 90% of businesses and more than 50% of total employment¹³, and represent powerful leverage to reduce poverty and inequality, as well as achieve several other sustainable development goals (SDGs).¹⁴ MSMEs usually have significant potential to innovate and go green and often host activities which tend to be conducted in more sustainable ways than in larger companies.¹⁵ MSMEs – especially in the Global South – are more exposed to the adverse effects of environmental change¹⁶, due to their position in the value chain, and are therefore the best candidates to implement both adaptation and mitigation strategies.

This report aims to contribute to the support of “green” MSMEs and local green enterprises (LGEs) in developing and emerging countries, suggest regulations and instruments which would support them and incentivise other small and medium entrepreneurs to turn towards more sustainable practices, thereby nurturing economic development of the concerned countries in an environmentally sustainable way. There are several steps outlined below to meet this objective:

- **Firstly, to sketch institutional settings and economic context in which MSMEs and LGEs operate in our case study countries** (section I). This involves comparing the legal definition of (green) MSMEs as well as their size distribution, assessing their contribution to employment and GDP, their sectoral concentration and possible inclusion in existing development and green economy strategies. This contextual analysis is necessary to understand the local situation of LGEs and green MSMEs, and assess the potential impact future regulatory and policy changes might have;
- **Second, to diagnose the key barriers faced by green MSMEs and LGEs in developing and emerging countries** (section II) based on the result of surveys conducted in our case study countries;
- **Finally, to identify financial and economic reforms which could support green MSMEs and LGEs in developing and emerging countries** (section III).

¹² Tripathy & Bisoyi (2021); Shafi et al. (2020); Saturwa et al. (2021)

¹³ CNUCED (2020)

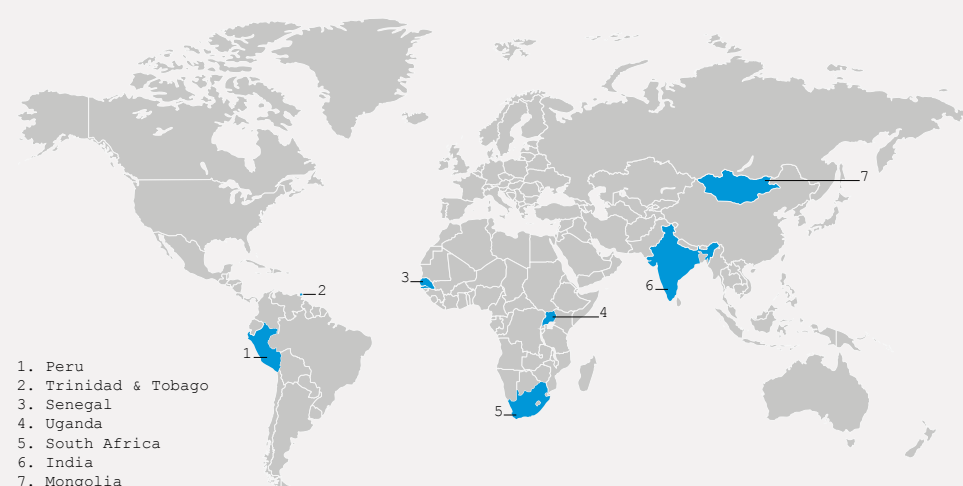
¹⁴ UNDESA (2020), pp. 5-37

¹⁵ As is shown by their less-than-proportional contribution to GHG emissions or pollution.

¹⁶ Samantha (2018); Isa & Mangifera (2019)

This report is a synthesis of contextualised analysis designed to capture key barriers faced by MSMEs/LGEs and best practices to overcome them. Whilst several academic and institutional papers already discuss how to support small businesses to go green – and we will echo some of their diagnosis or recommendations – this report is based on the evidence collected with partners in each country. Its findings take into account the respective context of each country and is focused on size-dependency in financial and economic policies, revolving around a reassessment of the “*Small Is Beautiful*” narrative.

This synthesis report builds on findings from a set of developing and emerging countries, raw statistical data, and literature. The core of this synthesis is based on two main types of documents provided by seven countries, i.e. Peru, Trinidad & Tobago, Senegal, Uganda, South Africa, Mongolia and India (see Map. 1): (a) **a contextual financial analysis (CFA)**¹⁷ designed to obtain first-hand information on the situation of LGEs and MSMEs locally, as well as broader information on the economic and financial national regulatory landscape; (b) **a national report** following standardised questions to display the results in a consistent analytical framework. These findings are then combined with raw data from international databases (e.g. OECD, WB, IMF) and enriched with an extensive review of the academic and institutional literature existing on green MSME/LGE in developing and emerging countries.



Hummingbirds: is small beautiful?

In his 1973 thought-provoking book *Small Is Beautiful: Economics as if People Mattered*, Ernst Schumacher challenged one of the most solid and grounded truths of modern economic theory: the concept of ‘economies of scale’. Here, Schumacher dissects the ways in which a large-scale organisation sometimes be an obstacle to functionality, **while smaller firms may gain advantage in certain conditions**. On top of this, and more crucially, how successful large companies often decentralise their operations in a way that mirrors a network of actually small to medium size units.¹⁸

Schumacher’s work intervenes a decade after a series of research papers coordinated by Amartya Sen, which first provided evidence for an **inverse relationship between the size of**

¹⁷ This CFA is composed of more than hundred questions covering economic (e.g. support mechanisms, informality, classification systems, legal status, reporting requirements) and financial topics (e.g. banking regulations, collateral laws, debtors and consumer protection, sustainable finance, digital finance).

¹⁸ Schumacher, 1973, chap. V.

a farm or landholding and its productivity per acre.¹⁹ This observation by Sen has since been confirmed by a considerable amount of scientific publications worldwide, both in the least developed, emerging and even developed economies.^{20, 21}

This finding of agricultural economics remains strongly evidence-based²² and has triggered questions as to whether similar observations would also exist in other sectors, which would display not farm but *firm-size* productivity inverse relationship. Whilst the results are much more contrasted, and **labour productivity tends to increase with firm size, noticeable counter-examples do exist**, notably in the Indian manufacturing sector.²³ Nevertheless, despite a clearer advantage of larger firms regarding *productivity* (mostly of labour or capital), some academic research tends to show that this fact is not reflected in the profitability – in Canada, the *profitability* of firms measured by their ROA displays a maximum value for the group of enterprises between 5 and 20 employees, and decreases continuously above that size threshold.²⁴

So far, only strictly economic aspects – productivity & profitability – have been brought to the debate. However, for the specific issue of the role of MSMEs and LGEs in catalysing sustainable development goals, the question of employment (which reflects on the issue of poverty and inequality), and of course environmental sustainability, need to be taken into account as well. While the evidence remains contrasted in terms of job creation and stability, from the perspective of environmental and social returns, the *Small is beautiful* narrative seems to hold. Put another way, where value is determined as a composite of economic, social and environmental returns, small is indeed beautiful. Despite the fact that larger companies tend to have better administrative capabilities, which facilitate environmental reporting, **MSMEs appear to have stronger incentives and display a higher willingness to implement sustainable practices.**²⁵ Further to this, MSME staff awareness of sustainability practices appears conversely correlated with firm size²⁶ (higher for micro and lower for medium-sized enterprises).

19 Sen, 1962 ; Sen, 1964 ; cf. Rudra & Sen, 1980. Labour productivity, on the other hand, remains positively associated with larger farms, although counter-examples do exist as well.

20 E.g. Carter (1984); Ünal (2008) – Turkey; Fan & Chan-Kang (2005) — Asia.

21 A possible explanation of this observation relates to the flexibility of factor endowments in small-scale agriculture, which tends to increase the labour/land ratio for smaller farms and hence generate higher land productivity. Other explanations involve the forms of land tenancy and differential management strategies. More discussion in: Hanumantha Rao, 1966

22 Despite counter-arguments regarding the effect of using nominal versus real productivity measurements

23 De & Nagaraj, 2011

24 Lafrance, 2012

25 Montmasson-Clair et al., 2019, p.3 ; see also : Moore & Manring, 2009.

26 Marks & Hidden (2017), p.20

A close-up photograph of a person's hands operating a vintage sewing machine. The person is wearing a red knitted sweater. The fabric being sewn has a vibrant, geometric pattern in shades of blue, yellow, and orange. The sewing machine is a light-colored, possibly white or cream, with dark metal components. The background is slightly blurred, showing more of the fabric and the machine.

CHAPTER 01.

MSMEs & LGEs IN CONTEX

KEY TAKEAWAYS

- **Micro enterprises account for the largest share of MSME number and employment**, with the notable exception of South Africa where small enterprises represent the major share of MSMEs;
- Micro and small enterprises make up the largest share of MSME turnover;
- Major characteristics of emerging and developing economies, **informality has mixed impacts and varies in intensity from one country to another** – representing up to 96% of a country's employment and 50% of its GDP;
- The main share of MSME activity seems to be concentrated in the **secondary sector** (except for Senegal), in particular in wholesale and retail trade, manufacturing, and construction;
- **Legal status of green and social enterprises and green taxonomy** are the most frequently lacking MSME definitional elements in the case study countries;
- Policy-wise, countries mostly lack specific support mechanisms towards LGEs or towards the greening of MSMEs;

I. MSMEs & LGEs in context

This section provides an overview of the MSME and LGE landscape in the specific context of seven case study countries, based on the evidence provided by respective partners in those countries and additional data. The goal of this overview is to get a grasp on how MSMEs and Local Green Enterprises (LGEs) are rooted in their relevant national economic and institutional frameworks. This implies a description of the **legal conditions** under which MSMEs and LGEs are defined (or not), and of the legal status they can access; an analysis of the **distribution of MSMEs** by size, economic activity, and contribution to employment and GDP in the surveyed countries. Finally, a summary of the different **national development and environmental strategies** involving LGEs and green MSMEs, or aiming to foster the greening of small businesses.

1. Definitions, legal status and classification

Enterprises are usually defined as micro, small, or medium in function of their size.

Their size is usually captured via three criteria: number of employees, total assets, and/or annual turnover or sales. The most commonly used thresholds are those of the International Finance Corporation (cf. Table. 1.), according to which an enterprise will be labelled as an MSME if it complies with at least two out of the three criteria.²⁷ In practice, the number of employees is the most commonly used criterion in both national and international statistics for comparative purposes. Nevertheless, thresholds used may vary from one country to another, as is the case among the reviewed countries (cf. Table. 2).

Table 1 - Cross-country of MSME definitions by employees

Country	Firm size class		
	Micro	Small	Medium
Mongolia ²⁸	<10	<50	<200
Uganda	<10	<50	<100
South Africa ²⁹	<10	<50	<250
Peru	<10	<100	/
Trinidad and Tobago	≤5	<25	<250

Table 2 - IFC thresholds to define MSMEs comparison

Indicator	Firm size class		
	Micro	Small	Medium
Number of employees	<10	<50	<300
Total assets (US \$)	<100,000	<3 million	<15 million
Total annual turnover (US \$)	<100,000	<3 million	<15 million

²⁷ Small matters, ILO, 2019

²⁸ Source: The revised Law of Mongolia on Support of Small and Medium Enterprises and Services (2019)

²⁹ Source: The National Small Enterprise Act 102 of 1996 (as amended) Revised Schedule 1 of the National Definition of Small Enterprises in South Africa, Government Gazette No.399, Department of Small Business Development, 15 March 2019

Local green enterprises (LGEs) are MSMEs delivering environmental and social benefits to their communities.

Whilst there is neither a universally accepted definition of Green MSMEs nor precise agreement on their remit, the term broadly refers to MSMEs which implement a set of socially and environmentally positive production and management measures. These include efforts in waste management, resource efficiency, business certification (e.g. ISO 14000 standards), participation in environmental projects³⁰, etc. On top of involving environmentally-positive outcomes, local green enterprises (LGEs) aim to deliver social benefits to their community³¹ and are often committed to gender equity and inclusiveness.³²

There is often a lack of official definition and legal status of LGEs and Green MSMEs at both national and international levels (see Table.3). Whilst legal definition and status are absent in many countries, only Mongolia and South Africa are advanced in the process of establishing an official classification system of green/sustainable economic activities – the so-called Green Taxonomy.³³ This lack of harmonised definition might have an impact on international comparisons, and on the potential responses to the issues faced by green MSMEs and LGEs (cf. section II on key barriers).

2. Number of MSMEs and size distribution

Considerable variations exist in terms of the abundance of MSMEs measured by the number of MSMEs per 1000 inhabitants (cf. fig.2). The variation ranges from 1 (Uganda) to 53 (Peru).³⁴ Meanwhile, a stronger grasp on the economic structure of the studied countries is given by breaking down MSME density by sub-category, i.e. the relative proportion of micro, small and medium enterprises (cf. fig.3).

Fig. 2. Number of MSMEs per 1,000 people (2019)

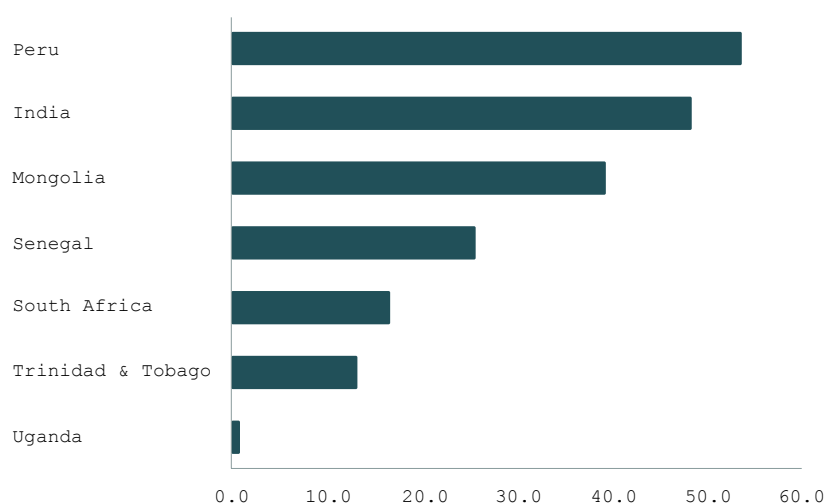
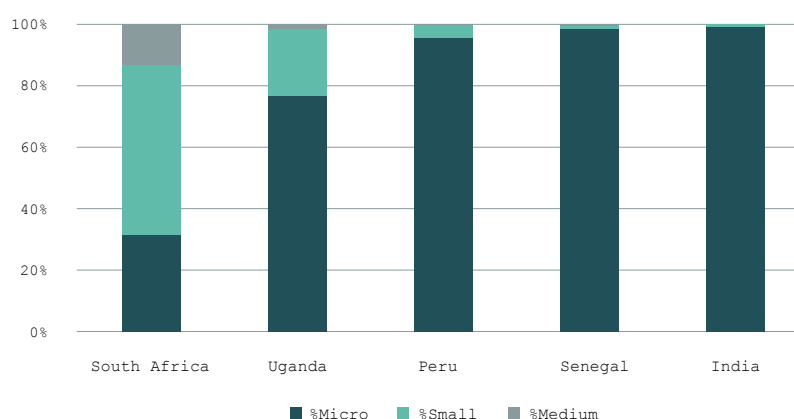


Fig. 3. Relative share of Micro, Small & Medium enterprises in the case study countries

(SME Finance Forum, 2019)



Microenterprises often represent the lion's share of MSME employment, total business numbers and turnover in many emerging and developing economies.³⁵ The bulk of MSMEs is made up of microenterprises, especially in Peru (95.5%), Senegal (98.4%) and India (99.4%). Only in South Africa are small (rather than micro) enterprises the dominant share of MSMEs (54%), yet micro-enterprises nevertheless account for the major share of total MSME turnover

³⁴ Interestingly, these values are partly in agreement, and partly in sharp contrast with earlier studies, particularly for India, in which MSME density seems to have risen substantially, and Africa, whose MSME density has decreased. See: Kushnir et al. (2010); Gonzales et al. (2014), p.11; Dano-Luna et al., (2018), p.17

³⁵ Keeping in mind that the definitions of MSME are not always uniform between countries

(35%, cf. fig.4).³⁶ In the countries for which such data is accessible (Peru and India), the share of MSME employment broadly follows a similar size distribution with 80% and 96% of total MSME employment respectively being concentrated in microenterprises (fig.5).

Fig. 4. Share of total MSME employment by micro, small and medium enterprises

Source: SME Finance Forum, 2019

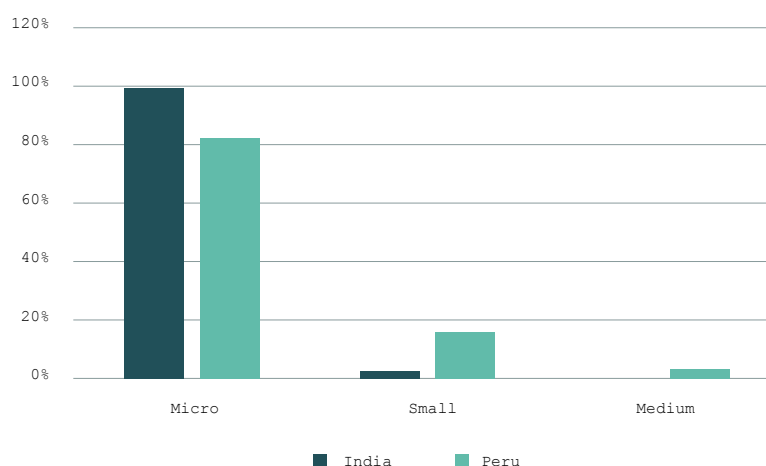
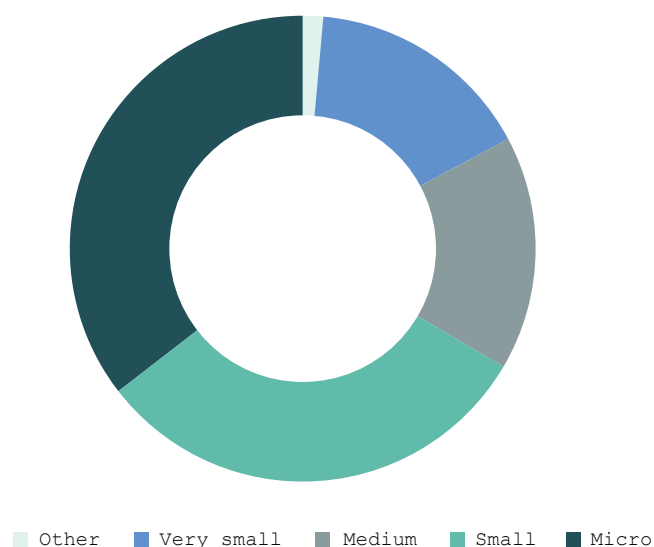


Fig. 5. Share of total MSME turnover by size of enterprises in SA

Source: IFC (2020)



Arguably, microenterprises should be a primary target of support mechanisms and have their specific needs and characteristics systematically considered by policymakers. However, although they account for the larger part of MSMEs and MSME employment, **microenterprises usually do not represent the main share of the MSME finance gap** (cf. section III.).

Beyond their breakdown by size sub-category, the crucial macroeconomic question is what part of total employment and GDP are MSMEs accounting for?

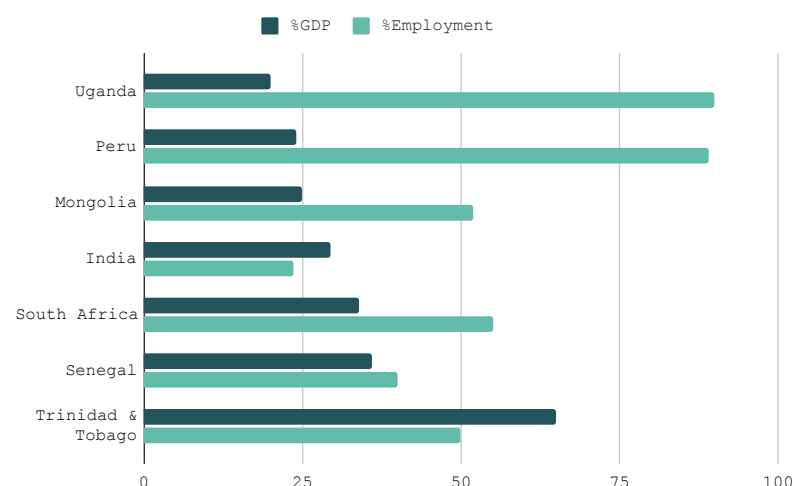
³⁶ Such type of data was not available for Trinidad & Tobago, but a proxy of the relative share of micro, small & medium enterprises can be found in the size distribution of MSMEs as a share of total employment, where microenterprises account for some 44% of the total (fig.xxx).

3. MSMEs contribution to total employment & GDP

MSMEs vary greatly in terms of their share of total employment and GDP (fig.6). Among the case study countries, the share of GDP represented by MSMEs varies from 20% (Uganda) to 65% (Trinidad & Tobago); whereas the share of MSME-based employment displays an even larger variation, such as between 23.5% (India) and 90% (Uganda).

Fig. 6. Share of GDP and employment accounted for by MSMEs in the case study countries

Source: MTIC 2015; OECD 2018; IFC 2018; MSC 2020



This gives an indication of MSME productivity³⁷, which can help tailor recommendations depending on whether the considered country's MSME landscape is stronger in contribution to value-added or in employment. Yet, this largely depends on the sectoral composition of the national MSME landscape, which could be subject to significant cross-country variation (cf. 5.).

4. Level of informality

Major characteristic of developing economies, informality has mixed consequences that should be taken into account by policymakers. While the existence of an informal economy may shelter a significant part of the population against extreme poverty and unemployment³⁸, informality among enterprises also often proves detrimental to their access to finance.³⁹ It is therefore essential to diagnose the share of the informal economy among the different countries when tailoring support policies for green MSMEs/LGEs.

Informality appears mostly situated among MSMEs, as illustrated by the Indian case and its 47.6 million unregistered MSMEs out of a total of 55.8 million.⁴⁰ Unfortunately, specific data on the percentage of MSMEs, green MSMEs and LGEs operating in the informal economy has varying degrees of availability. We are thus left with the general indicators of the relative size of the informal economy as a proxy.

³⁷ It serves as a proxy for average MSME labour productivity, since the ratio between the share of MSME contribution to GDP and the share of employment concentrated in MSMEs informs us on how large a proportion of the country's GDP can be made with a given share of its labour force.

³⁸ E.g. [BASSI, V., PORZIO, T., SEN, R., TUGUME, E., \(2021\)](#)

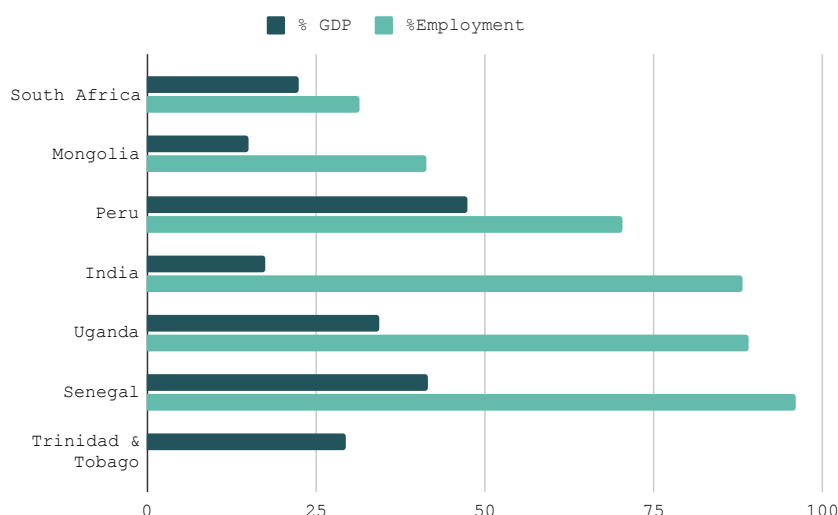
³⁹ Cf. Section II. 2.3.

⁴⁰ World Bank (2018)

Informality varies in intensity from one country to another. This variation can be explained by the inverse relationship between informality level and economic development, measured by GDP per capita.⁴¹ Among the surveyed countries, Senegal has the highest percentage of informal employment (96%), while South Africa has the lowest (31.5%); However, the highest level of informality in terms of GDP is reached by Peru (47.5%, with a significant margin of error), and the lowest recorded level is by Mongolia (15.1%).

Fig. 7. Size of the informal economy

Source: WB, 2017; ILO, 2019; INEla; IMF, 2020



5. Sectoral distribution

On average, MSMEs appear mostly active in the secondary sector (wholesale and retail trade, manufacturing, and construction), ahead of tertiary (services) and primary sectors (agriculture, mining).⁴² In **South Africa**, the largest sectors of MSME operations are wholesale and retail trade, construction, and domestic services (see fig.7). This is partly consistent with the **Indian** data, which shows trade (36%) and manufacturing (31%) as the two major MSME sectors of operation.⁴³ In **Mongolia**, most MSMEs operate in the trade (51%) and services sectors (32%), followed by manufacturing (19%) and agriculture (6%).⁴⁴ In **Peru**, the three largest MSME economic sectors are trade (46.2%), services (40.6%), and manufacturing (8.4%).⁴⁵ Data from other countries confirm this picture: in Rwanda, where the largest sectors of MSME activity are wholesale and retail trade (24%), and manufacture and construction (29%)⁴⁶; in Egypt, where trade and manufacturing account for 92% of total MSME operations⁴⁷; in the Philippines, where wholesale and retail trade together with manufacturing account for 58% of MSME activity.⁴⁸ **Senegal** appears the exception, as most MSMEs operate in the agricultural sector.

41 Williams, 2015

42 This contrasts with the global composition of economic activity as a whole in these countries

43 Boateng et al. (2019)

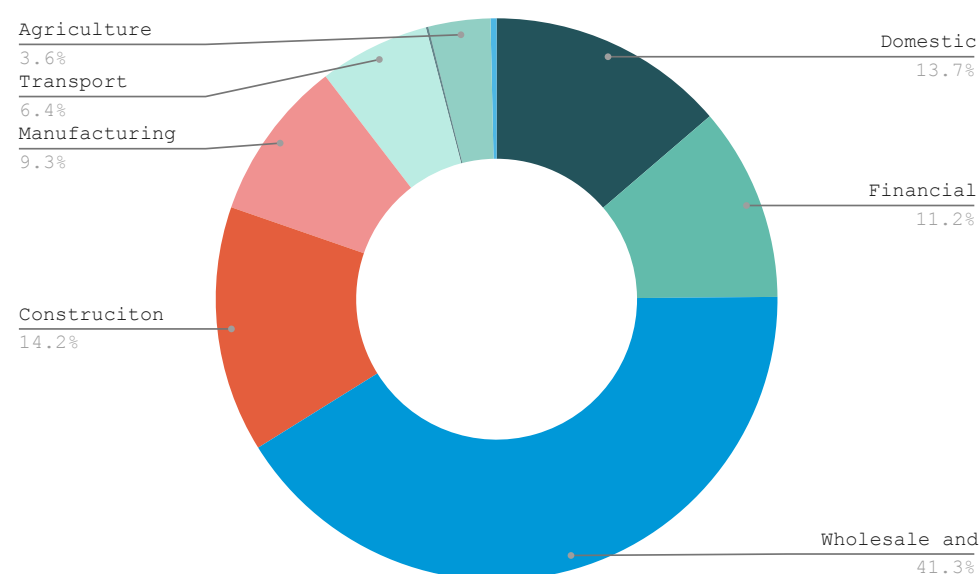
44 National Statistics Office, "[Business Registry Report 2018](#)", 2019.

45 Ministerio de la Producción, Anuario Estadístico Industrial, Mipyme Y Comercio Interno 2018

46 Rwingema (2020)

47 Shelaby (2019)

48 DTI, [Philippines MSME Statistics](#), 2020.

Fig. 8. Distribution of MSMEs in South Africa by sector

6. MSMEs in economic and environmental policy

Whilst most surveyed countries have (green) economic development strategies, they rarely target (green) MSMEs/LGEs. All the surveyed countries have national and/or regional economic development strategies, which in most cases incorporate environmental criteria. Most countries also developed green economy strategies at national level, but which only seldomly target (greening of) MSMEs or LGEs, except for India and Trinidad & Tobago.

Other more specific key policies in support of LGEs include plans devoted to the creation of green jobs (Senegal, Uganda, South Africa), incubation policies (Senegal, South Africa), and certification schemes for environmentally positive activities (India, Trinidad & Tobago).

Table 4 - Landscape of green economy and development economy initiatives

	T&T	PE	SN	UG	ZA	IN	MN
National/regional economic development strategy	YES	YES	YES	YES	YES	YES	YES
Green economy strategy	YES	NO	YES	YES	YES	YES	YES
Support mechanisms towards LGEs and greening MSMEs	YES	YES	NO	NO	NO	YES	YES

YES
UNCLEAR
NO

CHAPTER 02.

IDENTIFYING KEY BARRIERS

KEY TAKEAWAYS

- **Lack of access to formal sources of finance, such as banks, is the most stringent issue for green MSMEs and LGEs.**
- This lack of access to formal sources of finance relates to **the importance of informality** in developing and emerging economies, and the consequent dominance of informal sources of finance – such as friends, family, and moneylenders. It is also explained by three categories of internal and external barriers:
 1. **Financial barriers** (i.e. lack of collateral, insufficient credit guarantees, cumbersome procedures, prohibitive interest rates. Whilst high interest rates can be partly explained by risk aversion, other factors pertain to availability and cost of capital in an economy);
 2. **Information and capacity gaps** (i.e. lack of access to MSMEs' credit information, MSMEs' lack of information about existing financial opportunities and services, lack of business skills and financial literacy);
 3. **Regulatory mismatches** (i.e. lack of supportive regulations, presence of burdensome regulations, unintended adverse effects of existing regulations);
- MSME finance gap has been estimated at about USD 5.2 trillion (2017), and varies between 5% and 20% of GDP at country level. The SME finance gap for fulfilling SDGs has been estimated between USD 4.9 and 5.4 trillion (2019).
- The largest share of the MSME finance gap is accounted for by the **SME segment**, except in Uganda.



II. Identifying key barriers

Considering the context in which MSMEs and LGEs operate in our case study countries, this section highlights major obstacles or barriers faced by green MSMEs and LGEs, which arise from their contextual financial analysis (CFAs). This might refer to issues in the pursuit of environmentally positive activities, or to issues hampering regular MSMEs from turning to greener processes and activities.

We first compare results from all countries to display **the most frequently mentioned barriers**, and those scored as most substantial. In doing so, we distinguish between external and internal barriers:

- **External barriers** are obstacles faced by green MSMEs or LGEs which arise from contextual factors where enterprises have no influence on an aggregate level. These may include the general business climate, interest rates, national and supranational regulations, social & cultural norms and values, etc.⁴⁹
- **Internal barriers**, refer to these obstacles that are dependent upon factors linked to the firm's capabilities and choices. This includes entrepreneurial attitudes, level of skills, processes, etc.⁵⁰

From a policy perspective, this distinction is key as it helps direct recommendations towards the appropriate target audience – be it national decision-making authorities, international organisations, regional/local actors and MSME/LGE managers.

After this aggregate presentation of the most frequent and severe barriers, we engage in a more **in-depth analysis of a subset of 4 signature issues**, regardless of whether they represent internal or external factors.

1. Typology & cross-country survey

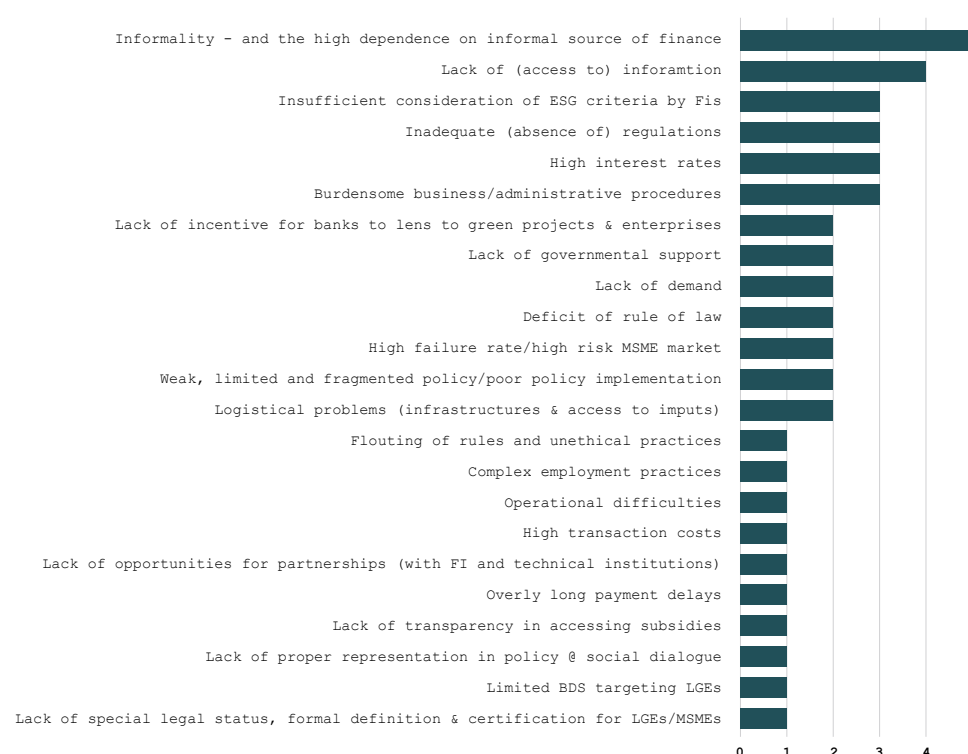
Poor access to finance is the most frequent, prominent and significant barrier, as it hampers MSMEs from turning green and green MSMEs/LGEs to prosper and remain viable. In these two subsections, we detail specific issues that contribute to this overarching problem, and which are critical in alleviating it.

1.1. External barriers

The four most frequently mentioned external barriers in national reports and CFAs are (see fig. xxx): **(1) Informality and the subsequent dependence on informal finance, (2) the insufficient consideration of social and environmental criteria by financial institutions, (3) the inadequacy of existing regulations or lack of necessary regulations and (4) the lack of access to information.**

49 Džafić et al, 2011, p. 154 ; Abdulghaffar & Akkad, 2020, pp. 118-119 ; Licastro & Sergi, 2021.

50 Abdulghaffar & Akkad, 2020, pp. 118; Licastro & Sergi, 2021, p.10

Fig. 9. Prevalence of main external barriers (number of countries)

Many of these barriers are also identified in other national contexts, such as *complex administrative procedures and/or obsolete requirements* (in a group of EaP countries⁵¹ as well as in Ohio⁵²), *inappropriate regulatory requirements & lack of information* (Asia-Pacific countries⁵³ and Ohio⁵⁴), *regulations and policies* (Australia⁵⁵, Malaysia⁵⁶, Greek dairy sector⁵⁷, Indian automobile manufactures⁵⁸), *high interest rates* (in Bosnia Herzegovina)⁵⁹, *lack of government support*.⁶⁰ Another study on barriers to the implementation of sustainable practices in textile-oriented Indian MSMEs also mentions the *lack of availability of bank loans to encourage green products and processes*⁶¹, as well as the *fear of failure*⁶², which echoes the high failure rate of MSMEs mentioned in the CFAs.

The issue of informality and lack of consideration of environmental criteria by Financial Institutions are virtually absent from comparative academic studies. This is quite surprising for the latter, but much less for the former, since informality remains primarily a feature of emerging and developing economies.

51 Mazur et al. (2016), p.22

52 Purwandani & Michaud (2021), p.589.

53 Cheok & Singh (2018) (APEC Policy brief n° 19)

54 Purwandani & Michaud (2021), p.589.

55 Caldera et al. (2017), p.20

56 Ghazilla et al. (2015), p.660

57 Ghadge et al. (2017), p.2003

58 Stevens (2010), Ashford and Hall (2011), Kishawy et al. (2018), Bag et al. (2018) ; cf. Virmani et al., 2020.

59 Džafić et al. (2011), p.158.

60 Ibidem.; see also : Purwandani & Michaud (2021), p.589; Moktadir (2018); cf. Karupiah et al. (2019), pp.10-11.

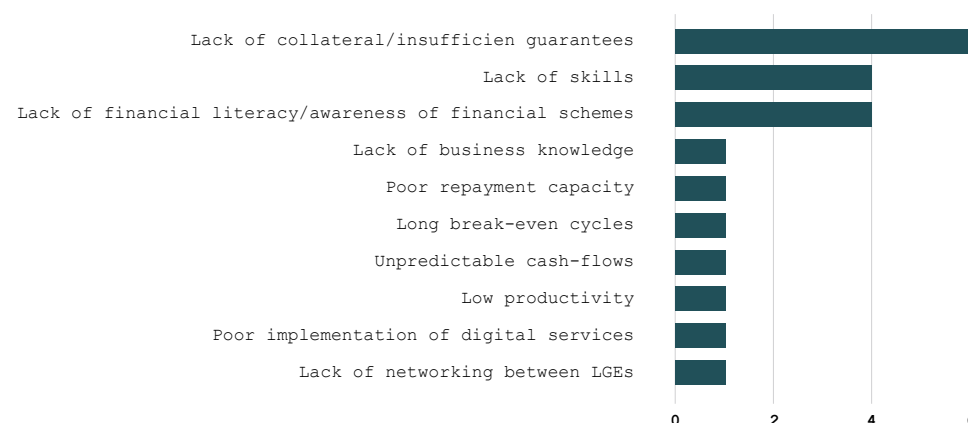
61 Mathiyazhagan et al. (2013) ; cf. Panigrahi & Nune, 2018.

62 Saad and Siha (2000); Revell and Rutherford (2003); Rao and Holt (2005); Perron (2005); Shrivastava (1995); cf. Panigrahi & Nune (2018).

1.2. Internal barriers

Regarding internal barriers, the contrast is even more striking, with 3 distinguished obstacles most frequently mentioned, namely **(1) the lack of collateral and/or the insufficiency of credit guarantees**, **(2) poor skills and/or business knowledge** and **(3) low levels of financial literacy and/or awareness of possible appropriate financial schemes**.

Fig. 10. Prevalence of main internal barriers (number of countries)



Many of these internal barriers are also identified in other countries and regions. The most commonly found obstacle in comparative literature is *the lack of skills and/or business knowledge*.⁶³ Only seldom are more specific internal financial barriers mentioned, such as the company's *limited own financial resources*⁶⁴ and *difficulty to secure credit guarantees*.⁶⁵ Other internal obstacles mentioned involve *low labour productivity*⁶⁶ and *the lack of awareness of environmental legislation and education concerning green practices*.

However, an important limitation to these cross-country comparisons is the fact that **most studies used for comparative purposes target SMEs rather than MSMEs, hence often omitting the 'micro' segment** (which was presented in the previous section, usually represents the lion's share of MSME employment and, sometimes, turnover).

63 Cheok & Singh (2018) (APEC Policy brief n° 19) ; Džafić et al. (2011) (Bosnia); Caldera et al. (2019), p.20 (Australia); Virmani et al. (2020); Purwandani & Michaud (2021) p.589 (Ohio) ; Hasan et al. (2021), p.53 (Indonesia).

64 Ghazilla et al., p.661 (Malaysia)

65 Džafić et al. (2011), p.158 (Bosnia)

66 Džafić et al. (2011), p.158

Table. 5. Signature issues by type and country

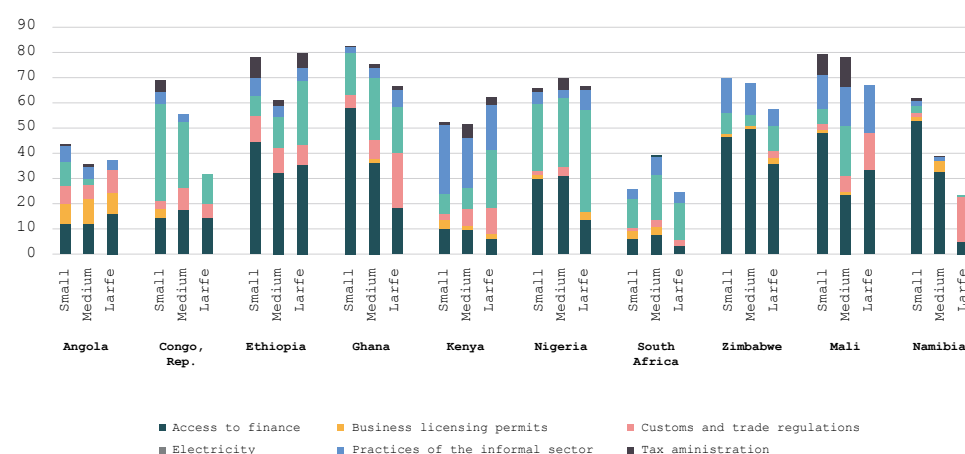
		COUNTRIES						
		Trinidad & Tobago	Peru	Uganda	Senegal	South Africa	India	Mongolia
SIGNATURE ISSUES	EXTERNAL	Lack of (access to) information						
		Weak, limited and fragmented policy/poor policy implementation						
		Inadequate (absence of) regulations						
		long/burdensome business/administrative procedures						
		High interest rates						
		High failure rate/High risk MSME market						
		Informality						
		Insufficient consideration of social and environmental criteria by Fis						
		Deficit of rule of law						
		Lack of demand						
		Lack of governmental support						
		Lack of incentives for banks to provide credits to green projects and enterprises						
		Lack of special legal status, formal definition & certification for LGEs/MSMEs						
		Limited BDS targeting LGEs						
		Lack of proper representation in policy & social dialogue						
		Lack of knowledge by FI of the specific risks of environmentally based projects						
		High dependence on informal finance and lack of access to formal finance						
		Lack of transparency in accessing subsidies						
		Overly long payment delays						
		Lack of opportunities for partnerships (with FI and technical institutions)						
		High transaction costs						
		Logistical problems (infrastructures & access to inputs)						
		Operational difficulties						
		Complex employment practices						
		Flouting of rules and unethical practices						
	INTERNAL	Lack of collateral/insufficient guarantees						
		Lack of financial literacy/awareness of financial schemes						
		Lack of skills						
		Lack of networking between LGEs						
		Poor implementation of digital services						
		Low productivity						
		Unpredictable cash-flows						
		Long break-even cycles						
		Poor repayment capacity						
		Lack of business knowledge						

2. Focal points: determinants of LGEs' lack of funding

The difficulty to access finance is the most prominent issue faced by MSMEs in general, and in particular by green MSMEs and LGEs in both low- and middle-income countries (as illustrated by figure 11).⁶⁷ Although issues are rarely ranked in order of severity in the specialised literature, lack of funding is the most frequent common denominator in the collected studies, appearing in more than 50% of the papers dealing with barriers and obstacles to green MSME development.⁶⁸ In South Africa, about 75% of MSME credit applications are rejected,⁶⁹ while loans to MSMEs in Mongolia account for only 17% of total domestic credit to the private sector.⁷⁰

Fig. 11 - Challenges faced by firms in sub-Saharan countries

Source: World Bank, Enterprise Survey Database



This difficulty to access finance has considerable adverse effects. On top of the very survival of MSMEs/LGEs, this structural lack of funding has considerable macroeconomic and environmental implications. This includes hindering local economic growth by inhibiting the ability of firms to create jobs, lowering their welfare capabilities, and rendering the transition to more sustainable practices more difficult.

The MSME finance gap is substantial and varies among countries. This lack of access to capital results in a substantial aggregate MSME finance gap⁷¹, which was estimated at about USD 5.2 trillion globally in 2017 – which is equivalent to 1.4 times the current level of global MSME lending.⁷² It is however difficult, from that estimate, to infer the value of the sum needed to support LGEs and to green the majority of MSMEs in developing and emerging countries –

⁶⁷ Dayé et al. (2016)

⁶⁸ See for example: Džafić et al. (2011), p. 146; Cecere et al. (2016); Gupta & Barua (2018), p.124; Karuppiah et al. (2019); Virmani et al. (2020), p.5; Jaramillo et al. (2018), p.5; Purwandani & Michaud (2021), p. 589; Hasan et al. (2020); Ghazilla et al. (2015), p.661; Cheok & Singh (2018), p.1.

⁶⁹ Fatoki & Odeyemi (2010)

⁷⁰ Enhancing access to finance for micro, small & medium enterprises in Mongolia, OECD Peer review note, 2016, p. 10.

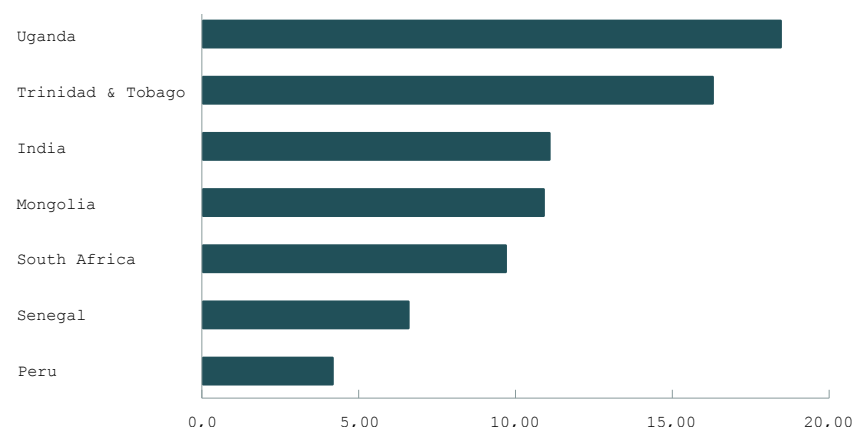
⁷¹ The MSME finance gap represents the difference between current supply of credit to MSME and potential demand which can potentially be addressed by financial institutions. The potential demand is estimated by taking the MSME equilibrium lending in developed economies according to the industry, age, and size categories, and applying this benchmark to MSMEs in developing countries.

⁷² East Asia And Pacific accounts for the largest share (46%) of the total global finance gap and is followed by Latin America and the Caribbean (23%) and Europe and Central Asia (15%). Source: IFC (2017); In India, the overall MSME credit gap is estimated to be ₹20 – 25 trillion (USD 253-316 billions). Source: Expert Committee on MSME (2019)

the MSME green finance gap.⁷³ Among the countries of our case study, this MSME finance gap expressed as a percentage of GDP is the largest for Uganda (18.4 %) and the smallest for Peru (4.2 %), with significant cross-country variation. Yet, to be properly addressed, a breakdown of this finance gap by size category of enterprises should also be taken into account.

Fig. 12. MSME Finance gap as share of GDP (%)

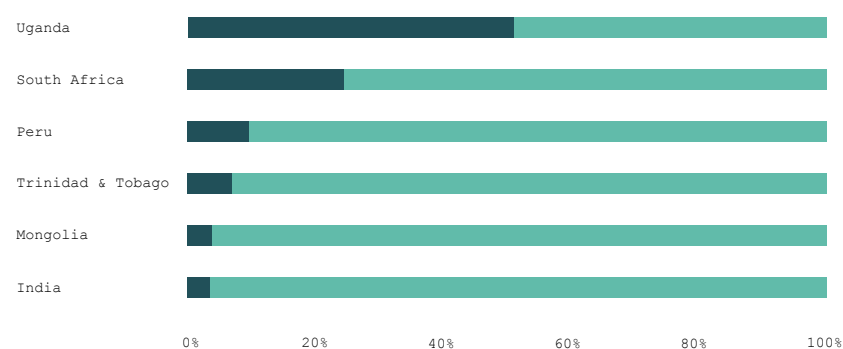
Source : SME Finance Forum, 2019



The MSME finance gap falls almost entirely on the SME segment – except for Uganda (cf. Fig. 12). Indeed, constraints to accessing finance are not uniformly spread over the MSMEs spectrum: they are particularly stringent at the “missing middle”, (i.e. SMEs that are too big to be eligible for microfinance, but too small for traditional credit or investment financing).⁷⁴ This issue has been particularly well documented in the context of agricultural MSMEs.⁷⁵ It leaves the question of which financial sources are lacking and why?

Fig. 13. MSME Finance gap by size of enterprise & by country, as% of GDP

Source : IFC, 2017



SMEs' low access to formal sources of funding appears the main barrier. This access to funding does not equally concern all forms of finance. In the early years of the firm, formal credit is rarely accessible due to poor credit history or insufficient collateral. Here, mostly informal sources

⁷³ As a reference point, the SME finance gap for fulfilling SDGs has been estimated between 4.9 and 5.4 trillion \$ (2019), but this range is probably both an underestimate – as it does not account for micro-enterprises –, and an overestimate, since it does not focus on developing countries.

⁷⁴ *The Unseen Sector: A report on the MSME opportunity in South Africa*, IFC (2018), p.14

⁷⁵ *Doran et al. (2009)*

of finance prevail. Private equity and venture capital therefore would seem to offer potential for an important source of early-stage financing. Over the long run, however, and although it would be worth disaggregating this result by firm size, bank financing prevails over equity financing.⁷⁶

There are four main barriers which directly contribute to the inability of MSMEs to access existing finance offers, namely: financial mismatches, regulatory mismatches, informality and information mismatches.

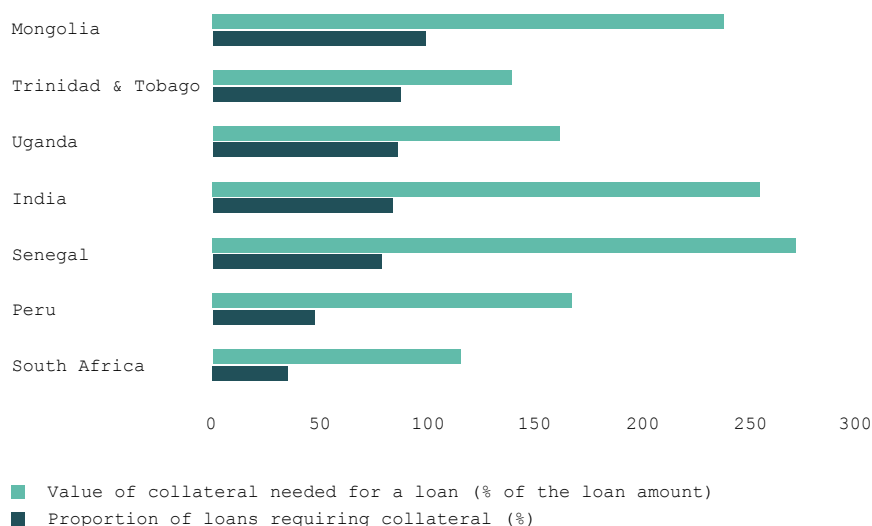
2.1. Financial barriers

Three key barriers are consistently reported as intrinsically linked to this lack of access to finance⁷⁷:

- (a) **Inappropriate collateral requirements and lack of credit guarantees.**⁷⁸ Aside from a general absence of credit history, the main reason why MSMEs/LGEs face difficulties in accessing formal finance is their inability to provide collateral that is almost always required to secure loans (see figure 14). Whilst (public or private) **credit guarantee schemes** can theoretically bridge this gap, these are still missing or underdeveloped in many countries. More fundamentally, the problem appears to lie in the nature of collateral requirements: they are simply **too high** (see figure 14) and/or **inappropriate** as MSMEs/LGEs simply do not possess the types of assets usually required by banks, namely fixed assets such as land or buildings. Indeed, 78% of the businesses' capital stock in developing countries is composed of movable assets such as machinery, equipment or receivables, and only 22% of immovable, or fixed, assets.⁷⁹

Fig. 14. The use of collateral (%)

Source : World Bank enterprise survey



⁷⁶ SME Finance Policy guide, GPFI - IFC, 2011, p.83

⁷⁷ Ibid. p. 14.

⁷⁸ ACODE (2021), p.16 ; Yoshino and Taghizadeh-Hesary (2018), pp. 5-6.

⁷⁹ *Alvarez de la Campa (2011)*

(b) **Prohibitive interest rates**⁸⁰ which are the result of commercial banks perceiving MSMEs lending as **risky and unprofitable**.⁸¹ High-interest rates can also reflect the **availability**⁸² and **cost of capital** in the economy (which can reach up to 30% in some low-income countries – see fig 15), bank-specific factors⁸³, the financial environment⁸⁴, and the banking regulations it has to abide by.⁸⁵ Last but not least, interest rates at which a country's private and public actors access international markets hinge on **each country's economic and financial fundamentals** (as reflected by its political stability and willingness to reimburse, the size of its economy, its growth rate, exchange rate, etc.). Domestic⁸⁶ central bank's reactions to inflation, as well as reactions by foreign central banks⁸⁷, also play a significant role in this complex conundrum.

Fig. 15. - Weighted average cost of capital against GDP per capita

Source: Sweerts, Dalla longa, van der Zwaan (2019)



(c) **Cumbersome application procedures** which tend to discourage MSMEs to devote time to applications for formal credit.

On top of supply and demand-side factors explaining MSMEs/LGEs' lack of access to finance, there are additional factors pertaining to the firm's business per se, notably the fact that the process of greening activities might be very costly – especially in the short run – as is shown by findings of the studies on Balkan countries highlighting the low profitability for enterprises to turn green⁸⁸, even more so in the absence of appropriate support.

80 In India, *top banks interest rates for MSME loans in 2022* varied from 7.65 % to 16.25% in 2022. Other documented interest rates for SME loans in low-middle income countries in 2020 vary from 6% in Brazil (25% in 2019) to 20% in Peru (OECD, 2022).

81 Mole & Namusonge (2006); *Expert Committee on MSME* (2019)

82 "In most developing economies, capital markets are immature, not well developed and lack capital stock, making it difficult to access and secure finance". In: *Ameli, Dessens, Winning, et al. (2021)*

83 That includes its size, capital structure, management efficiency, ownership pattern, quality of loan portfolio, overhead costs, etc. See e.g.: *Moore and Graigwell (2002)*; *Folawewo and Tennant (2008)*; *Demirgüç-Kunt and Huizinga (2000)*

84 That includes the number of players and their market share, the level of development of the banking system, etc. See e.g.: *Folawewo and Tennant (2008)*; *Ngugi (2001)*

85 E.g. interest rate ceilings, reserve requirements, etc.

86 Reactions to inflation vary from one central bank to another. For example, central banks in Turkey, Russia and Brazil raised interest rates in March to control inflation, while those in Mexico, the Philippines and Thailand kept interest rates on hold.

87 Recent research has shown that "each percentage point rise in US interest rates due to a "monetary policy surprise" tends immediately to lift long-term interest rates by a third of a percentage point in the average emerging market, or two-thirds of a percentage point in one with a lower, speculative grade credit rating." in: *IMF (2021)*

88 Licastrano & Sergi (2021), p.10.

2.2. Information and capacity gap

Another important barrier to MSMEs' access to finance is an information and capacity gap that revolves around three dimensions. First, financial institutions often lack information on MSMEs' financial health, but also on their environmental and social impacts.⁸⁹ This can lead to a lack of funding for creditworthy enterprises but also to excessive lending to credit unworthy enterprises. Second, MSMEs lack knowledge about existing financial opportunities, guarantee schemes (when they exist), policy support programs, or even existing regulations. Lastly, and intertwined with this lack of awareness, MSMEs often suffer from a lack of skills (business, finance, environmental) which hamper their viability and creditworthiness.

This multi-dimensional barrier has been often reported in our case studies, with the Uganda survey ranking it as the second most serious barrier to MSME greening and LGE development. Insufficient availability of credit-related information has been identified as a major difficulty in accessing formal sources of finance in many emerging and developing countries (e.g. the Caribbean⁹⁰). The Senegalese and Indian cases provide good examples of a top-down informational mismatch between financial schemes and the knowledge thereof: while appropriate funds and financial services might in some cases exist, the information about them and the appropriate procedures are missing.⁹¹ In Peru, a recent study revealed that about 67% of MSMEs had no experience in soliciting funds or credit guarantees.⁹²

Such lack of information, it should be noted, does not only concern financial schemes but also the implementation of sustainable practices, as well as management techniques in general. In India (Bundelkhand district), for instance, it has been reported farmers lack information on organic farming practices as well as on market linkages.

Overall, the dearth of information among MSMEs either about available financial schemes, government funding opportunities, or management options for greener activities is a major impediment to a financially sustainable implementation of green practices. On top of that, the lack of access to information about the MSME/LGEs by the financial sector impedes the development of *ad hoc* funding programmes and policies.

2.3. Regulatory mismatches

The naming of this issue might seem fairly vague to the reader, but there is a good reason for it. In fact, the way a specific country survey addresses the question of government regulations encompasses three different aspects:

- (a) The lack of supportive regulations.** Among yet non-existent critical regulations, the Trinidad & Tobago survey (CFA) mentions a sustainable finance roadmap, regulations promoting financial inclusion, and 'green', ESG or SRI labels.⁹³ More generally, the lack of concrete and detailed government involvement (i.e. beyond general green development strategies) in implementing regulations and policies that would ease

⁸⁹ Whilst corporate sustainability-related reporting is everywhere in its infancy, financial reporting is not. However, financial information about MSMEs tends to be of limited availability, but also less standard or transparent than financial information on larger firms.

⁹⁰ *Holden & Howell (2009)*

⁹¹ In India, for example (districts of Chamba, Mandi and Uttarkashi), the local administration lacks proper information about financial- or policy-related schemes, not solely because of poor government communication or insufficient circulation of information, but also because they are mostly busy with handling local communities' day to day issues. It is therefore also a question of time and resource allocation.

⁹² UNCDF (2020), p. 37

⁹³ Whilst ESG stands for "Environmental, Social, and Governance"; SRI stands for "Socially Responsible Investment".

MSMEs” access to funding is regularly deplored in national reports. Similarly, a lack of regulatory incentive to provide credits to green projects and enterprises is specifically reported in Peru. These issues also connect to the other frequently reported barrier of a lack of (direct) governmental support for MSMEs and LGEs (e.g. grants, guarantees, and concessional loans).

(b) The presence of burdensome regulations related to official **administrative registration**. Such regulations, according to the South African survey, imply high “*compliance costs such as the time taken to gather, understand, and comply with the rules, associated legal costs, [...] costs to annual registration, tax compliance, labour regulations*”. Again in South Africa, **licences and permits** and **tax and tariffs**, are seen as the most restrictive regulations for MSMEs. The difficulty to comply is negatively correlated with the annual turnover of companies.⁹⁴ This points to the need to ease regulatory constraints – and related costs – which mostly weigh on micro and small businesses.

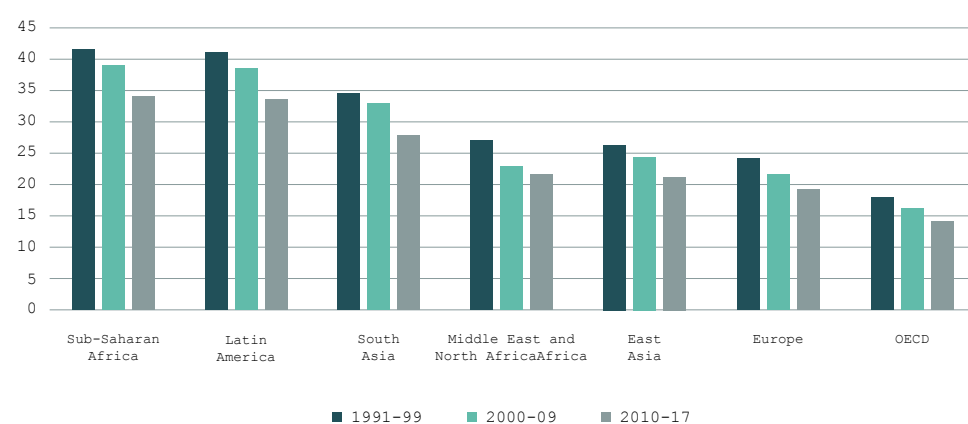
(c) The unintended negative effects of existing regulations. Regulations initially designed to provide support to small businesses are documented to have had negative consequences, notably in India. For example, the provision of **heavy subsidies for agricultural inputs** to farmers as incentives may result in making these farmers highly dependent upon external support. They may also drive land prices and rents up, and hence turn out detrimental to mid-scale and nascent farming businesses. Moreover, as also reported in Europe, **subsidies often mostly benefit larger farms**. Tailored subsidies have the potential to act for LGEs as a cushion against economic and environmental vagaries, and as a support for a sustainable transition.

2.4. Informality – match or mismatch?

Major characteristics of emerging and developing economies⁹⁵, informality has an impact on MSMEs access to finance. Whilst informality negatively affects MSMEs/LGEs’ access to formal sources of finance, it also combines with other factors to reinforce MSMEs/LGEs’ preference for, and dependence on informal sources of finance.

Fig. 16. - Average informality rates by region as percent of GDP

Source: Medina & Schneider (2019)



⁹⁴ [An Assessment of South Africa SME landscape](#), SME South Africa report, 2018, p.11

⁹⁵ See section I.4.

Informality is both a symptom of, and a response to, hindered development. Whilst the root causes of informality in developing countries are numerous⁹⁶, two variables most positively associated with it are perceived public sector corruption and the cost of starting a business. The two variables most negatively associated with informality are average wages (in Purchasing Power Standards, or PPS) and GDP per capita. This tends to show informality is both a symptom of and a response to features of hindered development. By hosting usually less productive activities, it drives GDP per capita downwards, but also answers to an underdeveloped labour market with low wage levels. Informality is also a consequence of high entrance costs for new businesses and reflects a generally low level of trust in public administration that is perceived as corrupt.⁹⁷

Informality can also be a helpful choice for MSMEs confronted with difficulties, such as high taxes, burdensome regulations and limited access to finance. Apart from the structural variables, studies have shown that the main reason for an enterprise to choose informality is the level of direct and indirect taxation and government regulations.⁹⁸ Yet, in emerging and developing countries, informality is sometimes a solution for small firms who face insufficient finance provisions. This may be due to regulations and supply-side barriers, or because there are few incentives for financial institutions to lend to early-stage MSMEs.

Informality carries negative side effects. While informality might shield against adverse socio-economic conditions⁹⁹, it also brings detrimental aspects for MSMEs/LGEs, such as limiting their:

- (a) **Growth and performance**¹⁰⁰
- (b) **Ability to claim property rights** that could serve as collateral for new credit
- (c) **Access to external sources of funds**, notably because they do not comply to the criteria imposed to banks by anti-money laundering regulations, excluding them de facto from the credit market¹⁰¹

Informality is both a cause and a consequence of the lack of access to formal finance. As illustrated in South Africa and India, informal finance from friends, family and money lenders are often the main sources of MSME finance¹⁰² (see Fig.17 and 18), because these loans are often free from collateral. Adding up local money lenders and employers, informal sources of finance represent more than 50% of MSME funding in South Africa.

96 E.g. the level of education, poverty, unemployment, lack of access to economic resources and property, tax burdens, overly bureaucratic governmental procedures, corruption, and lack of social protection.

97 Williams (2014); Williams (2015)

98 Schneider and Klinglmair (2004)

99 For the cost/benefit balance of informality in developing countries, cf. Standalone note n°1 'Informal economy: drawback or safety net'

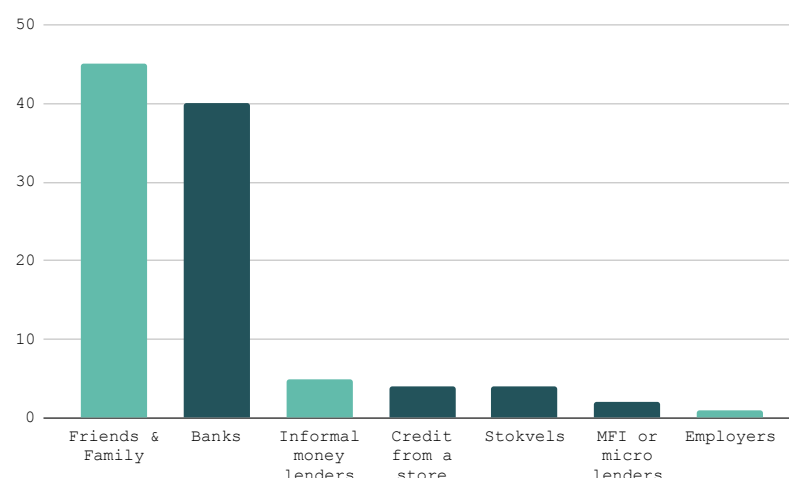
100 E.g.: McKinsey Global Institute (2014); *GPII & IFC (2011)*, p.81

101 Abraham & Schmukler (2017), p.2

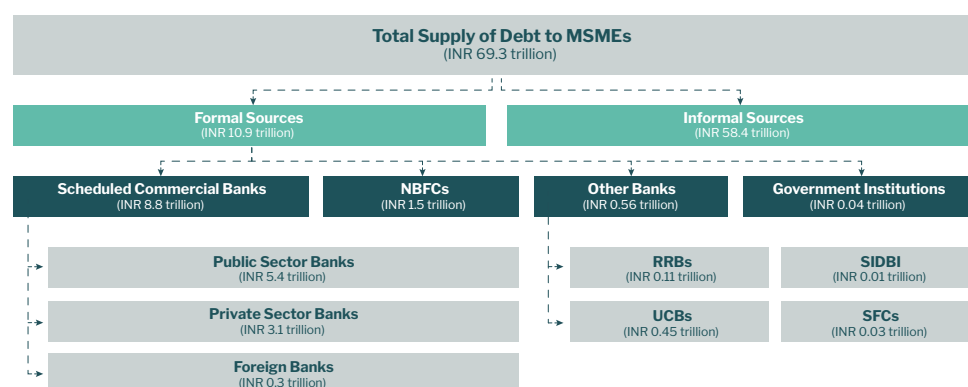
102 *An Assessment of South Africa SME landscape*, SME South Africa report, 2018, p.13

Fig. 17. Main sources of MSME finance in South Africa (% of enterprises)

Sources : IFC, 20218

**Fig. 18. Overall Credit Supply to MSMEs in India**

Source : MSME AR 16-17, Bank and NBFC ARs, SIDBI, RBI, NABARD, Primary Research, Intelicap Analysis



The informal economy is closely tied to the state of the environment. As many poor people depend on natural resources to support their informal economic activities (e.g. farming, fishery, forestry, crafts), they are particularly vulnerable to the impacts of climate change and environmental degradation, which exacerbate the poverty cycle.¹⁰³

Informality is a reality which needs to be taken into account in building more environmentally sustainable and resilient economies. As the informal economy persists as a safety net against poverty, it is important to include the informal sector in development and inclusive green economy strategies.¹⁰⁴ The complex causes of informality, and its role in the resilience of societies, should challenge frequent incautious appeals to ‘fight informality’ and policy ambitions to reduce informal activities to negligible levels.

¹⁰³ IIED, GEC et al. (2016)

¹⁰⁴ Ibid.

CHAPTER 03.

BRIDGING GAPS TO SUPPORT LGEs & GREEN MSMEs

KEY TAKEAWAYS

- This chapter discusses in more detail **financial and economic reforms** aimed at overcoming internal and external barriers identified in chapter 2.
- **Addressing the root causes of the MSMEs' lack of funding** identified in chapter 2 requires bridging a series of corresponding gaps:
 1. **Bridging the trust gap** between MSMEs and financial institutions. This can be done by ensuring MSMEs can pledge movable assets as collateral, and by improving and greening credit guarantee schemes. Another strategy widely used by microfinance institutions in group-based lending is to use social capital as a collateral substitute.
 2. **Bridging the information and capacity gaps** by getting credit information sharing mechanisms more granular and green, by creating a robust but simplified chain of ESG information (i.e. green taxonomy, corporate sustainability reporting and green labels for financial products), and by establishing MSMEs agency as a one-stop-shop with liaison offices spread around the country.
 3. **Bridging the financing ecosystem gap** by creating green MSME financing facilities to unleash DFIs' potential, improving consumer protection to reduce irresponsible lending and by improving the quality of public spending and reducing the cost of debt.
- On top of reforms aimed at overcoming these barriers, **unlocking green MSMEs' potential** also requires:
 4. **Fixing regulatory mismatches** by scaling down administrative procedures & requirements, addressing informality where it proves problematic, and greening and scaling down public procurement

III. Bridging gaps to support LGEs & green MSMEs

Financial institutions perceive MSMEs as a high-risk sector associated with little return.

Without appropriate collateral¹⁰⁵ and credit histories, lending to MSMEs is generally perceived as a risky and financially unattractive proposition for most commercial banks. As transaction costs¹⁰⁶ per loan are relatively constant, small loans are less attractive for commercial banks that can earn higher returns in other markets (e.g. lending to large firms and holding high-yielding sovereign debt).¹⁰⁷

MSMEs therefore often rely on informal sources of finance, with mixed implications.

Whilst informality often comes with collateral-free lending, informal moneylenders are notorious for charging usurious levels of interest and practice unregulated aggressive debt collection.

Mission-driven financial institutions have often tried to fill the funding gap left by profit-driven ones.

Microfinance institutions (MFIs) have focused on providing (very) small loans to microenterprises and poor households which are excluded from the formal financial system, with mixed results in the wake of a shift to a more profit-driven model of microfinance. Where they exist, state-owned banks have focused on projects characterised by low return, low private sector investment and high social return. Further to this, they also provide credit guarantees to help engage commercial banks in MSMEs lending.

Many policy options have been devised to bridge gaps between MSMEs and formal sources of finance

by reducing (real or perceived) risks and transaction costs of MSME lending. These include *secured transactions registries for movable property* to provide a wider range of collateralisable assets, ‘*social collateral*’ which acts as a substitute to physical collateral, *credit information systems* to provide more data on borrowers at a lower cost, or Credit Guarantee Schemes (CGS) architecture to help de-risk MSMEs lending. But information and capacity gaps usually impede their success (cf. section 2.4.).

The following sections will discuss in more detail financial and economic reforms aimed at bridging the trust gap (1.) and the information and capacity gaps (2.) which compose the financial barriers identified in chapter 2. We will then discuss ways to bridge the financing ecosystem gap where it exists (3.). We will finish by discussing ways to fix the regulatory mismatches (4.).

¹⁰⁵ Collateral may be defined as property that secures a loan or other debt, so that the property may be seized by the lender, if the borrower fails to make proper payments against loan.

¹⁰⁶ Costs incurred during the loan process by the lender (i.e. evaluate, distribute, and collect loans; opportunity costs; establishment and enforcement of a security interest) and the borrower (i.e. fees to apply, get approved, and pay the loan). Some parts of the transaction’s costs are contingent on borrower characteristics but also on the legal and regulatory framework. E.g. The anticipation by the lender of major transaction costs in connection with cumbersome judicial processes to liquidate certain types of collateral may have the side effect of further rationing out loan transactions with SMEs. In: [OIT \(2001\)](#)

¹⁰⁷ A very detailed loan appraisal of an MSME could reduce the risk of lending but could lead to high transaction costs.

1. Bridging the trust gap

Commercial banks and other sources of formal finance are often reluctant to fund MSMEs. The main reason for this is a general perception of this sector as risky – due to a lack of credit histories, appropriate collateral, and/or credit guarantee – and financially unattractive as it often entails significant transaction costs. At a more granular level, a difference must be drawn between microcredit and larger funding, as loan size determines whether and what form of collateral is required by the banks.

Different mechanisms have been devised to improve the risk-return ratio associated with MSMEs, mostly by mitigating risks and lowering transaction costs.

1.1. Ensuring MSMEs can pledge movable assets as collateral

Insufficient appropriate collateral is a major reason for MSMEs' difficulty to access formal sources of funding. Whilst transaction costs involved in establishing and enforcing the security interests are an important obstacle for banks to lend to MSMEs,¹⁰⁸ microenterprises are mostly impacted by the absence of assets that can be pledged as collateral. For many MSMEs, collateral-free practices are a large part of the added value of the informal financial sector.

Banks in developing countries are usually reluctant to accept movable assets as collateral. This proves problematic as movable assets – e.g. machinery and equipment, vehicles, livestock, crops, and other agricultural yields – often account for most of the capital stock of MSMEs in developing countries.¹⁰⁹ Banks' concerns relate to inadequate regulatory environments, difficulty to price these assets, weak or missing information on the status of collateral, costly and/or unreliable mechanisms to enforce collection in case of defaults, etc. In this context, banks prefer fixed assets – such as land or buildings – as collateral, as they are easier to price, more difficult to hide and are less likely to be subject to ownership disputes. But using fixed assets as collateral also comes with difficulties – as reported by Trinidad & Tobago, many agriculture-based MSMEs/LGEs have been denied use of the land which they occupy as collateral as they lack proper legal title to this land.

A sound regulatory environment that enables the use of movable assets as collateral can increase access to credit by firms that rely more on this type of assets¹¹⁰ and improve their funding conditions. To ensure efficient use of movable collateral, governments need to:

- **Design an advanced secured transaction framework** which governs the creation, priority, and enforcement of pledges over all types of fixed and movable assets. **International standards**¹¹¹ have been developed to support countries in properly designing their

¹⁰⁸ The cost of establishing and enforcing security interest is contingent on borrower characteristics but also on the legal and regulatory framework. The anticipation by the lender of major transaction costs in connection with cumbersome judicial processes to liquidate certain types of collateral may negatively impact lending to MSMEs. In: *OIT (2001)*

¹⁰⁹ In developing countries, 78% of the businesses' capital stock is in movable assets such as machinery, equipment or receivables, and only 22% is in immovable, or fixed, assets. See: *Álvarez de la Campa (2011)*

¹¹⁰ *Campello and Larraín (2016)*

¹¹¹ e.g. the United Nations Commission on International Trade Law's (UNCITRAL) *Model Law on Secured Transactions* based on the EBRD's *Model Law on Secured Transaction* (1994). The EBRD has also established ten core principles for a secured transactions law – e.g. the law should enable the quick, cheap and simple creation of a proprietary security right without depriving the person giving the security of the use of his asset; The costs of taking, maintaining and enforcing security should be low; Enforcement procedures should enable prompt realisation at market value of the assets given as security; etc.

secured transaction systems.¹¹² A well-designed system should ensure lenders can collect debts and enforce their rights over a broad range of collateral in a timely and cost-efficient manner. When collateral rights are regulated via diverse pieces of legislation¹¹³, integrating them in a **new comprehensive law** increases transparency and predictability for creditors. Whilst some systems to register movable property exist, South Africa, for example, is still missing a modern secured transactions system.¹¹⁴

- **Establish modern collateral registries** which act as centralised registration mechanisms for interests in movable and fixed assets, with online public access.¹¹⁵ Such registries are in place in a growing number of countries – e.g. India's CERSAI (2013); Uganda's SIM-PRS/SIMPO (2020)¹¹⁶ – and minimise the risk of third parties by fulfilling key functions: They **provide transparency** and inform interested parties about the status of rights to assets, preventing fraudulent activities¹¹⁷, and reducing uncertainty and information costs for banks. They also **eliminate conflicts between parties** with claims to the same asset by establishing the priority of creditors vis-a-vis third parties.¹¹⁸ The creation of collateral registries enables borrowers to receive **more financing at lower costs** – access to bank finance increases by about 8 percentage points on average, while interest rates decline by about 3 percentage points.¹¹⁹

To address the remaining concerns that financial institutions might have about accepting movable assets as collateral, the World Bank has established a **Second Loss Partial Credit Guarantee** (SLPCG).¹²⁰ It covers the risk that movable collateral cannot be enforced and the risk if the liquidation value falls below the assessment value.

1.2. Improving and greening Credit Guarantee Schemes (CGSs)

Credit guarantee schemes (CGSs) are mechanisms through which an external third party, known as the guarantor, promises to repay the lender all or part of the loan if the borrower defaults (generally between 50% to 90% of the loan). By absorbing part of the default risk, CGSs make lending to the targeted underserved segment (e.g. MSMEs, women, or youth¹²¹) more attractive. **Guarantees can incentivise lending to actors previously excluded from the credit market** (e.g. due to their poor creditworthiness, lack of appropriate collateral), and/or positively impact lending conditions (i.e. lower collateral requirements, longer tenor loans, and/or lower interest rates). CGSs can be public, private, or mixed.

112 Badly-designed movable collateral laws have little effect on MSMEs' funding gap. E.g. Until recently, the law in Thailand required that the collateral asset is in the possession of the lender and as a result would not be available for use by the (borrowing) enterprise. This made it difficult to pledge machinery, vehicles and inventory.

113 Secured transaction systems often follow a piecemeal approach where collateral laws are in fact a collection of dispositions in private law (e.g. contract law, property law, judicial process law, bankruptcy code) and in penal law (e.g. usury prohibition).

114 The last major reform of the South African real security (or secured transactions) law framework was the enactment of the Security by Means of Movable Property Act in 1993, and reforms appear needed. *Koekemoer & Brits* (2020)

115 "By mid-2016, 26 economies had operational, notice-based and modern collateral registries, including Australia, Colombia, the Lao People's Democratic Republic and most recently Costa Rica, El Salvador, Liberia and Malawi." in: *World Bank* (2016)

116 Following the passing of the Security Interest in Movable Property Act (SIMPA) of 2019.

117 Centralised registries can discourage the practice of taking out various loans from several banks using the same asset.

118 Rather than initiating legal proceedings, the parties can easily determine who has priority to the same asset on the basis of the time of their respective registrations. More discussion in: *Alvarez de la Campa* (2011); *LOVE, I., et al.* (2013)

119 *Love, Martínez Pería, and Singh* (2016)

120 *World Bank Group* (2018)

121 For example, Kenya stipulated that a substantial proportion of its CGS funds target women, youth and people with disabilities. In: *AFI* (2022)

Public Credit Guarantee Schemes are one of the most widely used policy instruments to support (M)SMEs. Whilst more than half of all countries in the world already established one¹²², the number is growing with governments' attempts to cushion the impact of the COVID-19 pandemic in both developing¹²³ and developed¹²⁴ economies. Partial public credit guarantee schemes are often perceived as a more efficient¹²⁵, less distortive, and a cheaper way for governments to expand MSMEs' access to finance than direct subsidies or concessional lending.¹²⁶ To support their MSMEs, India and Senegal have developed several such schemes.¹²⁷

Depending on the national context, actions can be needed to **make CGSs better support green MSMSEs/LGEs:**

- **Ensure the existence of well-designed CGSs specifically targeted towards MSMEs.** Whilst CGSs are a well-known MSMEs support mechanism, several organisations in surveyed countries referred to CGSs targeted towards MSMEs as a missing element of their financial landscape. **International standards** have been developed to help governments establish, operate, and evaluate CGSs.¹²⁸ Their goal is to avoid ill-designed guarantee schemes.¹²⁹ Where they already exist, **CGSs' reach, efficiency, and additionality should be evaluated** to ensure that guarantees are indeed extended to MSMEs that will otherwise not receive formal funding. Particular attention should be given to **simplifying the application process for MSMEs.**
- **Add clear and stable environmental commitments in CGSs mandates**¹³⁰ which include supporting national green strategies, Nationally Determined Contributions (NDCs) – that is countries' action plans to reduce their GHG emissions and adapt to the impacts of climate change – and other sustainable development strategies. Guidelines for integrating climate change into public CGSs have recently been issued by the World Bank and by the Alliance for Financial Inclusion (AFI).¹³¹
- **Ensure CGSs are sufficiently resourced.** This funding could come from tapping new sources such as environmental taxes, climate funds, development programs, as well as from (multilateral) development finance institutions (DFIs)¹³² – some DFIs run dedicated **multi-country guarantee funds.**¹³³

122 [World Bank \(2015\)](#); [OECD SME scoreboard \(2016\)](#); In Southeast Asia: Malaysia, Thailand, Indonesia, Vietnam and Philippines have introduced CGS as a tool to improve MSMEs access to finance.

123 E.g. Designed to support MSMEs impacted by the COVID-19 pandemic in Trinidad and Tobago, the MSME Stimulus Loan Facility offers government guaranteed loans granted for a maximum of 5 years with a 2-year moratorium on principal payments. The government guarantees 75% of the loan to the participating commercial banks, and pays interest.

124 [OECD \(2021\)](#)

125 E.g. the partial guarantee fund (NGF) in Colombia, where the government provides 48% of the loan to the bank in case of default. As the loan is only partially covered by the government, banks still have the incentive to undertake a creditworthiness assessment. More in: [Arraiz, I., Melendez, M. \(2014\)](#)

126 For a literature review and cost-benefit analysis of CGSs in OECD countries, see: [OECD \(2016\)](#) and [OECD \(2017\)](#)

127 In India: The Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), the Credit Guarantee Fund for Micro Units (CGFMU), and more recently the Emergency Credit Line Guarantee Scheme (ECLGS). In Senegal: the Guarantee Fund for Priority Investments (FONGIP).

128 E.g. Establish the CGS as an independent legal entity; Provide adequate funding and keep sources transparent; 3. Promote mixed-ownership; etc. More in: [World Bank \(2015\)](#)

129 E.g. The main institution in charge of providing guarantees to MSMEs in Mongolia, the Mongolian Credit Guarantee Fund (MCGF), halted operation in 2015 due to limited resources and unreliable operations. Banks have lost confidence since some guarantees were not re-paid by the MCGF.

130 [Calice \(2021\)](#)

131 [Task Force on Greening PCGS for SMEs \(2022\)](#); [AFI \(2022a\)](#)

132 [Calic \(2021\)](#)

133 E.g. In April 2022, 11 European Development Finance Institutions (DFIs) have launched a new EFSD+ Guarantee Programme funded by the European Union (EU), aimed at deploying EUR 80 million of EU budgetary guarantees to support MSME finance and private sector development in Sub-Saharan Africa and in the EU's Eastern and Southern Neighbourhood countries.

- **Support MSMEs in their guarantee application.** Evidence tends to show **low uptake of guarantees by MSMEs** when there is insufficient public information and awareness, when they lack support, or in presence of excessive bureaucratic processes and lack of transparency.¹³⁴ Support to MSMEs could be provided (e.g. free training on filling out guarantee applications) by the public CGS or by a dedicated MSMEs agency acting as a one-stop-shop (cf. 2.3.).

1.3. Using social capital as collateral substitute

Confronted with MSMEs' lack of appropriate collateral, substitutes have been developed by some mission-driven finance intermediaries, such as microfinance institutions (MFIs), state-owned banks and financial NGOs. The principal category **substitutes social capital¹³⁵ to traditional physical capital (fixed or movable) as collateral** by using *social sanctions* and *credit denial* as punishments for defaulting borrowers.

Well-known and widespread schemes are:

- **Group-based lending with or without joint liability¹³⁶** where groups (usually 5 to 30 members) receive unsecured (microfinance) loans, which are then distributed to members who have or have not joint liability for repayment. It usually includes provisions that no one in the group can have access to a new loan until the whole group has repaid the previous one. **Peer monitoring works as a screening and risk protection device** since groups have reasons to be concerned about a future supply of credit.¹³⁷ This minimises lender and borrower transaction costs by transferring part of it to the group (i.e. screening, monitoring, enforcement). Whilst group lending programs are widely used by microfinance institutions (MFIs) to reach out to underserved categories¹³⁸, their success often relates to the strength of the group's social capital (e.g. pre-existing community with strong bonds) and to careful design (e.g. community leaders being responsible for loan recovery); organisation of regular meetings to facilitate the formation of social capital.¹³⁹ The 2010 Indian Microfinance Crisis has shown an essential attribute of functioning group lending schemes was social capital and trust.¹⁴⁰ In terms of outcome, studies on Mongolia have shown that group-based lending tends to stimulate enterprise ownership and growth of business assets.¹⁴¹
- **Co-maker arrangement** which acts as a personal guarantee. The co-maker signature on a loan agreement has an enforcement effect on the debtor, as it obliges the borrower to pay back a loan, otherwise the good reputation would be affected.¹⁴²

¹³⁴ AFI (2022b)

¹³⁵ Social capital refers to "features of social organisations, such as networks, norms and trust that facilitate action and cooperation for mutual benefit" (Putnam, 1993).

¹³⁶ Whilst group lending with joint liability exist since decades with some success (cf. Adams and Ladman (1979)), microfinance institutions have progressively shifted away from the use of joint liability in the wave of evidence showing that (a) converting joint liability groups to individual liability groups did not affect repayment rates, and that (b) an intervention that increased social capital in individual liability borrowing groups led to improved repayment performance (de Quidt, Fetzner and Ghatak (2014)).

¹³⁷ ILO (2001)

¹³⁸ In developing countries, but also emerging – e.g. Indian's National Bank for Agriculture and Rural Development (NABARD) and its Joint Liability Groups (JLG) – and developed ones – e.g. Japan and Turkey have used group lending to reach small farmers for more than a century.

¹³⁹ Whilst successful examples exist – e.g. the famous example of Grameen Bank's "general loans" entirely secured by joint liability groups and benefiting from a very high recovery rate (up to 95%) –, examples of unsuccessful joint liability schemes exist too – for more, see e.g.: Adams and Ladman (1979); Ladman and Afcha (1990).

¹⁴⁰ For more discussion on the breakdown of SKS Microfinance resulting from mass default, see: Halder and Stiglitz (2016)

¹⁴¹ Attanasio et al. (2011), p.40 (cf. <https://www.povertyactionlab.org/es/node/1701>) ;

¹⁴² E.g. The BPD programmes in Indonesia require that a borrower obtains the signature of the village head and of a co-signer. In: ILO (2001)

Table 6. - Landscape of mechanisms to bridge the trust gap

	T&T	PE	SN	UG	ZA	IN	MN
Credit Guarantee Schemes (CGSs)							
Efficient movable collateral laws							
Use of social collateral							

Yes

Unclear

No

2. Bridging the information and capacity gaps

As identified in surveyed countries, another important barrier to MSMEs' access to funding is an information and capacity gap which revolves around three dimensions. First, financial institutions often lack information on MSMEs' financial health, but also on their environmental and social impacts.¹⁴³ This can lead to a lack of funding for creditworthy enterprises, but also to excessive lending to credit unworthy enterprises. Second, MSMEs lack knowledge about existing financial opportunities, guarantee schemes (when they exist), policy support programs, or even existing regulations (cf. section 2.4.). Lastly, and intertwined with this lack of awareness, MSMEs also often suffer from a lack of skills (business, finance, environmental) which hamper their viability and have a negative impact on creditworthiness.

We will now consider the main avenues to bridge this multidimensional information and capacity gap.

2.1. Getting credit information sharing more granular and green

There is a need to strike the right balance between making necessary funding available to MSMEs and recklessly lending to credit unworthy microenterprises, which can result in the crowding-out of limited financial resources from productive SMEs.¹⁴⁴ Credit information-sharing mechanisms which facilitate creditworthiness assessment can help to strike this balance.

Increasing credit information sharing is known to lower the proportion of non-performing loans, undue risk aversion and transaction costs. Whilst the amount of non-performing loans (NPLs) can be reduced by including more comprehensive borrower information in lenders' default prediction models,¹⁴⁵ credit information sharing mechanisms have been established worldwide to increase the information available on borrowing firms and individuals. They can take the form of public credit registries – where central banks or supervisory authorities collect information from supervised financial institutions – and private credit bureaus – private businesses that collect information required by commercial lenders. The information they make available (from a borrower's total number of current loans, repayment history, previous bankruptcies, etc.) facilitates financial institutions' credit risk analysis, lowers their costs, and can ultimately lower undue risk perception.

Well-designed information-sharing mechanisms facilitate lending to MSMEs, helping to reduce the financing gap between large and small firms.¹⁴⁶ The presence of credit bureaus

¹⁴³ Whilst corporate sustainability-related reporting is everywhere in its infancy, financial reporting is not. However, financial information about MSMEs tends to be of limited availability, less standardised and/or transparent than financial information on larger firms.

¹⁴⁴ On the unintended negative side-effects of excessive growth of microcredit, see e.g. *Bateman et al. (2018)*, *Karim (2011)*

¹⁴⁵ Kallberg and Udell (2003); Barron and Staten (2003); Powell, et al. (2004); Love and Mylenko (2003)

¹⁴⁶ *Galindo and Micco (2010)*

and registries also tends to reduce financial fragility.¹⁴⁷ Where these credit sharing mechanisms have already been established, improving their use and credit information coverage to include MSMEs can be done by:

- **Improving credit information granularity** by eliminating minimum loan thresholds for being included in a credit bureau or credit registry's database.¹⁴⁸ **High thresholds¹⁴⁹ often result in the exclusion of loans to MSMEs** from these databases, reducing the positive impact on the segment that can benefit the most from positive "reputational collateral" resulting from a good credit history.
- **Reporting negative positive credit information.** Credit information usually collected covers outstanding loans, payment history, credit account limit and balance, debt collections, bankruptcies, etc. But a credit reporting system which reports only **negative information** (i.e. defaults and late payments) penalises bad borrowers whilst failing to reward diligent borrowers. Sharing **positive information** (i.e. on-time loan repayments) allows customers to establish a positive credit history which can be used as "**reputational collateral**" to access formal credit.¹⁵⁰ To help establish credit history for those without previous bank loans or credit cards, some countries have started to collect and distribute data from retailers and utility companies, such as information on payment of electricity and phone bills.¹⁵¹
- **Using digital financial services (DFS) to reduce transaction costs.** Whilst DFS is often praised for helping reach out to financially excluded populations, it can also increase MSMEs lending by facilitating information sharing and reducing transaction costs. Policymakers can bolster their development by initiating or supporting efforts to build digital payment systems, by promoting the digitalisation of traditional financial services, **including DFS in their financial inclusion strategy¹⁵²**, and by **initiating digital data-sharing platforms** between financial institutions, credit bureaus, credit registries, and other economic data producers. Japan's Credit Risk Database (CRD) offers a good example – it is fed and used by financial institutions, credit guarantee corporations, credit rating agencies, and government institutions, and provides credit risk analysis and credit-scoring services.
- **Improving access to credit-relevant information and other services for financial institutions.** On top of reforms aimed at providing efficient online access to financial institutions¹⁵³, credit information sharing institutions might also provide a range of additional services, such as credit scoring (see Box xx), fraud detection, and debt collection. Other services could be developed to deal with a barrier frequently identified by partners in surveyed countries: the insufficient consideration and awareness of environment, social and governance (ESG) criteria by financial institutions. With the support of an appropriate

147 [Guerineau and Leon \(2019\)](#); Credit information is necessary for financial regulators to understand the risks due to interconnectedness faced by systemically important borrowers and financial institutions.

148 Over the last decade, many countries (e.g. Indonesia, Tunisia, Azerbaijan, Brazil, Bangladesh) lowered the threshold for submitting credit information to the credit registry's database in an attempt to expand the range of available credit information.

149 Credit registries usually set relatively high thresholds for loans, since their primary purpose is to support bank supervision and the monitoring of systemic risks.

150 A study of Latin American economies suggests that where credit bureaus distribute both negative and positive information and have 100% participation from banks, lending to the private sector is at least 47.5% greater. In: [Turner and Varghese \(2007\)](#)

151 In Vietnam, three retailer companies started providing credit information to the public registry, resulting in an increase in the number of firms and individuals covered in the public database.

152 For more discussion, see: [AFI \(2022\)](#)

153 E.g. The Mauritanian central bank introduced in 2016 a new online platform aimed at improving the credit registry's accessibility for financial institutions and range of information provided – e.g. total amount of loans for each borrower, type of loan and maturity.

regulatory landscape (cf. 2.3.), credit registries and bureaus could be tasked to **provide financial institutions with ESG information** on borrowers.

Credit scoring

The improvement of credit information sharing on MSMEs can lead to the creation of MSME credit scoring. By pooling credit information at their disposal – such as total exposure, amount of outstanding loans, and previous defaults – credit bureaus or credit registries can build synthetic credit scores for enterprises and individuals. This can help ensure speedy appraisal of loan requests at a reasonable cost.

Credit scoring models have been routinely used in developed countries to reduce the time and cost of lending to small businesses. Whilst guidelines have been developed by international institutions¹⁵⁴ to facilitate their development, **developing reliable and robust models still requires access to a relatively large volume of historical data which might be unavailable in some national contexts.** Transparency issues with credit scoring methodologies also raise concerns about data privacy, fairness, bias, and potential for discrimination which should be carefully reflected on.

2.2. Definition of “green” and ESG reporting requirements

Financial institutions increasingly refer to environmental, social and governance (ESG) considerations. Pushed by growing environmental and social concerns and a wave of sustainable finance policy initiatives and new rules, financial institutions (FIs) are increasingly expected to integrate, or at least take into consideration, the sustainability-related financial risks as well as the sustainability impact of their investment. But it comes with a number of technical difficulties on how to ensure the activities funded are indeed sustainable or do no significant harm. Different jurisdictions have therefore started a process to build a credible chain of ESG information from economic activities towards end investors and regulators by defining what is sustainable, requiring comprehensive corporate sustainability reporting, entity and product-level investor sustainability-related disclosures, and creating green labels for financial products.

The role of green or sustainable taxonomies is to define what is sustainable. Green taxonomies are classification systems that define criteria to identify assets, projects and economic activities with environmental benefits or costs.¹⁵⁵ They vary considerably across objectives¹⁵⁶, granularity and targets, and can be national (cf. China, Bangladesh, Mongolia, Russia, Malaysia, South Africa – soon), regional (cf. EU), or private sector-based (e.g. CBI Green Taxonomy). By providing a harmonised language on sustainability, taxonomies are expected to reduce FIs’ transaction costs, send a signalling effect to market participants and reduce greenwashing. Taxonomies can serve as foundations for corporate sustainability reporting requirements and green labels and standards for financial products. Ensuring green taxonomies’ comparability and interoperability across jurisdictions is increasingly perceived as important.¹⁵⁷

¹⁵⁴ E.g. *the World Bank (2019)*

¹⁵⁵ *NGFS (2022)*

¹⁵⁶ The objectives can span from the reduction of greenhouse gas (GHG) emissions to the protection of natural resources and ecosystems, pollution prevention and control, the sustainable use and protection of water and marine resources, and so forth.

¹⁵⁷ A key milestone in this regard was the development of the “*Common Ground Taxonomy*” by the International Platform on Sustainable Finance (IPSF)

Corporate sustainability reporting (CSR) requires companies to report their sustainability risks, opportunities and performance, on top of their economic performance.

In the last two decades, various regulations and reporting standards have been put in place on disclosure of ESG information. Meanwhile, being often voluntary and/or non-harmonised, most of them are prone to interpretation, lack of consistency, and even greenwashing. Whilst the EU just reviewed its framework to establish mandatory and harmonised CSR¹⁵⁸, some emerging and developing countries have also started to develop mandatory corporate sustainability reporting requirements, such as India.¹⁵⁹

The last step will be to ensure financial products which claim to fund sustainable economic activities are doing so.

At the other end of the chain, end investors need to have access and to be able to make use of sustainability disclosures. To achieve that, financial advisers and asset managers worldwide are increasingly required to disclose whether, and if so how, they integrate sustainability risks and so-called adverse impact considerations in their investment decisions.¹⁶⁰ In addition, sustainability considerations must be properly integrated into fiduciary duties and product governance to ensure clients are asked about their ESG preferences, and that products offered are aligned with those preferences. A growing amount of evidence points towards a strong preference among retail investors for ESG assets and activities,¹⁶¹ which is expected to boost demand. However, barriers exist, including the risks of ‘greenwashing’. Avoiding greenwashing requires to:

- **Establish green taxonomies**¹⁶² as aligned as possible with the existing ones, such as the EU taxonomy, while being adapted to the national context (i.e. specific environmental objectives, regulatory framework, stage of development). On top of fighting **greenwashing**, defining the most sustainable economic activities in the sectors most relevant to the climate and the broader environment (e.g. energy, transport, construction, manufacturing, agriculture) is a useful way to indicate the **direction of travel to the private sector**. Taxonomies can also be used to build powerful incentive mechanisms (e.g. tax breaks for taxonomy-compliant enterprises). Ensuring **interoperability with existing taxonomies** should help developing and emerging countries attract international “green” funding at better conditions. International guidelines have been established to help countries develop such taxonomies.¹⁶³
- **Adapt existing taxonomies and corporate sustainability reporting requirements to be applied to/by MSMEs.** In July 2009, the International Accounting Standards Board (IASB) issued the “IFRS for SMEs Standard” – a simplified version of the IFRS standard for financial reporting. A similar set of standards should be designed by ISSB for sustainability reporting for MSMEs. The European Commission should launch a reflection inside the International Platform on Sustainable Finance (IPSF) on how to **simplify existing taxonomy criteria and related reporting requirements** to facilitate the inclusion of MSMEs in the scope of the transition.¹⁶⁴

158 I.e. the Corporate Sustainability Reporting Directive (CSRD)

159 Since the 2021’s “Business Responsibility and Sustainability Reporting by listed entities” circular (BRSR circular), the top 1000 listed entities by market capitalisation have to include in their annual report a Business Responsibility Report (BRR) describing their ESG performance against the nine principles of the ‘national guidelines on responsible business conduct’ (NGRBC). Their BRR can be based on internationally accepted reporting frameworks (e.g. GRI, SASB, TCFD, IIRC).

160 E.g. the EU *Sustainable Finance Disclosures Regulation (SFDR)*, or the US *SEC proposal on ESG disclosure requirements*.

161 More than ¾ of retail investors in 22 countries consider ESG factors to be important in their investment decisions. Source: Natixis 2019 (Natixis Investment Managers Global Survey of Individual Investors).

162 A further step could be taken by developing brown taxonomy (i.e. covering activities that do significant harm) and amber taxonomy (i.e. activities that are not sustainable, but participate in the transition).

163 E.g. *Worldbank (2020)*; *OECD (2020)*

164 The EU Platform on sustainable finance is currently working on recommendations on whether and how to include SMEs in the scope of the sustainable finance agenda (i.e. taxonomy, corporate sustainability reporting).

- **Establish mandatory and harmonised corporate sustainability reporting** that requires large and listed companies – as well as mid-sized companies in high-risk sectors – to report on **sustainability risks** they face, and on their potential and actual **adverse impacts on the environment and society** (i.e. the so-called double materiality). The information reported would enable the company directors and a wide range of stakeholders – investors, policymakers, consumers, and supervisory authorities – to properly integrate sustainability considerations in their decision-making processes. This will require reporting against a **mandatory standard** including a range of sector-agnostic and sector-specific **key performance indicators (KPIs)** on environmental, social and governance-related matters. Increased quality, comparability and reliability of sustainability disclosures are essential to ensure investors can make informed investment decisions, enable the transformation of the economy towards sustainability and can stimulate competition among peers on sustainability performance.
- **Create ESG/sustainable labels and set minimum requirements for financial products** and instruments to effectively prevent greenwashing and increase (international) funding for sustainable activities. ESG labels and standards should include minimum performance criteria like a **percentage threshold of taxonomy-compliant activities** funded (which could evolve over time as the market develops), **exclusion lists** for particularly environmentally harmful activities, **do no significant harm criteria**, etc.¹⁶⁵ While labels are voluntary as such and the criteria become mandatory only if you want to obtain the label, a standard would result in mandatory requirements for all financial products marketed as sustainable.

Through the various regulatory initiatives discussed in this section, legislators can increase the transparency on companies' and financial products' sustainability performance. However, current sustainability disclosure regulations mostly apply to companies that are already on the radar of investors: mainly large enterprises listed on stock exchanges.¹⁶⁶ If these regulations are to facilitate LGEs access to finance and the greening of MSMEs, they should be **tailored to capture positive and negative environmental and social risks and impacts of MSMEs**. To avoid unrealistic reporting requirements, policymakers and standard setters have to build a **simplified framework for MSMEs** and ensure MSMEs can benefit from **technical assistance**.

2.3. Establishing MSMEs agency as a one-stop-shop

The lack of information, support and skills hamper green MSMEs/LGEs development.

Among the barriers most frequently identified in the surveyed countries (cf. Section II) is the lack of information about available funds, guarantees, policy support schemes, sustainable practices and regulations, and the lack of business skills.

MSMEs agencies act as one-stop shops that provide legal, technical and business support. Whilst some governments have already established MSMEs agencies (e.g. the SEDA in South Africa, the SME agency in Mongolia¹⁶⁷, OSMEP in Thailand, MSMEDA in Egypt), or even dedicated ministries (e.g. the Indian Ministry of Micro, Small and Medium Enterprises, or

¹⁶⁵ European consumer protection organisations and NGOs – among which Finance Watch – have issued a set of recommendations on the minimum criteria for products with ESG characteristics: *Palinska et al. (2022)*

¹⁶⁶ Even if this is changing with the new EU *Corporate Sustainability Reporting Directives (CSRD)* that apply to all companies (listed or not) with more than 250 employees, as well as listed SMEs. Non-EU companies with substantial activity in the EU market (€150m in annual turnover in the EU) will have to follow equivalent reporting rules.

¹⁶⁷ The previous SME Development Fund has been dissolved and reorganised into the SME Agency in August 2020. It aims to act as a one stop-shop for MSMEs, providing regulatory, business advisory, and market research services.

the South African Ministry of Small Business Development), more can be done in most countries to provide adequate information, support, guidance, and financing solutions to MSMEs – as pointed out by Trinidad and Tobago, Senegal, and Peru. Where they do not exist, MSMEs agencies should be established to:

- **Increase MSMEs' awareness of existing opportunities** by acting as a one-stop-shop for MSMEs. Whilst funding and support mechanisms targeted toward MSMEs exist in many countries, low uptake by MSMEs is often explained by a lack of awareness, cumbersome application processes, and a large number of institutions in charge. A one-stop-shop can do much to **increase MSMEs' awareness and use of existing support mechanisms**, such as credit guarantee schemes or group lending programs.
- **Provide technical assistance and training**. When relevant schemes exist, an MSMEs agency can also provide technical assistance in **credit (guarantee) application**, collateral establishment, setting up of group lending, cooperative societies, the **greening of their activities**, etc. For example, in India, National Small Industries Corporations (NSIC) provide a similar type of technical support to MSMEs.¹⁶⁸ By covering the above-mentioned costs, the government helps to reduce lender transaction costs – relatively high for small loans to MSMEs – which incentivise financial institutions to lend more to MSMEs. An MSMEs agency can also help develop MSMEs' internal capacity and, therefore, increase their chance of survival.
- **Act as a one-stop-shop for business registration**. Whilst MSMEs' registration process should be made as simple as possible (cf. 2.2.), the MSMEs agencies could build MSMEs' awareness of the benefits of formal registration, provide information, partner with business organisations to facilitate registration, and act as a one-stop-shop for the registration in itself. **Registration desks, or liaison offices, should be set up across the country** – e.g. the South African MSME agency, the SEDA, has successfully developed 53 branches across the country and has adopted a district-based development approach.

Table 7. - Landscape of information mechanisms

	T&T	PE	SN	UG	ZA	IN	MN
Credit information sharing mechanisms	YES	YES	YES	YES	YES	YES	YES
Sustainable finance strategy ¹⁶⁹	YES	YES	YES	YES	YES	YES	YES
Green taxonomy	YES	YES	YES	Unclear	YES	YES	YES
Corporate sustainability reporting regulation ¹⁷⁰	YES	YES	YES	Unclear	YES	YES	YES
MSMEs agency as one-stop-shop	YES	YES	YES	YES	YES	YES	YES

YES
Unclear
No

¹⁶⁸ ADBI (2019)

¹⁶⁹ South Africa: In May 2020, the National Treasury released the draft technical paper 'Financing a Sustainable Economy'. Mongolia: The Mongolian Sustainable Financing Initiative, launched 2013.

¹⁷⁰ The presence of a corporate sustainability reporting regulation doesn't mean that the scope of companies covered, the information required, or the indicators are the appropriate ones.

3. Bridging the financing ecosystem gap

Whilst financial institutions can be incentivised to lend more to MSMEs via the bridging of existing trust, information and capacity gaps (cf. 1. and 2.), some countries might face a more fundamental problem - **an imbalanced financial ecosystem**. Whilst some countries might see their financial ecosystem dominated by very large financial institutions which ignore MSMEs, others experienced an overdevelopment of microfinance institutions that poured too much credit into inefficient informal microenterprises, crowding-out scarce financial resources away from more productive SMEs (cf. the “missing middle”). By favouring only certain types of practices and audiences, both developments are problematic.

A well-diversified financial ecosystem should be able to extend funding to micro, small, medium, and large enterprises as long as they are creditworthy. In other words, an efficient financial ecosystem comprises different types of institutions able to propose various financial products to different audiences.

Different policy actions can help equilibrate a financial ecosystem.

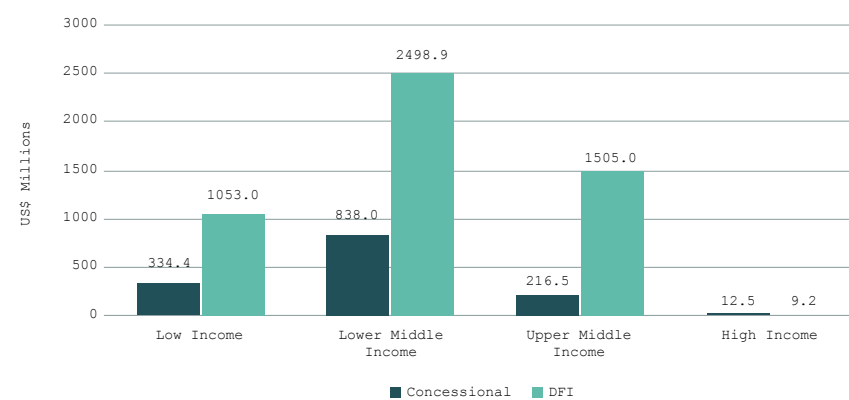
3.1. Create green MSME financing facilities to unleash DFIs' potential

As discussed in previous sections, MSMEs in developing and emerging countries are often deemed too risky by private financial institutions. Whilst development finance institutions (DFIs) are theoretically expected to help crowd-in private investment to bridge important funding gaps (MSME, climate, etc.) in developing and emerging countries (low- and middle-income countries), the reality is more contrasted.

Excessively risk-averse development finance institutions (DFIs) tend to support emerging, rather than developing countries. Whilst DFIs tend to aim at supporting low-income countries, the largest share of their commitments are going to middle-income countries as presented in figure 19. This can be explained by DFIs risk aversion which does not differ drastically from those of commercial institutions.¹⁷¹ By chasing similar risk-return as private financial institutions, DFIs increasingly face criticism for potentially crowding out, rather than crowding in, private finance.¹⁷²

Fig. 19. - Concessional and DFI new commitment by country income in 2019

Source: DFI Working Group 2021



¹⁷¹ Similarly to the commercial bank business model, DFIs fund themselves through the spread between their borrowing costs and their returns on investments and lending. Therefore, most DFIs strive to protect their ratings and tend to adopt risk-averse practices. See: [Bilal, S., Bueno, M., Dembele, F., et al., \(2020\)](#); [Lee & Preston \(2019\)](#)

¹⁷² [Bilal, S., Bueno, M., Dembele, F., et al., \(2020\)](#)

DFIs should increase their risk tolerance and revise their practice to better take green MSMEs into account. Development finance practitioners and experts have pointed to the need to increase DFIs' risk-taking capacity, their role in MSMEs financing, but also the support for new policy reforms to improve the sustainable investment climate in developing economies, fostering private sector mobilisation.¹⁷³ DFIs could, for example, lower their risk-adjusted returns requirements, partner with (M)SMEs-focused local financial institutions, revise the minimum ticket size and/or introduce requirements in some of their programmes to prioritise 'homegrown' MSMEs in the countries of intervention.

Setting up joint MSME financing facilities can help unleash DFIs' potential to support MSMEs. To increase DFIs' risk-taking capacity and their role in MSMEs financing, experts suggest setting up a joint MSME financing facility¹⁷⁴ as an off-balance sheet fund capitalised by donor equity and supported by public guarantees. Whilst different financing facilities more or less focused on MSMEs and sustainable investments have been developed over the past decade¹⁷⁵, more appears needed to ensure green MSMEs are particularly supported:

- **Revise DFIs mandate to integrate lending targets towards green MSMEs and low-income countries.** DFIs which have explicit targets to invest in low-income countries in their mandate or organising principles tend to invest a larger percentage of their portfolio in these countries (e.g. Norfund). This may imply acceptance of lower risk-adjusted rates of return.¹⁷⁶ As DFIs' return on assets is often low, their current margin of manoeuvre to increase risk-taking appears small. Establishing mandatory lending targets could therefore require increased support to DFIs risk-taking capacity (cf. next points).
- **Build a global green MSME financing facility** as part of international efforts to mobilise climate and biodiversity finance in the frameworks of the *UN Climate change conference* (COP 27) and *the UN Biodiversity Conference* (CBD, COP 15). Such a facility would specifically support green MSME financing by DFIs by stretching their capital, allowing them to invest in projects that otherwise would not pass DFI credit committees.¹⁷⁷ It would help DFIs reach their new lending targets towards LICs and green MSMEs. It could be built as part of the *Green Climate Fund*¹⁷⁸, providing additional funding to the very-limited *GCF MSME Pilot Programme*¹⁷⁹, as part of the *Global Environment Facility* or as a standalone facility.
- **Set up a green MSME co-investment vehicle at the EU level**, building on the success

¹⁷³ Ibid.

¹⁷⁴ The *Tri Hita Karana recommendation* to set up a joint MSME financing facility, builds on a previous proposal of the Centre for Global Development in 2019 to create a "*stretch fund*" to bridge the SDG financing gap.

¹⁷⁵ E.g. the Global Innovation Fund, the Global SME Finance Facility, the European Fund for Sustainable Development (+), European Financing Partners – a joint venture between the EIB and European DFIs –, or the ACP Investment Facility. More recently, a series of DFIs (15 EU DFIs, AfDB, etc.) committed, as part of a "*coalition for a sustainable and inclusive recovery of the private sector*" to dedicate at least USD 4 billion of financing to MSMEs in Africa, between mid-2020 and end-2021.

¹⁷⁶ *Attridge & Gouet (2021)*

¹⁷⁷ *Bilal, S., Bueno, M., Dembele, F., et al., (2020)*

¹⁷⁸ The Green Climate Fund (GCF) of the UNFCCC was agreed at the Durban COP in 2011 and became fully operational with its first projects approved at the end of 2015. Like the GEF, it serves as an operating entity of the financial mechanism of both the UNFCCC and the Paris Agreement and receives guidance by the COP. More in: *Watson, Schalatek, Evequoz (2022)*

¹⁷⁹ The Green Climate Fund board allocated up to USD 200 million to an MSME Pilot Programme aiming to provide financing for MSMEs at all stages of growth. GCF call for proposals under this programme attracted 30 concept notes for a requested financing of over USD 739 million. As of March 2021, 3 projects have been approved. Selection criteria might need to be reflected on. Source: *GCF (2019), GCF (2021)*

of the European Financing Partners (EFP)¹⁸⁰ and the Interact Climate Change Facility (IC-CF)¹⁸¹, both directed toward developing and emerging countries.¹⁸² **EU DFIs could jointly submit¹⁸³ a ‘proposed investment programmes’ (PIPs)** to access guarantee, blended finance, and technical assistance from the European Fund for Sustainable Development Plus (EFSD+) and the External Action Guarantee (EAG), which has a substantial budget of €41 billion over 2021-2027. MSMEs financing, sustainable energy and sustainable agriculture are thematic investment windows of the EFSD/EAG+.

3.2. Regulate microfinance to avoid excessive growth

Whilst microfinance can fill another part of the MSME financing gap, its impacts should not be overstated. Microfinance loans (or microcredits) often do not require credit history and collateral, and are more rapidly approved than traditional business loans. Meanwhile, they often come with much higher interest rates¹⁸⁴ and shorter repayment timelines. The results in terms of poverty reduction and economic development have often been overstated and the reality is more contrasted.¹⁸⁵

Unregulated microfinance can lead to over-indebtedness and to a lower pace of economic development. Some countries moved from the original non-profit microcredit model to a market-driven for-profit microcredit model. This shift went alongside the realisation by commercial banks that lending to microenterprises can be very profitable, often more than lending to SMEs (partially explaining the so-called “missing middle” issue).¹⁸⁶ But an unregulated and excessively developed microfinance industry can lead to scarce financial resources being poured into the very least productive enterprises (informal microenterprises and self-employment ventures). By crowding out available funding away from more productive SMEs, it can result in lower long-term economic development.¹⁸⁷ In the absence of appropriate consumer protection and creditworthiness assessment rules, excessive and reckless (micro)lending can also lead to over-indebtedness and mass default, as illustrated by the 2010’s Indian microfinance crisis.¹⁸⁸ A decade after this crisis, the Indian central bank issued warnings on continuous excessive profit-seeking behaviours among MFIs.¹⁸⁹

Regulations are needed to ensure microfinance products match the financial capabilities and needs of borrowers. Following robust creditworthiness assessments, the total amount of

180 European Financing Partners (EFP), a joint venture between the European Investment Bank (EIB) and several European DFIs, is a co-financing vehicle established in 2003 aiming at promoting sustainable development of the private sector and strengthening cooperation between eligible European Development Finance Institutions and the EIB. The EFP provides financing to countries included in the OECD DAC list.

181 The Interact Climate Change Facility (ICCF) builds on the successful model of EFP, and finances renewable energy and energy efficiency projects in the private sector in developing countries and emerging economies. It is funded by the French Development Agency (AFD), the European Investment Bank (EIB) and several EDFI members.

182 EFP and ICCF target countries of the DAC list of ODA recipients. This list is composed of LDCs such as Senegal and Uganda, but also middle-income such as India, Mongolia, and upper-middle income such as Peru and South Africa.

183 For example via their dedicated [EDFI Management Company](#) (EDFI MC).

184 E.g. In India, most Microfinance Institutions charge a very high rate of interest (12-30%) when compared to commercial banks (8-12%).

185 For a discussion of microcredit impact, see e.g.: Haldrup and Stiglitz (2016)

186 [Bateman \(2019\)](#)

187 [Bateman \(2019\)](#), p.41-68

188 “In November 2010, the Indian microfinance industry—one of the biggest [...] and the fastest growing in the world [...]—was paralyzed as a result of the most serious repayment crisis in its history, with default rates rising to 90 percent. The immediate trigger for the crisis was village suicides in the state of Andhra Pradesh linked to the arm-twisting tactics allegedly used by the microfinance industry to ensure loan repayment.” in: [Haldrup and Stiglitz \(2016\)](#)

189 In 2021, the Reserve Bank of India, the RBI, urged Microfinance lenders to refrain from chasing profits and introspect on the ‘negative consequences’ of pushing their borrowers into a debt trap, using harsh recovery practices and harassing customers.

microcredit and repayment should both be capped to some percentage of the expected earnings of the household/business for that period. The loan size and maturity can increase later on for clients who have repaid successfully and developed positive credit histories. In the case of group-based lending, particular attention should be put on social capital (cf. 1.3.).¹⁹⁰ Different avenues appear important:

- **Strengthening regulatory norms for microfinance lenders.** Different types of lenders cohabitate in the microfinance space, such as commercial banks, microfinance institutions, cooperative banks and financial NGOs. The fact that different norms generally apply to these actors often results in an **uneven playing field, which gives disproportionate benefit to less regulated non-financial entities**. This can have negative side effects for borrowers as it can lead to the overdevelopment of unregulated practices at usurious interest rates. Conscious of this problem, the Reserve Bank of India issued in March 2022 a new Regulatory Framework for Microfinance Loans that covers the definition of microfinance loans (e.g. size; collateral-free), methodology for creditworthiness assessment, pricing of loans, harmonisation of **caps on interest rates and repayment obligations** (i.e. maximum of 50% of monthly household income), etc.
- **Supporting the development of green microfinance.** Traditionally, microfinance has focused on the combination of financial and social objectives (double bottom line). A recent trend of green microfinance proposes an expansion towards a third bottom line by including environmental concerns.¹⁹¹ However, it raises the general issue of **how to account for environmental concerns**. In practice, it generally simply translates into microcredit directed towards activities deemed sustainable.¹⁹² Meanwhile, this raises the largely shared concern of, first, **how to define sustainable economic activities** and, second, **how to assess the environmental impact of economic activities?** (see 2.2.)

3.3. Improve consumer protection to reduce irresponsible lending

Irresponsible lending can be understood as a credit proposed when the borrower, at the time of the contract signature, has insufficient financial means to pay it back or has a foreseeable chance to see his or her income diminish during the reimbursement period. While lenders might reap the benefits of higher profits associated with such more risky loans, such loans imply significant social costs.¹⁹³ **If creditworthiness assessments** were properly made in the pre-contractual phase, a large part of future defaults and their social costs could be avoided – as evidenced by the 2010's Indian microfinance crisis.

Avoiding irresponsible lending that leads to over-indebtedness requires regulation(s)¹⁹⁴ that expands to a broad scope of credit products¹⁹⁵ and includes:

190 As shown by *Postelnicu and Hermes (2018)* in a well-remarked cross-country analysis, the success of microfinance models depends on the extent to which the society is conducive to social capital development.

191 *Allet and Huddon (2013); Forcella et al. (2017)*

192 Grameen Shakti, an NGO established by Grameen bank and dedicated to sustainable activities, offers a range of solar home systems, from 10 to 135W, for off-grid consumers as well as improved cook stoves, biogas digesters and organic fertiliser. In Central America, the "Proyecto CAMBio" intended to encourage biodiversity-friendly land-use practices via microfinance and technical assistance.

193 For more discussion, see: *Jérusalmy (2019); Norwood and Molinari (2021)*

194 E.g. The South Africa's National Credit Act (2005). The introduction of this Act is often presented as having shielded South Africa from some of the worst excesses of the global recession of 2008/2009. *Woker (2010)*

195 The importance of capturing a broad scope of credit products can be demonstrated at the example of European consumer credit market, where new unregulated consumer credit products lead to overindebtedness and mis-selling practices. See: *Norwood, & Antar (2022)*

- **Minimum criteria for creditworthiness assessment** (CWA). CWAs are important in determining a consumer's ability to repay a loan.¹⁹⁶ An adequate CWA assesses a consumer's household budget, which is based on data on the consumer's income and essential expenditures, as well as ongoing credits/debts.¹⁹⁷ **Adequate CWAs can be greatly facilitated by extending credit information sharing mechanisms** (cf. 2.1.). Lenders should be at **risk of sanction** if they offer credit without first establishing that the borrower has the ability to repay.
- **Interest rate caps** to protect consumers from predatory practices and limit the overdevelopment of microcredit, without reducing lending rates to creditworthy MSMEs. Ceiling on interest rates is a widely-used instrument¹⁹⁸ which can be **set at different levels for different categories of products**, and for different purposes (consumer protection, price control, or financial market shaping). When the national context requires it, interest rate caps should be set at a sufficiently high level to **protect MSMEs from usury practices and limit excessive development of microcredit** from crowding out SME lending. Careful attention should be put to avoid setting a too-low ceiling, which would have the unintended effect of lowering the credit supply to creditworthy MSMEs.¹⁹⁹
- **Minimum criteria for pre-contractual information** (advertising rules). Key information about the loan – such as costs, risks, and consequences in case of default – must be included and clearly and prominently displayed in the advertisement.²⁰⁰
- **Harmonised forbearance measures**. When borrowers fail to meet their repayment obligations, lenders may choose to initiate enforcement proceedings. In the context of credit, forbearance is an exceptional arrangement between a lender and a borrower to postpone any enforcement proceedings. In a forbearance agreement, lenders and borrowers agree on forbearance measures to help vulnerable borrowers to get back on track. Examples of forbearance measures are a **total or partial refinancing** of a credit agreement, **extending the term** of the credit agreement, or **changing the type** of the credit agreement, amongst others.²⁰¹

196 As inspiration, the European Banking Authority (EBA) developed [Guidelines on loan origination and monitoring](#) that introduce, among other things, requirements for assessing the borrowers' creditworthiness, clarification on bank's internal governance and control framework for the credit-granting and credit decision-making process, etc.

197 [Norwood and Antar \(2022\)](#)

198 According to the [Worldbank \(2018\)](#), at least 76 countries around the world, representing more than 80% of global GDP and global financial assets, impose some restrictions on lending rates.

199 [Heng, Chea and Heng \(2021\)](#)

200 [Norwood and Antar \(2022\)](#)

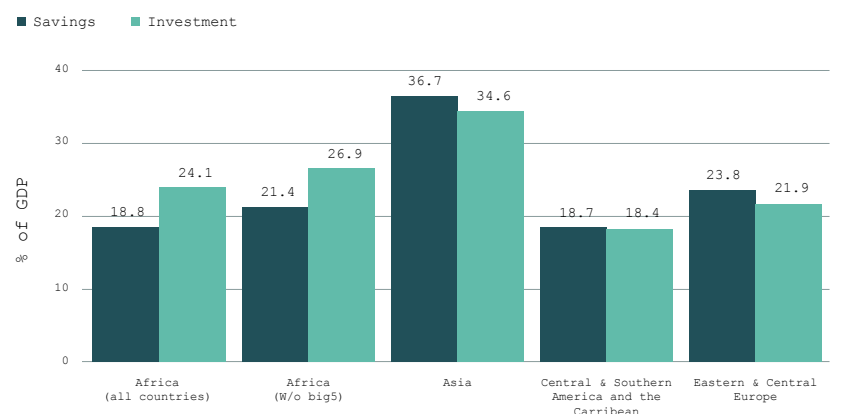
201 [Norwood and Antar \(2022\)](#)

3.4. Improve the quality of public spending and reduce the cost of debt

An underdeveloped domestic financial ecosystem often leads to an overreliance on external sources of finance. The absence of a well-developed and diversified financial ecosystem and sufficient savings inhibit most developing and emerging countries from generating finance at the domestic level.²⁰² To bridge their saving-investment gap (see fig 20), these countries depend on external sources of capital such as foreign direct investment (FDI), portfolio equity and debt, remittances but also external debt in the form of bilateral, multilateral public, and private debt.²⁰³

Fig. 20. - Saving-investment gap per region

Source: IMF WEO, April 2022



Average savings/investment rates over 2016:2020; GDP-weighted average per region. 5 biggest African economies are Algeria, Egypt, Morocco, Nigeria, and South Africa

Emerging market debt is very attractive for institutional investors, as it tends to exhibit the highest yields among the fixed income instruments. Private debt is overwhelmingly issued, distributed, and held by the largest investment banks and asset managers and is typically more expensive than bilateral and multilateral debt. But concerns emerged that a large part of the risk premium required by these private lenders is excessive and not truly related to some countries' fundamentals. Whilst external private debt is generally issued in foreign "hard" currencies, above all in US dollars, and under foreign law (mostly US and UK), it can also result in capital outflows from developing to developed countries.

Debt servicing costs are substantial in developing and emerging countries with interest payments (on public debt only) representing between 7 and 28% of the public revenue in our case study countries (see figure xx). Case in point, India's interest payments on government debt reached about 28% of general government revenue in 2021.²⁰⁴ This represents the first component of government spending (followed by subsidies, defence, investment, salaries, and pensions). Whilst a share of the interest payments is paid to domestic bondholders, a significant share is going to foreign bondholders – mostly large financial institutions and multilateral financial institutions such as the IMF – to service important stock of external debt.²⁰⁵

202 Ameli, Dessens, Winning, et al. (2021)

203 The two main public sources of external debt are bilateral debt (owed directly to governments) and multilateral debt (owed to multilateral financial institutions, or MFIs).

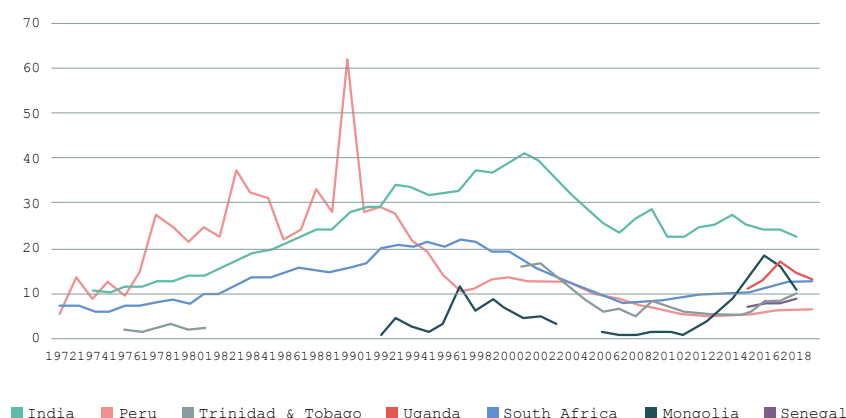
204 The highest among Baa-rated peers and more than three times the Baa median forecast of around 8%.

205 Reaching USD 570 billion in March 2021, Indian external debt is important and therefore comes with significant financial outflows for interest payments. This stock of external debt is divided between government debt (USD 107.2 bn), financial corporations (USD 207bn), and non-financial corporations (USD 230.1 bn). It can be further divided between commercial borrowing (USD 213.2 bn), non-resident deposit (USD 141.9 bn), short-term trade credit (USD 97.3 bn), multilateral debt (USD 69.7 bn), and bilateral debt (USD 31.0 bn).

Debt is not inherently good or bad, it depends on the use of the proceeds. Whilst debt used to pay current expenditure is hardly a good choice, debt is good when used for productive investment which increases the country's level of development, or to lower important risks looming (e.g. climate-related risks). Therefore, a State should strive to ensure the quality of public spending, but also to act as a strategic actor - to have the philosophy of a developmental state.

Fig. 21. Interest payments (% of revenue)

Source: World Bank



Different reforms can increase investors' confidence, therefore lowering interest rates and debt servicing costs, whilst increasing the quality of public finance and its direction towards green development:

- **Establish or improve the public financial and debt management legal framework** to ensure broad coverage, timeliness, quality and integrity of **fiscal reporting**. A clear and consistent public financial management legal framework is a prerequisite for the effective implementation of fiscal rules and existence of independent fiscal councils. Whilst many countries already possess public financial management legislations²⁰⁶, they are not all following the best international standards.²⁰⁷
- **Establish advanced fiscal rules that favour future-oriented expenditures.** Many advanced and emerging²⁰⁸ countries have set fiscal rules (including at sub-national levels) to create the institutional and budgetary framework for fiscal sustainability. Well-designed and well-implemented fiscal rules can indeed help contain the 'deficit bias' and strengthen credibility in the eyes of the market of a country's commitment to fiscal sustainability. Meanwhile, they should be designed to also **enable countercyclical fiscal management**, and account for the quality of public spending by **giving preferential treatment to future-oriented expenditures**.²⁰⁹ In particular, categories of public expenditures that

206 E.g. South Africa: the 1999's Public Finance Management Act (PFMA); India: the Fiscal Responsibility and Budget Management (FRBM) Act.

207 Whilst South Africa's budget documentation is highly transparent and accessible, with extensive debt reporting and clear and concise fiscal risks reports, India appears to have room for improvement. See: [CSEP \(2021\)](#)

208 India was one of the early adopters of fiscal rules among emerging market countries. The Fiscal Responsibility and Budget Management (FRBM) Act has been updated several times to adopt multiple fiscal indicators. The Central government (i.e. the Union) as well as all States have their fiscal rules and numerical targets in place. However, there are gaps and inconsistencies in these rules. in: [CSEP \(2021\)](#)

209 For more discussion on the European fiscal rules, see: [Suttor-Sorel \(2021\)](#); [Suttor-Sorel \(2022a\)](#); [Suttor-Sorel \(2022b\)](#).

have a growth-enhancing and/or a risk-lowering impact should be excluded from deficit rules.

- **Institute independent fiscal councils** that should monitor compliance with fiscal rules, produce forecasts and estimate funding gaps and fiscal risks. A growing number of developed and emerging economies have instituted Independent fiscal councils (or institutions) to monitor government's compliance with fiscal rules, debt sustainability, and provide independent macroeconomic and budgetary forecasts. Whilst the presence of such institutions can enhance the credibility of the fiscal rules, help impose budget constraints and reassure financial markets over a country's commitment to fiscal sustainability, their role should also be to provide estimations of funding gaps (e.g. green funding gap; MSME funding gap) and fiscal risks analysis (e.g. climate-related fiscal risks).
- **Develop a master plan for supporting and greening MSMEs** as a prerequisite for success. In South Africa, the Department of Small Business Development has developed a **National Integrated Small Enterprise Development (NISED) Masterplan**.²¹⁰ It represents a 10-year strategic approach to support and facilitate growth, productivity, formalisation and sustainability of MSMEs.²¹¹
- **Establish development-focused competent public institutions and bureaucracy** which can identify and financially support only those enterprises or projects linked to rapid growth and sustainable development.²¹² The relative autonomy of a **competent and meritocratic bureaucracy**²¹³ are among the characteristics²¹⁴ explaining the rapid economic development of the east and north-east Asian countries known as the 'Asian Tigers'.²¹⁵
- **Improve the public debt management (PDM) legal framework**. Guidance for effective PDM has been provided over the years by international organisations²¹⁶ and revolves around a series of principles such as the importance of creditor/investor security, the openness of the laws to scrutiny by all, etc. Where PDM legal framework exists, Debt Management Performance Assessment (DeMPA) could be conducted to identify room for improvement.²¹⁷

210 [DSBD \(2022\)](#)

211 The key objectives of this masterplan are: (1) more small enterprises productively contributing to GDP; (2) significant increase of formal employment by MSMEs; (3) intensifying formalisation and sustainability of MSMEs to support transformation; (4) raising the productivity and competitiveness of MSMEs.

212 [Bateman et al. \(2018\)](#), p. 51

213 I.e. hire civil servants on merit instead of on recommendation or nepotism.

214 Other characteristics of the so-called "developmental state" (DS) are the presence of committed developmental elites, relative State autonomy and *bureaucratic embedded autonomy*, bureaucratic power, legitimacy and performance, but also the existence of a special structure or 'pilot agency'. A good example of such a pilot agency is Japan's celebrated Ministry of Internal Trade and Industry (MITI) which consisted of an "extensive, relatively efficient bureaucracy, staffed by the nation's brightest and best". In: [Beeson \(2004\)](#)

215 Hong Kong, Singapore, South Korea and Taiwan "underwent rapid economic growth and a radical socio-economic transformation, moving from being poor agrarian societies or city states in the 1960s to producers of high technical, high value-added goods by the 1990s". [Fritz and Menocal \(2006\)](#)

216 [IMF & World Bank \(2014\)](#); [IMF \(2011\)](#);

217 The World Bank's Debt Management Performance Assessment (DeMPA) is a methodology for assessing public debt management performance through a comprehensive set of indicators spanning the full range of government debt management functions. [Worldbank \(2021\)](#)

4. Fixing regulatory mismatches

Country surveys have pointed to a series of regulatory mismatches that limit the development of LGEs and green MSMEs. They can be classified along three lines: (a) the lack of supportive regulations, (b) the presence of burdensome regulations and (c) the unintended adverse effects of existing supporting regulations (see section II, 2.2.). The complex question of informality also belongs to this category.

4.1. Scaling down administrative procedures & requirements

Streamlining regulatory procedures required for small businesses appears critical to encouraging the creation/formalisation of MSMEs & LGEs, and to facilitating activities of already existing ones. This implies: (a) reducing the number of procedures to comply with, (b) simplifying existing procedures (many countries have already established differentiated treatment for MSEs regarding labour and non-labour laws²¹⁸), and (c) avoiding instability and uncertainty arising from too frequent legal changes. This would allow MSMEs to allocate a larger part of their resources to their internal development and increase the likelihood of converting to greener activities. Specific attention should be given to the following procedures which tend to be the more limiting or the most time- and energy-consuming ones: (1) business registration; (2) licensing requirements; (3) environmental impact assessments (EIAs); (4) tax-related procedures; (5) labour-related procedures.

- **Conduct regulatory impact analyses (RIA)** to identify focal points of improvement.²¹⁹
- **Streamlining complex regulatory procedures** for small businesses identified in the RIA.
- **Develop digital services** where infrastructures allow it.²²⁰

4.2. Addressing informality where it proves problematic

Four main policy reactions to informality are possible²²¹: taking no action, moving formal work into the informal economy, pursuing the (near) suppression of the informal economy, and transforming informal activities into formal ones. As already outlined in section II, informality plays a crucial role in many developing or least developed economies. On top of providing a safety net against poverty and conveying an essential means of socialisation and cultural transmission, the informal realm also acts as an incubator of innovation and, under certain conditions, drives economic development.²²² The first element to **determine is therefore if, and to which extent informality is an impediment and which development goals (e.g. growth, poverty, sustainability) might be impacted the most**. Having assessed how critical the issue of informality is at the country level and considering a policy of bringing economic activity to the regulated sector, several aspects should be taken into account.

First, its benefits in terms of economic growth depend upon the productivity of informal labour - the largest benefits from fighting informality would be expected for the countries where the informal segment appears the least productive (i.e. for which the ratio between the share of informal GDP and the share of informal labour is the lowest), namely Uganda, Mongolia & India. For them, the 'formalisation' of informal labour is indeed likely to generate additional revenues.

²¹⁸ For more discussion, see: *ILO (2009)*; *ILO (2020)*

²¹⁹ *Improving the business environment of SMEs through effective regulation*, OECD Policy note (2018), p.8.

²²⁰ *NISED Masterplan*, 2022, pp. 24-26.

²²¹ Williams (2015), pp. 28 sqq

²²² Williams (2006)

Second, spillover effects in terms of alleviation of poverty, unemployment, and sustainability must be understood from a systemic perspective.

Since poverty and low material standards are usually associated with informal employment, formalisation can legitimately be expected to improve living conditions, especially in countries where a considerable part of the workforce remains informal (Senegal, Uganda, India, Peru). And since the care for environmental problems usually comes after the satisfaction of primary material needs, tackling economic distress is also an indirect way to foster environmental sustainability. Nevertheless, as informal employment is systematically less productive than formal employment, the benefits of the formalisation will depend on the extent to which productivity gains arising from more formal activities are reinvested to stimulate wages and generate more formal employment to keep the size of the workforce constant, rather than leaving room for higher unemployment levels.

Finally, the formalisation of activities is a long-run perspective: informality is not likely to vanish any time soon – nor is it desirable in most cases. In the meantime, however, informal MSMEs & workers still need support in various forms.

Said differently, **policies of informality reduction are no magic stick; rather, they involve subtle and continuous trade-offs** with other goals, mostly poverty reduction & environmental sustainability enhancement.

Following the approach of multi-dimensional sustainability outlined in the introductory section, rather than the illusory pursuit of an ‘informal-free’ economy, we advocate for **policies channelling progressively informality to more viable levels** in countries where it consists of a major impediment to economic development and policies of poverty reduction. At the same time, supporting informal workers is also needed to better shelter them against economic turmoil. Several measures and policies may be taken that incentivize formalisation²²³:

- **Promote and facilitate the registration of informal enterprises.** As discussed earlier, **MSMEs agencies with liaison offices** spread around the country can do much to sensitise and support business registration by providing information, explaining the benefits of formal registration, building partnerships with business organisations and acting as registration desks. Training and technical assistance they can provide can also enhance the productivity of informal work and make it increasingly compatible with expectations from the formal sector.
- **Improve (formal and informal) workers’ protection:** this involves the protection of workers against **labour-related risks**, access to **social security**, but also specific **support mechanisms for informal workers** (e.g. ad hoc insurance schemes, financial assistance). Developing and reinforcing labour inspection procedures can be instrumental in reducing the size of the informal economy while improving workers’ protection. Overall, there seems to be a general trend in emerging and developing countries towards the extension of equal protection to all workers, including those in the informal economy and self-employment.²²⁴

4.3. Greening and simplifying public procurement

As a final element in the regulatory toolbox with direct potential to enhance MSMEs’ financial capacity, (green) public procurement (GPP) plays a crucial role in strengthening the position of

²²³ Chen (2014), pp. 165sq.

²²⁴ Vargas (2020)

(M)SMEs. Green public procurement indeed represents a major **pool of demand for products and services of MSMEs** facing limited access to markets (cf. Section II. Signature issues), increases the enterprise's credibility, and generates regular revenue flows by facilitating connection with supply chain finance (i.e. procurement finance²²⁵). GPP is also positively associated with enterprise competitiveness and economic performance.²²⁶

Moreover, from an ecological perspective, **GPP also contributes to the mainstreaming of sustainable products and activities²²⁷, and boosts the environmental performance of manufacturing enterprises.**²²⁸

However, MSME involvement in GPP is also limited by several contextual barriers²²⁹, i.e. corruption, lack of transparency, cost of tender submissions, as well as organisation-level barriers (inability to match qualifications criteria, large contract size, under-staffed procurement divisions, etc.).²³⁰ In this respect, it is crucial to acknowledge the critical role played by public sector management in the development of SME-friendly public procurement policies (SFPP) through regulation & policy motivators.²³¹ Therefore, in order to enhance MSME access to green public procurement, it is essential to:

- **Implement more diverse evaluation metrics in GPP** (e.g. the Most Economically advantageous Tender (MEAT) evaluation)²³² to foster MSME participation in GPP. For many MSMEs feeling disadvantaged in comparison to larger companies, **green public procurement applications might indeed represent a long and burdensome process** which may not be considered worth the time, energy and money invested. Yet, as governments tend to privilege the lowest long-term cost over the short-term lowest price, MSMEs are often in a position to compete with larger companies on the social and environmental criteria.²³³
- **Foster and strengthen the commitment of public sector top management in SME-friendly public procurement practices.**
- **Organise and develop ad hoc training** for public sector procurers and SME suppliers.

225 *Nicoletti (2018)*

226 *Ivanova (2019)*

227 *Parikka-Alhola (2008)*

228 *Ivanova (2019)*, p. 124

229 *Akenroye & Aju (2013)*

230 *Patil (2017)*

231 *Liu et al. (2020)*, pp.2-3

232 *Nemec & Džupka (2021)*

233 *Andrecka (2017)*

Bibliography

- Abdulghaffar, N. A., & Akkad, G. S. (2021). *Internal and external barriers to entrepreneurship in Saudi Arabia*. Digest of Middle East Studies, 30(2), 116–134.
- Abraham, F., & Schmukler, S. L. (2017). Addressing the SME Finance Problem (Reports & Policy Briefs No. 9). World Bank Group - Global knowledge & research Hub in Malaysia.
- Adams, D. L., & Ladman, J. R. (1979). Lending to rural poor through informal groups: A promising financial market innovation. Savings and Development, 3(2), 85–94.
- AFI. (2018). Credit guarantee schemes: Facilitating MSME financing in Africa during the COVID19 pandemic. Alliance for Financial Inclusion - SME Finance Working Group.
- AFI (2022). Integrating digital financial services into a national financial inclusion strategy (Guideline Note No. 51). Alliance for Financial Inclusion.
- Aldaba, R. (2012). Small and Medium Enterprises' (SMEs) Access to Finance: Philippines. PIDS Discussion Paper Series, 5.
- Allet, M., & Huddon, M. (2013). Green Microfinance. Characteristics of microfinance institutions involved in environmental management (Working Papers CEB No. 13–005). Université libre de Bruxelles.
- Alvarez de la Campa, A. (2011). Increasing access to credit through reforming secured transactions in the MENA region (Policy Research Working Paper No. 5613). The World Bank Middle East and North Africa Region Financial and Private Sector Development Unit & Financial and Private Sector Development Network Investment Climate Department.
- Álvarez Jaramillo, J., Zartha Sossa, J. W., & Orozco Mendoza, G. L. (2018). *Barriers to sustainability for small and medium enterprises in the framework of sustainable development*—Literature review. Business Strategy and the Environment. <https://doi.org/10.1002/bse.2261>
- Ameli, N. et al. (2021). Higher cost of finance exacerbates a climate investment trap in developing economies. Nature Communications, 12(1), 4046. <https://doi.org/10.1038/s41467-021-24305-3>
- Arráiz, I., Meléndez, M., & Stucchi, R. (2014). *Partial credit guarantees and firm performance: Evidence from Colombia*. *Small Business Economics*, 43(3), 711–724. <https://doi.org/10.1007/s11187-014-9558-4>
- Ashford, N. A., & Hall, R. P. (2011). The importance of regulation-induced innovation for sustainable development. Sustainability, 3(1), 270–292. <https://doi.org/10.3390/su3010270>
- Attanasio, O. et al. (2011). Group lending or individual lending? Evidence from a randomised field experiment in Mongolia (MPRA Paper No. 35439). European Bank for Reconstruction and Development.
- Attig, N., & Brockman, P. (2017). *The local roots of corporate social responsibility*. *Journal of Business Ethics*, 142(3), 479–496. <https://doi.org/10.1007/s10551-015-2757-3>
- Attridge, S., & Gouett, M. (2021). Development finance institutions: The need for bold action to invest better. ODI.
- Balkenhol, B., & Schütte, H. (2001). Collateral, Collateral Law and Collateral Substitutes (Working Paper No. 26). International Labour Office.
- Bateman, M. (2019). The rise and fall of global microcredit: Development, debt and disillusion. Routledge.
- Beeson, M. (2019). *The rise and fall (?) of the developmental state: The vicissitudes and implications of east Asian interventionism. In Developmental States: Relevancy, Redundancy or Reconfiguration?* (pp. 29–40). Nova Science Publishers.
- Besley, T., & Coate, S. (1995). *Group lending, repayment incentives and social collateral*. *Journal of Development Economics*, 46(1), 1–18.
- Bruhn, M. et al. (2017). MSME finance gap: Assessment of the shortfalls & opportunities in financing micro, small and medium enterprises in emerging markets. World Bank Group - SME Finance Forum - IFC.

- Caldera, H. T. S., Desha, C., & Dawes, L. (2019). *Evaluating the enablers and barriers for successful implementation of sustainable business practice in 'lean' SMEs*. *Journal of Cleaner Production*, 218, 575–590.
- Calice, P. (2021). Greening public credit guarantee schemes for net zero. Private Sector Development Blog.
- Campello, M., & Larrain, M. (2016). *Enlarging the contracting space: Collateral menus, access to credit, and economic activity*. *Review of Financial Studies*, 29(2), 349–383.
- Caradonna, J. (2014). *Sustainability: A history* (Oxford University Press).
- Cecere, G. (2016). Financial constraints and public funding for Eco-innovation: Empirical evidence on European SMEs (Working Paper No. 46). Università Cattolica del Sacro Cuore - Dipartimento di Economia e Finanza.
- Chee Wooi, G., & Zailani, S. (2010). *Green supply chain initiatives: Investigation on the barriers in the context of SMEs in Malaysia*. *International Business Management*, 4(1), 20–27.
- Chen, M. A. (2016). *The informal economy: Recent trends, future directions*. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy*, 26(2), 155–172.
- Cheok, D., & Singh, S. K. (2018). Identifying Green, Sustainable and Innovative MSMEs in APEC (APEC Policy Support Unit Policy Brief No. 19). Asia Pacific Economic Cooperation (APEC).
- Chien, F. et. al. (2021). *Assessing the mechanism of barriers towards green finance and public spending in small and medium enterprises from developed countries*. *Environmental Science and Pollution Research*, 28(43), 60495–60510. <https://doi.org/10.1007/s11356-021-14907-1>
- Choudhury, M., & Goswami, C. (2019). *Msme financing gaps – review of literature for the period 2005 to 2016*. *Journal of Small Business & Entrepreneurship Development*, 7(2).
- D'Amato, D. et. al. (2017). *Green, circular, bio economy: A comparative analysis of sustainability avenues*. *Journal of Cleaner Production*, 168, 716–734.
- Daño-Luna, M. et al. (2018). Drivers of Philippine SME Competitiveness: Results of the 2018 SME survey (Working Paper Series No. 2018–003). AIM Rizalino S. Navarro Policy Center for Competitiveness.
- Dayé, M., Houssa, R., & Reding, P. (2016). *Improving MSMEs access to external financing in low income countries: Is there a role for development cooperation? : Reflets et Perspectives de La Vie Économique*, Tome LV(1), 9–28. <https://doi.org/10.3917/rpve.551.0009>
- De, P. K., & Nagaraj, P. (2014). *Productivity and firm size in India*. *Small Business Economics*, 42(4), 891–907.
- de Quidt, J., Fetzter, T., & Ghatak, M. (2016). *Group lending without joint liability*. *Journal of Development Economics*, 121, 217–236.
- Demirgüç-Kunt, A., & Huizinga, H. (1999). *Determinants of commercial bank interest margins and profitability: Some international evidence*. *The World Bank*. <https://doi.org/10.1596/1813-9450-1900>
- Doran, A. et al. (2009). The Missing Middle in Agricultural Finance: Relieving the capital constraint on small-holder groups and other agricultural SMEs [Research report]. Oxfam GB.
- Durst, S., & Gerstlberger, W. (2020). *Financing responsible small- and medium-sized enterprises: An international overview of policies and support programmes*. *Journal of Risk and Financial Management*, 14(1), 10.
- Džafi, Z. et al. (2011). Internal and External Obstacles to the Development of SMEs in Bosnia and Herzegovina. *Croatian Economic Survey*, 13(1), 143–171.
- Eijdenberg, E. L., Sabokwigina, D., & Masurel, E. (2019). *Performance and environmental sustainability orientations in the informal economy of a least developed country*. *International Journal of Entrepreneurial Behavior & Research*, 25(1), 129–149.
- Endris, E., & Kassegn, A. (2022). *The role of micro, small and medium enterprises (MSMEs) to the sustainable development of sub-Saharan Africa and its challenges: A systematic review of evidence from Ethiopia*. *Journal of Innovation and Entrepreneurship*, 11(1), 20.
- Fan, S., & Chan Kang, C. (2005). *Is small beautiful? Farm size, productivity, and poverty in Asian agriculture*. *Agricultural Economics*, 32(1), 135–146.

- Fatoki, O., & Odeyemi, A. (2010). *Which new small and medium enterprises in South Africa have access to bank credit?* *International Journal of Business and Management*, 5(10), p128.
- Ferrari, A. (2018). Interest Rate Caps: The Theory and The Practice (Policy Research Working Paper No. 8398). World Bank.
- Forcella, D. (2017). Green Microfinance in Latin America and the Caribbean: An analysis of opportunities (IDB Report No. 658). Inter-American Development Bank.
- Fritz, V., & Rocha Menocal, A. (2006). (Re)building Developmental States: From Theory to Practice (Working Paper No. 274). Overseas Development Institute.
- GCF. (2019). Review of the initial modalities for the Private Sector Facility – Addendum IV: Review of the micro, small and medium sized enterprise pilot programme (GCF/B.23/12/Add.04). Green Climate Fund.
- GCF. (2021). Independent Rapid Assessment of the GCF's Request for Proposals Modality (GCF/B.29/08). Green Climate Fund.
- Geissdoerfer, M., Savaget, P., Bocken, N. M. P., & Hultink, E. J. (2017). *The Circular Economy – A new sustainability paradigm?* *Journal of Cleaner Production*, 143, 757–768.
- Ghadge, A. et. al. (2017). *Implementing environmental practices within the Greek dairy supply chain: Drivers and barriers for SMEs.* *Industrial Management & Data Systems*, 117(9), 1995–2014.
- Ghazilla, R. A. R. et. al. (2015). *Drivers and barriers analysis for green manufacturing practices in Malaysian SMEs: A preliminary findings.* *Procedia CIRP*, 26, 658–663.
- Giddings, B., Hopwood, B., & O'Brien, G. (2002). *Environment, economy and society: Fitting them together into sustainable development.* *Sustainable Development*, 10(4), 187–196.
- Glavi, P., & Lukman, R. (2007). *Review of sustainability terms and their definitions.* *Journal of Cleaner Production*, 15(18), 1875–1885. <https://doi.org/10.1016/j.jclepro.2006.12.006>
- Gonzalez, E., Hommes, M., & Mirmulstein, M. L. (2014). Towards a Better Understanding of Micro, Small, and Medium Enterprises [MSME Country Indicators]. IFC.
- Guérineau, S., & Léon, F. (2019). *Information sharing, credit booms and financial stability: Do developing economies differ from advanced countries?* *Journal of Financial Stability*, 40, 64–76.
- Gupta, H., & Barua, M. K. (2018). *A framework to overcome barriers to green innovation in SMEs using BWM and Fuzzy TOPSIS.* *Science of The Total Environment*, 633, 122–139.
- Haldar, A., & Stiglitz, J. E. (2016). *Group lending, joint liability, and social capital: Insights from the Indian microfinance crisis.* *Politics & Society*, 44(4), 459–497.
- Hanumantha Rao, C. H. (1966). Alternative Explanations of the Inverse Relationship between Farm Size and Output Per Acre in India. *Indian Economic Review*, 1(2), 1–12.
- Hasan, A. et. al. (2021). *Ranking of drivers and barriers for the green management implementation at MSME in banda Aceh city, Indonesia: Proceedings of the 2nd Borobudur International Symposium on Science and Technology* (BIS-STE 2020), *Advances in Engineering Research*, 203.
- Hediger, W. (2008). *Weak and strong sustainability, environmental conservation and economic growth.* *Natural Resource Modeling*, 19(3), 359–394.
- Heng, D. et al. (2021). *Impacts of interest rate cap on financial inclusion in Cambodia.* *International Monetary Fund*.
- Holden, P., & Howell, H. (2009). Enhancing access to finance in the Caribbean (Private Sector Development Discussion Paper No. 4). Inter-American Development Bank.
- Hu, J. et al. (2021). *Will green finance contribute to a green recovery? Evidence from green financial pilot zone in china.* *Frontiers in Public Health*, 9, 794195.
- Hussain, F. (2020). Developing a national green taxonomy: A world bank guide. World Bank Group.
- ILO. (2009). The informal economy in Africa: Promoting transition to formality: Challenges and strategies.

International Labour Office, Employment Sector and Social Protection Sector.

ILO (2019). Small Matters: Global evidence on the contribution to employment by the self-employed, micro-enterprises and SMEs. (2019). International Labor Organization

Isa, M., & Mangifera, L. (2019). *Continuous flood risk reduction on MSMEs: Implementation of MACTOR program. Economic Journal of Emerging Markets*, 11(1), 113–121.

Ivanova, T. (2020). *Management of green procurement in small and medium-sized manufacturing enterprises in developing economies*. 22(53), 121.

Jerusalmy, O. (2019). What makes credit so risky? A consumer perspective A paper on the development of consumer credit markets from ancient times to the present [Finance Watch Report].

Johnston, P. (2007). *Reclaiming the definition of sustainability. Environmental Science and Pollution Research - International*, 14(1), 60–66.

Jose, R., & Ramakrishna, S. (2021). *Comprehensiveness in the research on sustainability. Materials Circular Economy*, 3(1).

Jun, W., Ali, W., Bhutto, M. Y., Hussain, H., & Khan, N. A. (2019). *Examining the determinants of green innovation adoption in SMEs: A PLS-SEM approach. European Journal of Innovation Management*, 24(1), 67–87.

Kallberg, J. G., & Udell, G. F. (2003). *The value of private sector business credit information sharing: The US case. Journal of Banking & Finance*, 27(3), 449–469.

Karim, L. (2011). Microfinance and its discontents: Women in debt in Bangladesh (NED-New edition,). University of Minnesota Press.

Karuppiyah, K. et. al. (2020). *An integrated approach to modelling the barriers in implementing green manufacturing practices in SMEs. Journal of Cleaner Production*, 265.

Kishawy, H., Hegab, H., & Saad, E. (2018). *Design for sustainable manufacturing: Approach, implementation, and assessment. Sustainability*, 10(10), 3604.

Koekemoer, M., & Brits, R. (2020). Towards reforming South African secured transactions law: The value of a comparison with international and regional legal instruments (THRHR No. 83; pp. 528–541).

Kushnir, K. et al. (2010). Micro, small, and medium enterprises around the world: How many are there, and what affects the count? (MSME Country Indicators). World Bank - IFC.

Ladman, J. R., & Afcha, G. (1990). Group lending ; why it failed in Bolivia. Savings and Development, 14(4), 353–369.

Lafrance, A. (2012). *Are small firms more profitable than large firms? SSRN Electronic Journal*.

Lebacqz, T., Baret, P. V., & Stilmant, D. (2013). *Sustainability indicators for livestock farming. A review. Agronomy for Sustainable Development*, 33(2), 311–327.

Lee, K. (2009). *Why and how to adopt green management into business organizations?: The case study of Korean SMEs in manufacturing industry. Management Decision*, 47(7), 1101–1121.

Lee, N., & Preston, D. (2019). The Stretch Fund: Bridging the Gap in the Development Finance Architecture [CGD Brief]. Center for Global Development.

Licastro, A., & Sergi, B. S. (2021). *Drivers and barriers to a green economy. A review of selected Balkan countries. Cleaner Engineering and Technology*, 4.

Liu, J. et al. (2020). *Promoting SMEs friendly public procurement (Sfpp) practice in developing country: The regulation and policy motivator and beyond. The Social Science Journal*, 1–20.

Love, I., Martínez Pería, M. S., & Singh, S. (2013). Collateral Registries for Movable Assets. Does Their Introduction Spur Firms' Access to Bank Finance? (No. 6477; Policy Research Working Paper). The World Bank - Development Research Group.

Love, I., Martínez Pería, M. S., & Singh, S. (2016). *Collateral registries for movable assets: Does their introduction spur firms' access to bank financing? Journal of Financial Services Research*, 49(1), 1–37.

- Love, I., & Mylenko, N. (2003). *Credit reporting and financing constraints*. The World Bank.
- Mabhungu, I., & Van Der Poll, B. (2017). *A Review of Critical Success Factors Which Drives the Performance of Micro, Small and Medium Enterprises*. *International Journal of Business and Management*, 12(6), 151.
- Mahesh, M. K., Aithal, P. S., & Sharma, K. R. (2022). *Impact of sustainable finance on MSMEs and other companies to promote green growth and sustainable development*. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 6(1), 60–76.
- Marks, J. T., & Hidden, K. (2017). *SMMEs and the green economy: Muddy waters and murky future [Working Paper]*. Gordon Institute of Business Science (GIBS).
- Mathiyazhagan, K. et al. (2013). *An ISM approach for the barrier analysis in implementing green supply chain management*. *Journal of Cleaner Production*, 47, 283–297.
- Mazur, E. (2016). Environmental Policy Toolkit for Greening SMEs. EaPGREEN - Partnership for Environment & Growth.
- Menkhoff, L., Neuberger, D., & Rungruxsivorn, O. (2012). *Collateral and its substitutes in emerging markets' lending*. *Journal of Banking & Finance*, 36(3), 817–834.
- Mole, S. A., & Namusonge, G. S. (2016). *Factors affecting access to credit by small and medium enterprises: A case of kitale town*. *The International Journal of Social Sciences and Humanities Invention*.
- Montmasson-Clair, G. et. al. (2019). All is not green: Climate change adaptation and small business resilience in low- and middle- income countries [Background paper]. Global Commission on Adaptation.
- Montmasson-Clair, G. (2019). Small Business Development in the Climate Change Adaptation Space in South Africa [TIPS report]. Trade & Industrial Policy Strategies.
- Moore, S. B., & Manring, S. L. (2009). *Strategy development in small and medium sized enterprises for sustainability and increased value creation*. *Journal of Cleaner Production*, 17(2), 276–282.
- Moore, W., & Craigwell, R. (2002). *Market power and interest rate spreads in the Caribbean*. *International Review of Applied Economics*, 16(4), 391–405.
- Nemec, P., & Džupka, P. (2021). *Determinants of SME access to public procurement: Empirical evidence from the Visegrad group countries*. *Proceedings of CBU in Economics and Business*, 2, 75–80.
- NGFS. (2022). Enhancing market transparency in green and transition finance [Technical Document]. Network for Greening the Financial System.
- Ngugi, R. W. (2001). An empirical analysis of interest rate spread in Kenya (AERC Research Paper No. 106). African Economic Research Consortium.
- Nicoletti, B. (2018). *From trade finance to supply chain finance to procurement finance*. In B. Nicoletti (Ed.), *Procurement Finance: The Digital Revolution in Commercial Banking* (pp. 39–92). Springer International Publishing.
- Norwood, P., & Antar, R. (2022). Tackling causes of over-indebtedness in the EU consumer credit market: An in-depth study of the key topics that need to be addressed by the Consumer Credit Directive Review [Finance Watch Policy Brief].
- Norwood, P., & Molinari, A. (2021). Consumer credit market malpractices uncovered: An in-depth study of consumer credit markets in Spain, Romania and Ireland and what it means for the Consumer Credit Directive review [Finance Watch Report].
- OECD. (2016a). Evaluating costs and benefits of policy interventions to facilitate SME access to credit: Lessons from a literature review [DAF/CMF(2016)17]. Organisation for Economic Co-operation and Development.
- OECD. (2016b). *Financing SMEs and entrepreneurs 2016: An OECD scoreboard*. OECD.
- OECD. (2017). Evaluating Publicly Supported Credit Guarantee Programmes for SMEs.
- OECD. (2018). Improving the business environment for SMEs through effective regulation (SME Ministerial Conference) [OECD Policy note]. Organization for Economic Cooperation & Development.

- Ongechi, A. M., & Mandala, N. O. (2021). *Financing MSMEs Green Growth, Resource Efficiency and Cleaner Production in East Africa. European Scientific Journal ESJ*, 17(1).
- Owens, S. (2003). *Is there a meaningful definition of sustainability? Plant Genetic Resources*, 1(1), 5–9.
- Panigrahi, S. S., & Rao, N. S. (2018). A *stakeholders' perspective on barriers to adopt sustainable practices in MSME supply chain: Issues and challenges in the textile sector. Research Journal of Textile and Apparel*, 22(1), 59–76.
- Parikka-Alhola, K. (2008). *Promoting environmentally sound furniture by green public procurement. Ecological Economics*, 68(1–2), 472–485.
- Patil, K. (2017). *Public procurement policy for small and medium enterprises in developing countries: Evidence from India. International Journal of Public Sector Management*, 30(4), 391–410.
- Phillis, Y. A., & Andriantiatsaholainaina, L. A. (2001). *Sustainability: An ill-defined concept and its assessment using fuzzy logic. Ecological Economics*, 37(3), 435–456.
- Pierce, D. (2011). SME Finance Policy Guide. Global Partnership for Financial Inclusion (GPFI) - IFC.
- Postelnicu, L., & Hermes, N. (2018). *Microfinance performance and social capital: A cross-country analysis. Journal of Business Ethics*, 153(2), 427–445.
- Postelnicu, L., Hermes, N., & Szafarz, A. (2014). *Defining social collateral in microfinance group lending. In R. Mersland & R. Ø. Strøm (Eds.), Microfinance Institutions* (pp. 187–207). Palgrave Macmillan UK.
- Pretty, J. N. (1997). *The sustainable intensification of agriculture. Natural Resources Forum*, 21(4), 247–256.
- Prima Dania, W. A., Xing, K., & Amer, Y. (2016). *Collaboration and sustainable agri-food supply chain: A literature review. MATEC Web of Conferences*, 58, 02004.
- Purwandani, J. A., & Michaud, G. (2021). *What are the drivers and barriers for green business practice adoption for SMEs? Environment Systems and Decisions*, 41(4), 577–593.
- Putnam, R. D. (1993). The Prosperous Community: Social Capital and Public Life. *The American Prospect*, 13, 35–42.
- Rao, P., & Holt, D. (2005). *Do green supply chains lead to competitiveness and economic performance? International Journal of Operations & Production Management*, 25(9), 898–916.
- Ratnawati, K. (2020). *The influence of financial inclusion on MSMEs' performance through financial intermediation and access to capital. The Journal of Asian Finance, Economics and Business*, 7(11), 205–218.
- Revell, A., & Rutherford, R. (2003). *UK environmental policy and the small firm: Broadening the focus. Business Strategy and the Environment*, 12(1), 26–35.
- Rwingema, P. C. (2020). Effect of covid-19 on micro, small and medium enterprises (MSMEs) in Rwanda. *The Strategic Journal of Business & Change Management*, 7(4), 1630–1655.
- Saad, G. H., & Siha, S. (2000). *Managing quality: Critical links and a contingency model. International Journal of Operations & Production Management*, 20(10), 1146–1164.
- Sandy, K., & Dardaine-Edwards, A. (2017). Building resilience and adding value to local green enterprises: Developing a 'climate-proofing' methodology (Technical Report No. 403). Caribbean Natural Resources Institute (CANARI).
- Sanoussi, B. (2020). The Role of DFIs and their shareholders in building back better in the wake of Covid-19 (Tri Hita Karana Working Paper for Development Finance Institutions).
- Saturwa, H. N., Suharno, S., & Ahmad, A. A. (2021). *The impact of Covid-19 pandemic on MSMEs. Jurnal Ekonomi Dan Bisnis*, 24(1), 65–82.
- Schneider, F., & Klinglmaier, R. (2004). Shadow economies around the world: What do we know? (Working Paper No. 0403). Johannes Kepler University of Linz, Department of Economics.
- Schumacher, E. (1972). *Small is beautiful: Economics as if people mattered*. Harper & Row.

- Sen, A. (1962). An Aspect of Indian Agriculture. *Economics Weekly*, 14, 243–246.
- Shafi, M., Liu, J., & Ren, W. (2020). *Impact of COVID-19 pandemic on micro, small, and medium-sized Enterprises operating in Pakistan. Research in Globalization*, 2, 100018.
- Shankar, S. (2019). The role of credit rating agencies in addressing gaps in micro and small enterprise finances: The case of India (ADB Working Paper Series No. 931). Asian Development Bank (ADB).
- Shelaby, A. (2019). What Affects the Birth of New MSMEs in Egypt? The Case of Agribusiness in Fayoum. *International Journal of Economics, Commerce and Management*, 7(4), 237–248.
- Singh, A. et al. (2021). India's fiscal architecture: Lessons from the world and a way forward (CSEP Discussion Note No. 5). Center for Social & Economic Progress.
- Smit, S., & Musango, J. K. (2015). *Towards connecting green economy with informal economy in South Africa: A review and way forward. Ecological Economics*, 116, 154–159.
- Stevens, C. (2010). *Linking sustainable consumption and production: The government role. Natural Resources Forum*, 34(1), 16–23.
- Suttor-Sorel, L. (2019). Making Finance Serve Nature: From the niche of Conservation finance to the mainstreaming of Natural Capital approaches in financial systems [Finance Watch report].
- Suttor-Sorel, L. (2020). Nature's Return: Embedding environmental goals at the heart of economic and financial decision-making [Finance Watch report].
- Suttor-Sorel, L. (2021). One Framework to Rule Them All: The European fiscal framework in five questions [Finance Watch report].
- Suttor-Sorel, L. (2022). Breaking The Stalemate: Upgrading EU economic governance for the challenges ahead [Finance Policy Brief]. Finance Watch.
- Suttor-Sorel, L., Brachet, I. (2022). From Maastricht to Paris: Why climate change should be considered in a reformed EU fiscal framework. Finance Watch - Climate Action Network.
- Sweerts, B., Longa, F. D., & van der Zwaan, B. (2019). *Financial de-risking to unlock Africa's renewable energy potential. Renewable and Sustainable Energy Reviews*, 102, 75–82.
- Tambunan, T. (2018). *MSMEs and Access to Financing in a Developing Economy: The Indonesian Experience. In A. Woldie & B. Thomas (Eds.), Financial entrepreneurship for economic growth in emerging nations: (pp. 148–171). IGI Global. https://doi.org/10.4018/978-1-5225-2700-8*
- Tchamyou, V. S., & Asongu, S. A. (2017). *Information sharing and financial sector development in Africa. Journal of African Business*, 18(1), 24–49.
- Thanagopal, T., & Le Mouel, P. (2014). *Resisting foreign competition—A case study of France and Germany. Croatian Economic Survey*, 16(1).
- Tisdell, C. (1996). *Economic indicators to assess the sustainability of conservation farming projects: An evaluation. Agriculture, Ecosystems & Environment*, 57(2–3), 117–131.
- Turner, M., & Varghese, R. (2007). Economic Impacts of Payment Reporting Participation in Latin America. Political & Economic Research Council.
- Ünal, F. G. (2008). *Small is beautiful: Evidence of an inverse relationship between farm size and yield in Turkey (Working Paper No. 551). Working Paper*.
- Vargas, A. M. (2020). Applying labour law to micro, small and medium-sized enterprises: A comparative study of 16 countries (ILO Working Paper No. 9). International Labor Organization.
- Verma, T. L. (2019). *Role of micro, small and medium enterprises (MSMEs) in achieving sustainable development goals. International Journal for Research in Engineering Application & Management (IJREAM)*, 4(12).
- Virmani, N., Bera, S., & Kumar, R. (2020). *Identification and testing of barriers to sustainable manufacturing in the automobile industry: A focus on Indian MSMEs. Benchmarking: An International Journal*, 28(3), 857–880.
- Vos, R. O. (2007). Defining sustainability: A conceptual orientation. *Journal of Chemical Technology & Bio-*

technology, 82(4), 334–339. <https://doi.org/10.1002/jctb.1675>

Watson, C. (2022). The Global Climate Finance Architecture (Climate Finance Fundamentals). ODI - Heinrich Böll Stiftung.

Williams, C. C. (2015). *The informal economy as a path to expanding opportunities*. *SSRN Electronic Journal*.

Williams, C. C., & Nadin, S. (2010a). *Entrepreneurship and the informal economy: An overview*. *Journal of Developmental Entrepreneurship*, 15(04), 361–378.

Williams, C. C., & Nadin, S. (2010b). *Entrepreneurship and the informal economy: An overview*. *Journal of Developmental Entrepreneurship*, 15(04), 361–378.

Woker, T. (2021). *Why the need for consumer protection legislation? A look at some of the reasons behind the promulgation of the national credit act and the consumer protection act*. *Obiter*, 31(2). <https://doi.org/10.17159/obiter.v31i2.12356>

World Bank. (2016). *Doing business 2017: Equal opportunity for all*. *The World Bank*.

World Bank. (2019). Credit scoring approaches guidelines. World Bank - International Committee on Credit Reporting.

World Bank. (2021). Debt Management Performance Assessment Methodology—2021 Edition. The International Bank for Reconstruction and Development / The World Bank.

World Bank Group. (2015). Principles for Public Credit Guarantee Schemes for SMEs. International Bank for Reconstruction and Development / The World Bank and FIRST Initiative.

World Bank Group. (2018). Second Loss Partial Credit Guarantee. Unlocking the potential of small and medium enterprises with an innovative, risk-sharing financing solution.

Ye, T. et al. (2022). *Research on green finance and green development based eco-efficiency and spatial econometric analysis*. *Sustainability*, 14(5), 2825.

Yoshino, N., & Taghizadeh-Hesary, F. (2018). The role of SMEs in Asia and their difficulties in accessing finance (n°911; ADBI Working Paper Series). Asian Development Bank Institute.

A contextual financial analysis of green micro, small & medium enterprises / local green enterprises in Uganda (ACODE Policy Research Paper No. 105). (2021).

An assessment of South Africa's SME landscape: Challenges, opportunities, risks & next steps. (2018). [SME South Africa report]. AdClickAfrica - SME South Africa - In On Africa (IOA).

Informality and inclusive green growth: Evidence from 'The biggest private sector' event. (2016). [Conference report].



Finance Watch

Making finance serve society

About Finance Watch

Finance Watch is an independently funded public interest association dedicated to making finance work for the good of society. Its mission is to strengthen the voice of society in the reform of financial regulation by conducting advocacy and presenting public interest arguments to lawmakers and the public. Finance Watch's members include consumer groups, housing associations, trade unions, NGOs, financial experts, academics and other civil society groups that collectively represent a large number of European citizens. Finance Watch's founding principles state that finance is essential for society in bringing capital to productive use in a transparent and sustainable manner, but that the legitimate pursuit of private interests by the financial industry should not be conducted to the detriment of society. For further information, see www.finance-watch.org



About Finance GEC

The Green Economy Coalition (GEC) is the world's largest alliance for green and fair economies. We work with our partners around the world, united by the Principles of A Green Economy, to give citizens a voice, hold governments to account, and drive real economic change. GEC represents a range of sectors, NGOs, businesses, research institutes, UN organisations and trade unions. Although we are diverse, we are united by the same vision. We know that green economies are possible, necessary and desirable. www.greeneconomycoalition.org