ACELI AFRICA

# **Bridging the Financing Gap:** Unlocking the Impact Potential of Agricultural SMEs in Africa

**September 2020**

# Introduction

Dear Stakeholder,

At a sector convening in December 2017, lending practitioners discussed barriers to growing the finance market for agricultural SMEs: namely, the mismatch between the risk-return hurdle of capital providers and the addressable demand among businesses. Stakeholders in attendance pushed lenders to put hard evidence behind their anecdotal experiences. This report synthesizes our journey over the past two and half years: first to distil the economics of agri-SME lending across a diverse set of lenders and then to design solutions to bridge the gap - estimated at $65 billion a year across Sub-Saharan Africa - between capital supply and demand for agri-SMEs. **Our ultimate goal is to mobilize capital flows at scale and unlock the substantial impact potential of agricultural SMEs for: economic growth, farmer and worker livelihoods, regional food security, opportunities for women and youth, and climate resilience across the continent.**

In partnership with Dalberg Advisors and with funding from 12 donors, we reviewed data from 31 lenders on 9,104 transactions totaling $3.7 billion and also conducted in-depth interviews with lenders, technical assistance providers, and many other ecosystem actors. This report has the dual purposes of:

1. **Sharing our conclusions: in short, lending to agricultural SMEs, particularly loans in the $25k-$500k range, tends to be unprofitable.** Previous debates have focused on real v. perceived risk despite a lack of data on loan performance and even less on the composite lending economics at loan- and portfolio-levels. More data is still needed, particularly in other regions, but we believe that the evidence presented here is sufficient to conclude that i) the returns in agri-SME lending in East Africa are well below market rate and ii) solutions that go beyond the current offer are needed.

2. **Presenting Aceli Africa's data-driven, marketplace approach to align capital supply and demand.** We also put forward a set of specific solutions, informed by this new data and stakeholder insights. Some of these solutions differ in important ways from approaches that have been tried in the past while others build on successful models. We believe that a range of solutions are needed to solve the enormity of the problem and will be testing and honing Aceli's offering to contribute to sector practice and learning for how to optimize the growth and impact of the agricultural SME finance market.

This report focuses on our data findings in partnership with Dalberg Advisors; for a condensed version, please view the executive summary. To learn more about Aceli's product offerings, please download our programmatic overview. Our data collection and the design of Aceli Africa would not have been possible without the many collaborators listed on the next page – thank you. We invite your continued engagement and welcome new partners as we embark on this next phase of implementation.

Brian Milder
CEO, Aceli Africa

# Donor acknowledgments

**We thank the following donors for supporting the data analysis and design of Aceli Africa:**


USAID FROM THE AMERICAN PEOPLE

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

ceniarth

CONVERGENCE
BLENDING GLOBAL FINANCE

IKEA Foundation

MacArthur Foundation

mastercard foundation

OMIDYAR NETWORK
A WORLD OF POSITIVE RETURNS

OPEN SOCIETY FOUNDATIONS

PROPEL CAPITAL

Rabo Foundation

FOUNDATION

UKaid
from the British people

# Acknowledgements

**In addition to the donors that have supported Aceli Africa, we would like to thank the following institutions for their roles in the data analysis and design process:**

**Institutional partners**

- **Council on Smallholder Agricultural Finance** for initiating dialogue among lending practitioners that led to the development of Aceli Africa
- **Dalberg Advisors** for conducting data analysis and providing inputs to calibrate the financial incentives Aceli will offer
- **Global Development Incubator** for serving as institutional host
- **International Growth Centre** for developing the independent evaluation of Aceli's financial incentives and technical assistance
- **Anjarwalla & Khanna and Ropes & Gray** for offering legal counsel in establishing Aceli's legal entity and program parameters

**Lenders that contributed quantitative and qualitative data**

Absa Bank (Kenya and Uganda), AgDevCo, Alterfin, Benefactors, Centenary Bank, Credit Bank, Development Bank of Rwanda (BRD), DFCU Bank, Equity Bank, EFTA, Global Partnerships, FACTS (Kenya and Uganda), Kiva, Incofin, Madison, Mango Fund, NCBA, NMB, Oikocredit, Opportunity Bank, Rabo Rural Fund, responsAbility, Root Capital, Shared Interest, SME Impact Fund, Stanbic Kenya, TADB, TPB Bank, Triodos

**Ecosystem actors that provided input to the initiative's design**

Africa Development Bank, Agriterra, Alliance for a Green Revolution in Africa, BlueInventure, CGAP, Co-Impact, Dutch Ministry of Foreign Affairs, Financial Sector Deepening, Kenyan Bankers Association, Kenya Investment Mechanism, KfW, ISF Advisors, MIX, Mulago Foundation, New Markets Lab, Open Capital Advisors, Partners in Food Solutions, Roots of Impact, Salum Awadh, Smallholder and Agri-SME Finance and Investment Network (SAFIN), Solidaridad, Swiss Development Corporation, TechnoServe, Uganda Agribusiness Alliance, US Africa Development Foundation, US Development Finance Corporation

ACELI AFRICA

# How this report is organized

This report is organized in four sections, as follows:

**Section 1** provides an overview of the importance of agricultural SMEs in the context of the Sustainable Development Goals and identifies the gaps in the financing market to unlock their growth and impact potential

**Section 2** examines the profitability drivers underpinning limited agri-SME lending in Africa based on analysis of loan- and portfolio-level data from 31 lenders conducted by Dalberg Advisors in collaboration with Aceli Africa

**Section 3** presents Aceli Africa's product offerings to bridge the gap between the supply and demand of capital for agri-SMEs with emphasis on additionality and impact

**Section 4** synthesizes the framework used to design Aceli and suggests other sectors where a similar approach could be used to mobilize capital flows for development impact

**Appendix** provides additional analysis on agri-SMEs' relevance from a gender perspective, presents Aceli's methodology in more detail, presents more detailed analysis on surveyed lenders' agri-SME portfolio, and lists contributors.

# Executive summary (1/2)

**Investing in African agriculture is critical to achieving the Sustainable Development Goals**.

Yet while 60-70% of the population in East Africa works in agriculture, it receives less than 10% of commercial bank lending in most countries and as little as 2% in Rwanda. Small- and medium-enterprises (SMEs), such as farmer cooperatives and food processors, are especially affected. Agri-SMEs handle over 60% of all food production and trade on the continent and they have the potential to facilitate **pathways out of poverty** for smallholder farmers and low-skill workers, particularly women and youth.

However, **most agri-SMEs fail to realize this potential** because they lack sufficient access to finance and the capacity to manage it. The financing gap for agri-SMEs in the "missing middle"– too large for microfinance but unable to access loans from commercial banks – **is estimated at $65 billion, or three in four agri-SMEs**, across Sub-Saharan Africa.

**In the past, limited data on the economics of financing agri-SMEs** has made it difficult to identify where donor or government interventions are required and how they should be designed. Aceli Africa partnered with Dalberg Advisors to analyze loan-level data from 31 lenders and 9,104 loans to agri-SMEs totaling $3.7 billion. The key findings explain the persistent financing gap for agri-SMEs in Africa:

- **Risk in agri-SME lending is at least twice as high** as risk in other sectors served by the same lenders in Africa; it is also twice as high for lending to agri-SMEs in Africa as in Latin America.
- **Returns in agri-SME lending are on average 4-5% lower** than returns in other sectors in East Africa.
- High operating costs and low returns of serving agri-SMEs are as significant a driver of sub-par lending economics as risk (i.e., **credit guarantees that only address risk are not sufficient**).

# Executive summary (2/2)

**Informed by this data, Aceli Africa is designed as a "market incentive facility" to mobilize $700M in lending to agricultural SMEs in East Africa by 2025 by aligning capital supply and demand.** On the capital supply side, Aceli will offer:

- **Portfolio first-loss coverage** incentivizing lenders to make more loans that meet impact criteria and are designed to absorb the incremental risk from serving these marginalized borrowers.
- **Origination incentives** to lenders that compensate them for lower revenues and higher operating costs of making smaller loans to SMEs that would not otherwise have access to financing.
- **Impact bonuses** in the form of higher first-loss coverage and origination incentives when businesses are gender inclusive, strengthen food security, or practice climate-smart agriculture.

Aceli Africa will also increase addressable demand among agri-SMEs and bring capital supply and demand into greater alignment through:

- **Technical assistance** at both the pre- and post-investment stage for agri-SMEs to strengthen their business and financial management capacity to qualify for and manage financing.
- **Capacity building** for lenders to adapt their product offering, enhance their staff expertise, and improve their systems and processes so they are better suited for the agri-SME market.
- **Innovation investments** to promote technological and other business model improvements that will drive down the costs of agri-SME lending.

**Independent evaluation** by the International Growth Centre (IGC), will analyze enterprise growth and livelihood improvements to determine the impact return on investment for donor funding. Data and learning will inform a strategy for engaging African governments, bilateral and multilateral agencies, and other influential actors in order to **strengthen the enabling environment for a thriving finance market that unlocks the growth and impact potential of agricultural SMEs**.

# Report Contents

**Section 1 – Finance gap for African agricultural SMEs**

Section 2 – Agri-SME lending profitability analysis

Section 3 – Aceli's response to the agri-SME lending challenge

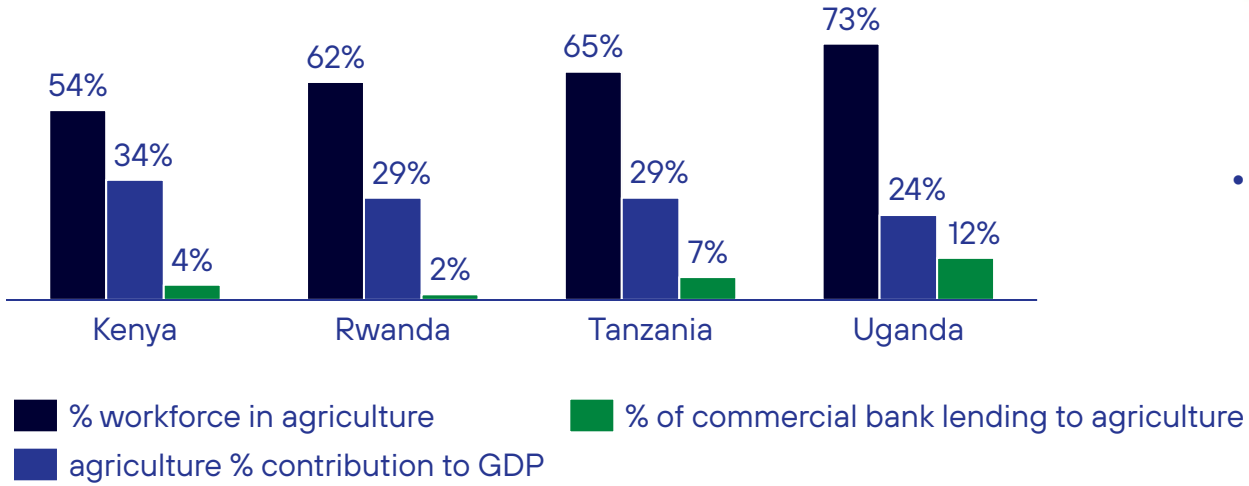
Section 4 – How Aceli Africa's approach can be replicable

Appendix

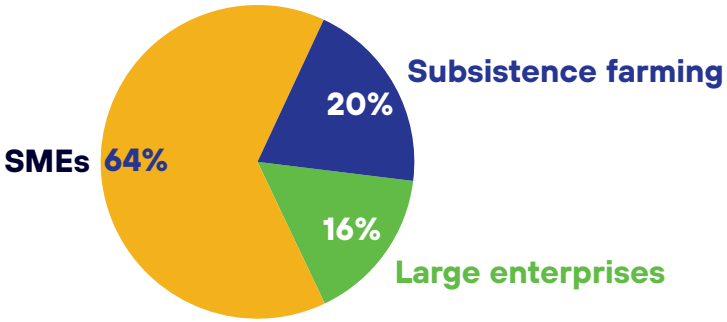
**Section 1** provides an overview of the importance of agricultural SMEs in the context of the Sustainable Development Goals and identifies the gaps in the financing market to unlock their growth and impact potential

# Agriculture & agri-SMEs are particularly important in East African economies, but the sector remains chronically under-financed

## Agriculture as a share of selected East African countries' employment, GDP and bank lending (%, 2019)[1]




## Supply channels for food consumption in Sub-Saharan Africa (%, 2018)[2]

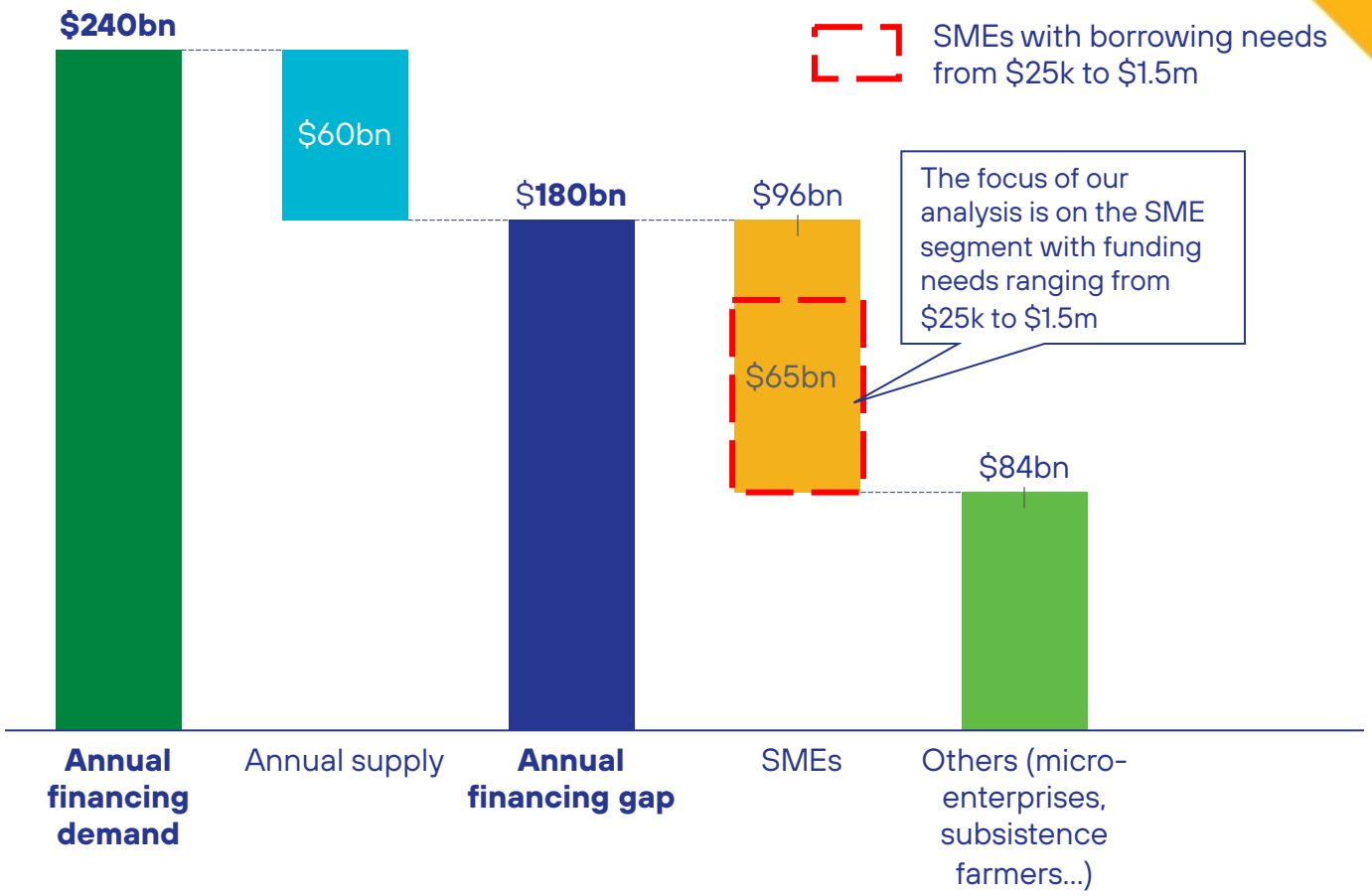



- **Agriculture is one of the most important sectors in East Africa,** representing **on average more than 60% of total formal employment** and more if the informal sector is included
- Despite its prime role in the economy, **agriculture remains heavily under-invested** by both governments and the private sector
  - Loans to agriculture represent on average less than 6% of total lending by commercial banks
  - Despite committing in 2003 under the CAADP framework to spend 10% of their budgets on agriculture, most African countries continue to spend less than 5% of their budget in the sector
- SMEs in Africa represent **~90% of total businesses** across sectors
- In Sub-Saharan Africa, SMEs constitute nearly **2/3rds of the supply channels of food consumption** and **create 70% of formal employment**[3]

Note. The data uses the World Bank. SME categorization from yearly "Global Financial Development Reports,'" i.e. businesses employing between 5 and 99 employees.
1. World Bank ILOSTAT database and national accounts data, 2019 and Dalberg Analysis. 2. Alliance for a Green Revolution in Africa, "Africa Agriculture Status Report," 2019. 3. Proparco, "SME Finance in Africa: What's New?" 2019.

# Annual financing gap of ~$65bn for African agri-SMEs with financing needs of $25k to $1.5m

## Estimated annual gap in agricultural finance, Sub-Saharan Africa (2018)[1]

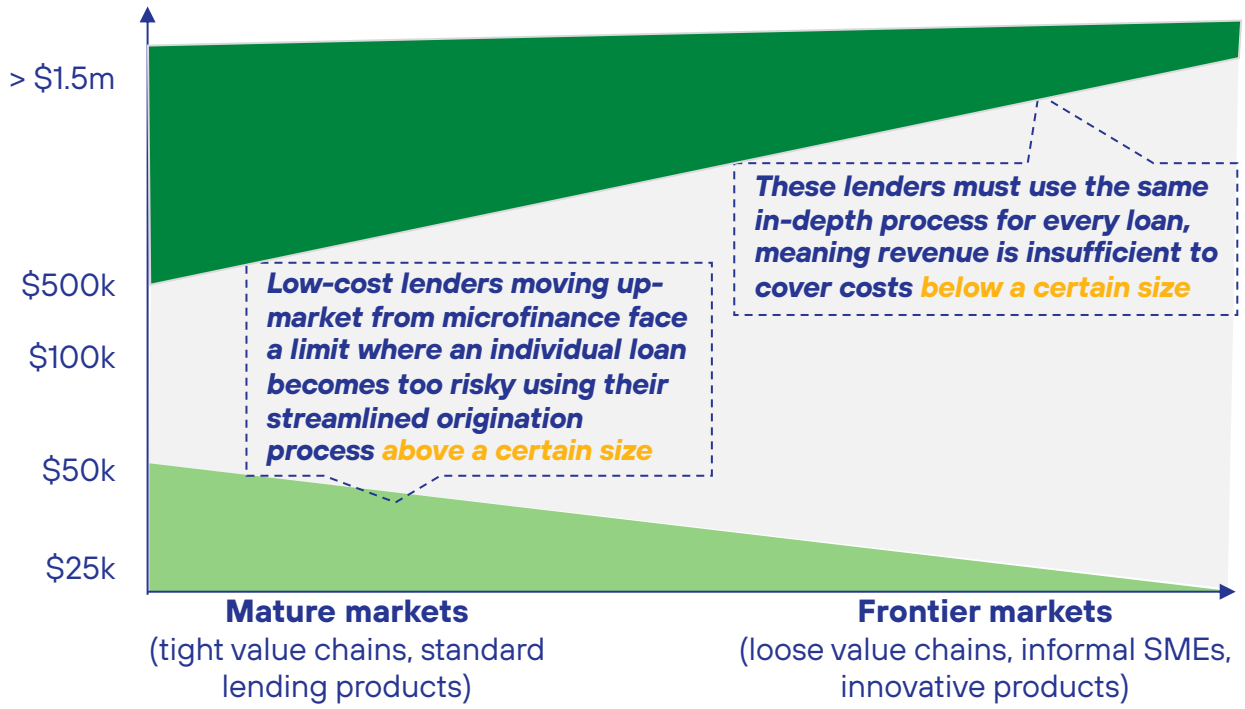



- In Sub-Saharan Africa, the agriculture **financing gap amounts to $180bn** annually
- **~$65bn**, or more than 35% of the total gap, is among **SMEs with borrowing needs of $25k to $1.5m**

1. Dalberg and KFW, "Africa Agricultural Finance Market landscape," 2018.

# Agri-SMEs in this $25k-$1.5m segment are under-financed in part because they fall between two lending business models

## Illustrative representation of the African agri-SME finance market by loan size, lender type, and market segment




**Corporate lending** (high cost / low volume, large loans served by corporate banking and some social lenders)

**Microfinance** (low cost / high volume, high margin, small loans served by retail banking, microfinance, mobile money and fintech)

**"Missing middle" -** estimated at $65bn in financing needs across Sub-Saharan Africa

- The agricultural **"missing middle"** ranging from **~$25k to $1.5m** is underserved because the loan sizes and borrower profiles are too large and too risky for microfinance and retail banking, but too small and costly to serve for corporate banking
- While there is some lending activity in the "missing middle" the unattractive economics of serving this segment (which are detailed in this report) indicate why **there still are not successful business models for serving it at scale**
- Apart from loan size, other parameters influence the agri-SME "missing middle":
  - **Informal or "loose" value chains** (e.g., many food crops) **tend to have less access to finance than formal or "tight" value chains** (e.g., coffee, cocoa, tea)
  - **Working capital facilities** made on the basis of a borrower's cash flows rather than hard collateral are **deemed too risky by commercial banks**, which are best positioned by virtue of their reach and access to local currency to serve the "frontier" end of this market

# Aceli Africa and Dalberg Advisors analyzed data from 31 lenders to assess the economics and low volumes of agri-SME lending

## Ingoing hypothesis

- While some are willing to finance this market segment, **lenders find agri-SME lending unprofitable relative to other market segments in agriculture and especially to other sectors in the economy**. However, there was **no comprehensive data to prove it.**
- We assumed that **lenders are not adequately rewarded for the risk or cost associated with agriculture and SME lending**, two segments with higher risk profiles compared to non-agriculture retail or corporate lending.

## Analysis of social lenders

- In collaboration with the Council on Smallholder Agricultural Finance (CSAF), we reached out to 11 **global social lenders** and gathered loan-level and entity-level profitability data of agri-SME loans in Sub-Saharan Africa and Latin America.
- The analysis highlighted that profitability was indeed an issue as only half of those loans had positive net operating returns, and even less after considering costs of funds. Regionally, **lending risks were 2x higher and operating costs 22% higher for social lenders in Africa than in their more mature portfolios in Latin America.**

## Analysis of other lenders

- We enlarged the scope of the analysis to **two additional business models in East Africa**: **non-bank financial institutions (NBFIs)** that serve the lower-end of the agri-SME segment with a high-frequency and low loan-size model, and **commercial banks** that operate with a low-frequency and large loan-size model and that serve agri-SMEs in-between their retail and corporate banking business.
- This analysis **confirmed that risk is twice as high for bank lending to agri-SMEs relative to other sectors and that operating costs are also higher – the combined effect is returns are 4-5% lower for banks in their agri-SME lending relative to other sectors.**

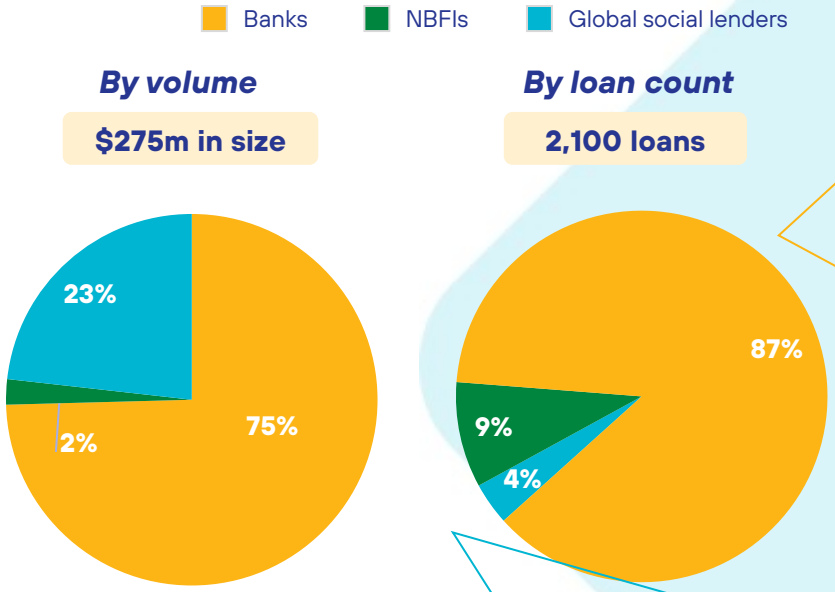
**Throughout the remainder of the report, we break down profitability, challenges, and market coverage according to these three lender types, given their different business models and focus areas.**

*For more details on activity by lender type, see Slides 50-52 in the Annex*

# Three lender types target different agri-SME segments and all have room to grow – if the lending economics can be improved

## Distribution of agri-SME lending in East Africa among global social lenders, banks, and NBFIs

(% of all loans from $10K to $5M originated in a typical year)[1]




**NBFIs** focused on very small ($10k-100k), short-term working capital facilities, with some long-term leases.

While many **have high growth rates**, they struggle to provide larger loan sizes due to limited balance sheets and the challenges of assessing agri-SME risks (many are sector-agnostic). Promoting NBFIs could increase financing in the lower end of the agri-SME market, especially with alternative loan products such as equipment leasing and factoring.

**Global social lenders** make comparatively few loans in East Africa but **fill a gap in terms of larger working capital loans (primarily $150k-$1M+)** to cooperatives and SMEs that other lender types do not serve due to perceived risk. Social lenders have limited ability to offer local currency funding and can have higher operating costs. However, their social mandate and risk tolerance, including more flexible collateral requirements, make them important players in agri-SME lending.

**Commercial banks carry out the bulk of agri-SME lending** at present in East Africa, with 4 banks reporting 100+ loans per year recently.

Banks focused on **short-term, smaller** loans for trade finance or working capital, and on **large asset finance loans.** Some banks have moved upmarket from a micro-lending focus and have most of their loans in the $10-100k range; others have moved down from corporate lending and are active in the $50k - $500k range – **but are still only reaching a fraction of the market** given their heavy collateral requirements and focus on a limited number of value chains.

**These banks' agri-SME portfolios represented on average only 8% of their total portfolio**, suggesting that **there is potential to increase bank lending** to this segment, especially as banks can source capital at low rates in local currency and leverage their increasing branch presence in rural areas.

*For more details on activity by lender type, see slides 50-52 in the Annex*

1. Based on agri-SME loan portfolios of 26 lenders in East Africa. The reference year for each lender is the most complete year where data was available, which varies from 2017-2019.

# 31 lenders contributed data to the analysis of agri-SME lending economics that informed the design of Aceli

## Global Social Lenders

AgDevCo
alterfin
Global Partnerships
incofin Investment Management
kiva
OIKO CREDIT
Rabobank
responsAbility
root capital
SHAREDINTEREST Investing in a fairer world
Triodos Bank

## Domestic Commercial & Development Banks

absa *
Development Bank of Rwanda www.brd.rw | BRD We empower you
Centenary Bank
Credit Bank My Friend, My Bank
dfcu BANK ...with pleasure
EQUITY Bank The Listening, Caring Financial Partner
MADISON FINANCIAL SERVICES Plc
NCBA
NMB
OPPORTUNITY BANK
Stanbic Bank A member of Standard Bank Group
TADB Tanzania Agricultural Development Bank "The Farmers' Bank"
Tpb Bank Grow with us

## Regional Non-Bank Financial Institutions

BENEFACTORS LTD.
EQUITY FOR TANZANIA FINANCING BUSINESS GROWTH
FACTS *
MANGO Fund
SME Impact Fund

*Institutions with distinct country subsidiaries, two or more of which contributed data.

# Report Contents



**Section 2** examines the profitability drivers underpinning limited agri-SME lending in Africa based on analysis of loan- and portfolio-level data from 31 lenders conducted by Dalberg Advisors in collaboration with Aceli Africa

# While agri-SME lending is often unprofitable, the economics could shift if the impact generated by these capital flows were included

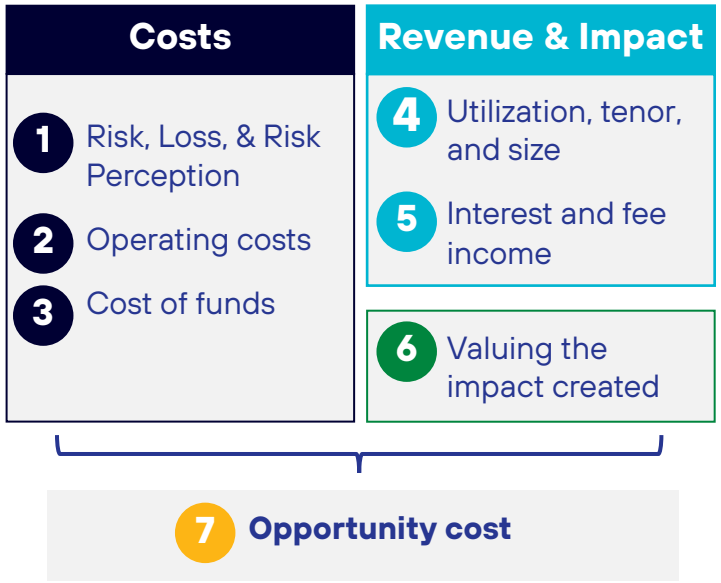
## The status quo

Lenders shy away from financing agri-SMEs – and their impact potential goes unrealized – because these loans are unprofitable and lenders do not derive financial value from the positive benefits (e.g., farmer & worker livelihoods, food security) of reaching these underserved borrowers

## Re-balancing the scale with impact

By valuing the social and environmental impact generated by agri-SMEs lending and compensating lenders for the risks and costs of making these loans, we can increase capital flows and unlock substantial impact on farmer and worker livelihoods, food security, gender inclusion, and climate resilience

# Multiple challenges combine to make the economics of lending to agricultural SMEs unattractive




## Key findings on profitability drivers from our research into agri-SME lending

1. Lending to agri-SMEs compounds the high inherent risks of agriculture with the informality of SMEs. As a result, lenders experience relatively high losses and often face pressure from their leadership and investors to limit exposure to the sector
2. Agricultural borrowers are more expensive to reach, especially for lenders with limited local presence; the cost of assessing new value chains or new borrowers is even higher
3. Banks and social lenders have access to relatively low-cost funding so capital providers would need to accept returns close to 0% to shift their lending economics; innovative non-bank lenders focused on smaller loans struggle with high funding costs but capital providers would need to be comfortable with additional risk and/or currency exposure
4. Due to the nature of loan economics (where there are significant fixed costs and revenues are linked to loan size, term, and price), lending to smaller borrowers or those with only short-term, seasonal needs is especially unprofitable
5. Revenues are rarely sufficient to provide a comfortable lending margin, and raising interest rates further would cause difficulties for borrowers
6. Many agri-SMEs are at the center of complex webs of interaction; increasing their ability to grow has positive spillover effects on livelihoods and food security, among others – but lenders cannot capture this value today so are not taking these benefits into account in their strategies
7. While banks have significant ability to mobilize funding for agriculture, they also face the biggest opportunity costs given the profitability of African banking overall (i.e., non-agriculture lending). Similarly, innovators are attracted to other markets with lower barriers to entry and higher returns, perpetuating the unattractive economics for agri-SME lending.

# 1 Lending in agriculture is perceived to be riskier than other sectors due to unpredictable external risk factors and volatility of cash flows

## Challenges faced by agri-SMEs due to their *sector*

Agri-SMEs face major constraints as lenders find serving them even more difficult than SMEs in other sectors, due to agriculture-specific factors, including:

- Unpredictable **external risk factors** such as weather shocks and crop disease
- **High cost to serve** in low population density areas with poor infrastructure
- **Irregular cash flow cycles** due to crop seasonality or market conditions
- **Weak enabling environment** with inadequate institutional coverage of property rights
- **Low understanding** of agricultural enterprises and risks

*"It's less about the customer, and more about the value chain. There are some value chains we simply wouldn't touch."*

*"The ag sector is very dynamic. What is not working today, might work tomorrow...Tea & coffee was doing very well, now it's floundering"*

*"Even if you produce a lot, you don't have anywhere to sell it. This is another reason why banks struggle to lend. You can't advance cash if you don't know who they will be selling to"*

*"Much easier in terms of effort [to make non-agri loans].. for agri there is a 2nd set of questions, where [the risk team] are asking what is happening in the macro, micro farming environment, e.g. global prices, weather, etc."*

Source: Dalberg Analysis; Lender interviews

# 1 Within agriculture, SMEs present additional risks as a result of their informal nature and susceptibility to external risk factors

## Challenges faced by agri-SMEs due to their *size*

**Financial strength**
- Weak capitalization
- Weak collateral

**Operational stability**
- Low operating margins
- Lack of diversified operations
- Weak bargaining position in the value chain
- Limited long-term visibility on revenues

**Transparency**
- Prevalence of informal value chains
- Lack of national credit bureaus

**Knowledge**
- Limited book-keeping and budgeting skills
- Limited ability to do financial planning
- Limited support on how to apply for funding (debt and equity)
- Limited business planning and growth capabilities

**Physical presence**
- Often located in remote rural areas
- Sporadic physical encounters with loan officer

## Resulting challenges for...

### ...agri-SMEs

- **Limited availability of loans for new borrowers** with no banking history as many lenders require 3 years of trading history + hard asset collateral that is 200%+ the value of the loan
- **Preference for short-term lending** (<12 months) **or asset-backed lending** (equipment finance)
- **Tight risk limits on agriculture exposure and high collateral requirements**, due to difficulty of evaluating agri-SME lending risk

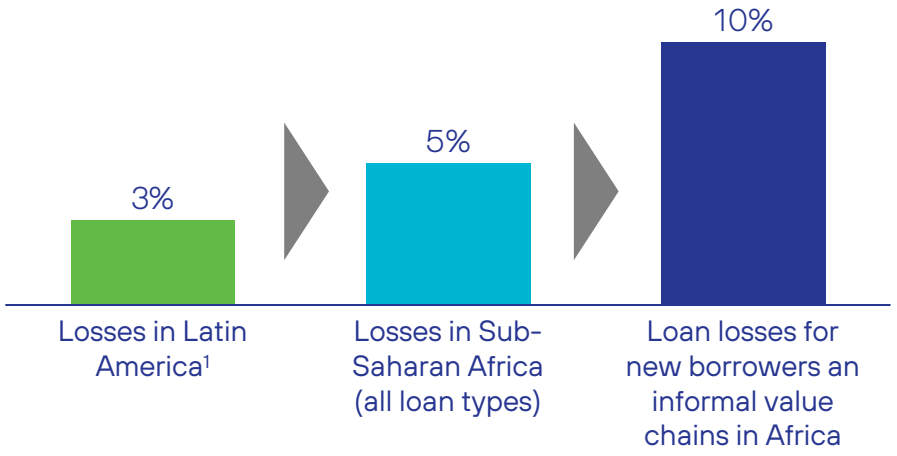
### ...lenders

- Need for **flexible and quick decision-making**
- **Increased costs** to build an agri-SME lending pipeline
- **Extra human resources efforts** required to set up funding application, carry out due diligence and monitor loans
- **Higher loan-loss provisions required (tying up precious capital that could be deployed more profitably in other sectors)**as borrowers can't pay back every month

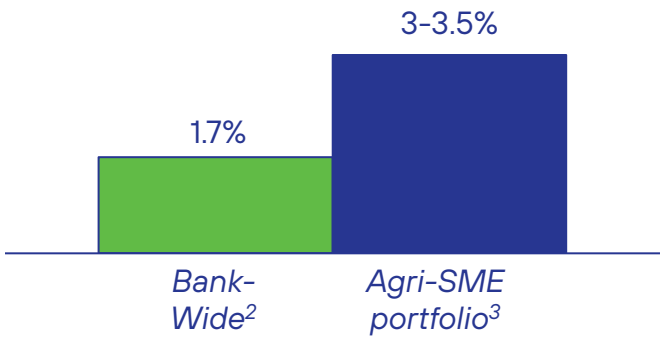
Source: Dalberg Analysis; Lender interviews

# 1 Risk is real: Risk in agri-SME lending is 2x other sectors in Africa

## 1. Risk of agri-SME lending in Africa vs Latin America for social lenders (write-off %)




## 2. Risk in agri-SME vs overall lending for commercial banks in East Africa (write-off %)[4]




- All three types of lenders had risk challenges in agri-SME lending:
  - Historic losses for **social lenders** in the riskiest segments in Sub-Saharan Africa were much higher than their core markets in Latin America
  - **Non-bank lender** data also showed high losses with new borrowers: loss rates 10%+ for loans in informal value chains to new borrowers
  - For **banks**, risk appears to be ~2x as high for agri-SME lending vs typical bank lending - even as many banks only serve the most formal SMEs, impose high collateral requirements, and stay away from value chains that are perceived as risky. If banks were to loosen these criteria and serve more of the market, their loss rates would likely be even higher
- As a result, **lenders adapt their business models to focus on a set of value chains they know better** (often more organized value chains with closer links to export markets) or impose strict requirements on borrowers in terms of collateral or documentation standards
- This has the result of **shutting out certain segments of the agri-SME market**, especially **smaller, newer businesses in less-formal value chains –** often food crops for domestic or regional markets that play an important role in food security and farmer livelihoods

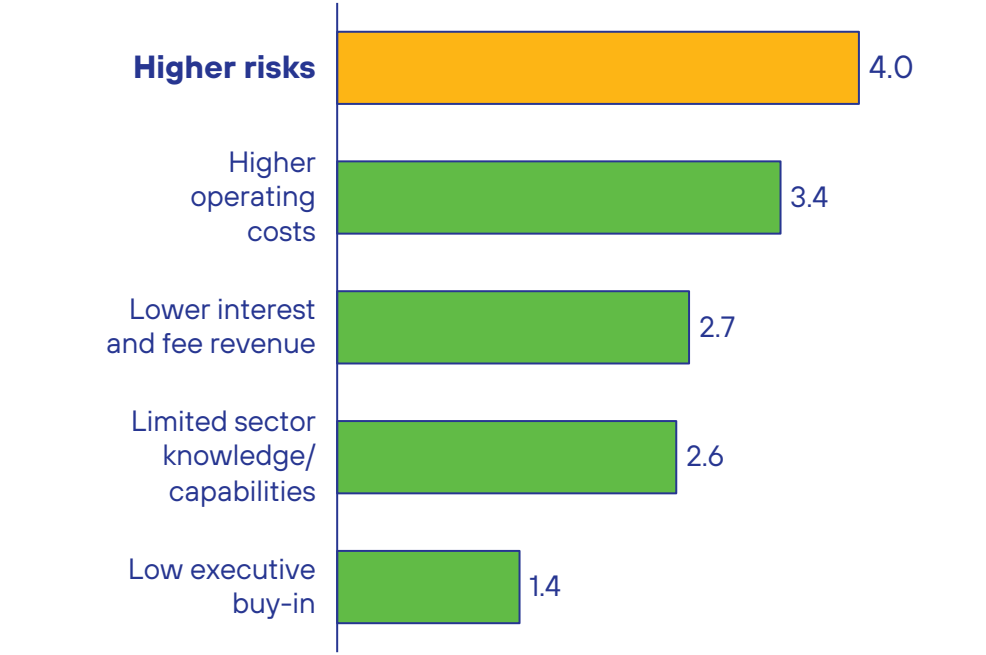
1. Selected as the baseline as social lenders' most mature lending market. 2. Reported figures from annual reports, 3. Estimate of ultimate expected losses as a share of outstanding balance, based on interviews and impairments shown in loan data; 4. Detailed Agri-SME portfolio loss calculation methodology in Appendix. Note. Sample size = 8 Social lenders. Source: Lender loan-level data from 2010 to 2019; Dalberg Analysis; Lender interviews

# 1 Risk – both actual losses and perceived risks of serving less-formal segments – is a key barrier for banks in particular

- Overall, **banks see potential for growth in agri-lending:** when we surveyed 12 bank business unit heads about the growth potential in agri-SME lending, their mean projected growth rate was **~20% per year** – i.e., doubling activity over the next 5 years
- However, given that banks mainly focus today on more-established borrowers working in a handful of well-known value chains**, it is likely that increased lending would result in even higher losses** than the already-elevated levels seen today
- As a result, the **risk departments of banks often impose sector caps or other limits on agricultural exposure** (as highly-regulated entities, banks overall face strict pressure to minimize risk); based on this constraint, lenders cite **high risks** as the leading barrier to growth, as shown at right
- If real and perceived **risks could be brought in line with other sectors**, **this could help unlock bank capital for agri-SME lending** - although, as shown on right, support to address operating costs is also viewed as a priority; we turn to this topic next

**Survey answers for "To what extent do the following factors prevent you from lending more to agri?"**

*Bank-level averages, 1= not significant at all; 5 = very significant (n = 12)*



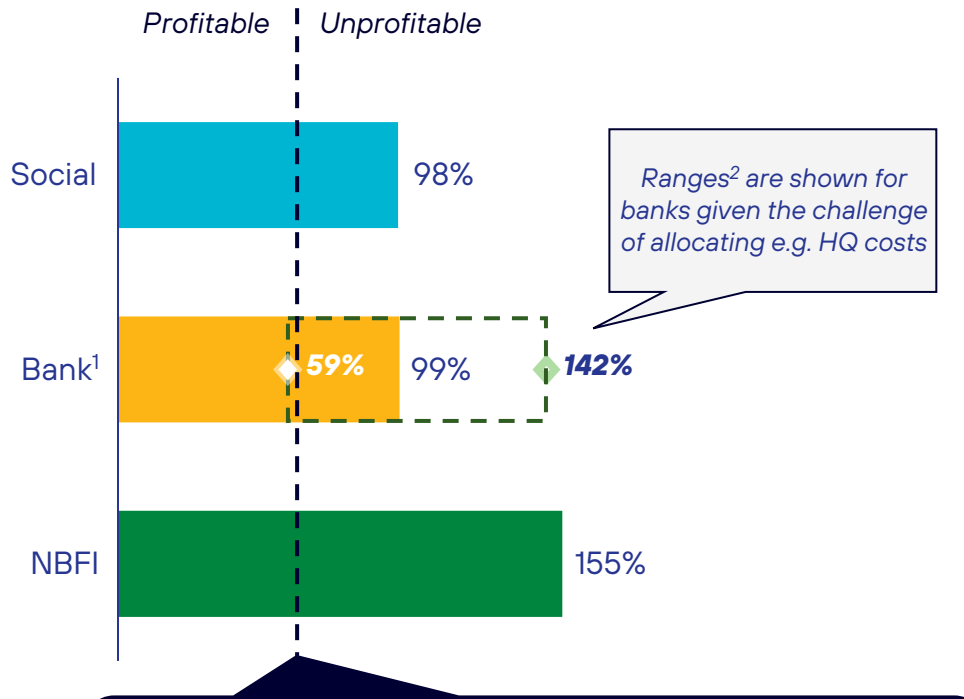

Source: Lender loan-level data from 2010 to 2019; Dalberg Analysis; 10 Question survey; Sample size: 12

# 2 All lender types have some difficulty generating sufficient operating margin; the small scale of NBFIs makes profitability harder

**Cost to Income Ratio for average loan (%)**

*Loan operating costs = Origination + Servicing + Overhead*

*Net Income = Interest + Fees – Cost of Funds*




For context, a typical commercial bank in the region **would aim for a cost to income ratio of 55-60%** across its business lines.[3] Only a couple of the top performers are close to these levels in their agri-SME lending.

- In our dataset, the typical agri-SME loan barely generates enough revenue to cover the direct costs of lending – even without accounting for credit risk
- Agri-SME lenders use a variety of strategies and business models to improve their lending economics, but all models face some challenges:
  - **Social lenders** focus on customizing products and tailoring underwriting processes to meet the needs of agri-SMEs and cooperatives – but this customization takes time and expense, and even with recent investments in local footprints, their break-even loan size can be in excess of $500k
  - **Banks** are better positioned (based on local branch network and access to local currency deposits) to reach a full range of borrowers at scale, but their high fixed costs mean loan officer productivity is important and agri-SME lending is time-intensive and costly, in part because businesses are located in rural areas
  - **Non-bank lenders** use digital tools and standardized products to drive down costs, but this limits their ability to manage risk when making larger loans in less-known value chains, so they focus on small loans where even a very low cost base is not fully sustainable
- On the next slide, we examine some of the factors driving these costs, and their impacts on lending sustainability

1. Bank operating costs were calculated based on aggregate level data for staff and non-staff costs attributable to their agri-SME portfolios and income was determined by calculating cumulative interest for loan size and tenor + origination fee – cost of funds. Sample size =12 banks, 4 NBFIs, 8 social lenders. 2. 25th and 75th percentiles. 3. Data from Bankscope, as reported by https://www.theglobaleconomy.com/rankings/bank_cost_to_income/Africa/

ACELI AFRICA

# 2 The high cost for lenders to serve agri-SMEs is driven by their remote location, limited capacity, and complex operations…

## Factors driving the operating cost burden in agri-SME lending

**Need for tailored solutions**

- Borrowers have uncertain cash flows that differ with the season and the dynamics of a specific value chain. Lenders must understand these nuances to manage risk properly

> "**Agriculture is more difficult than our other sectors**. **It's hard to predict harvests** […], [borrowers] can't pay back every month. We need to build [our] capacity."

**Remote locations**

- Borrowers are based in rural areas far from head offices or major branches – but visiting warehouses and processing centers is absolutely critical to manage risk and design appropriate solutions

**Informal / semi-formal borrowers**

- Borrowers often have record-keeping and financial management challenges – conducting robust due diligence requires sorting through these issues

> *"The problem is that [agri-SMEs] don't keep records. You can be lucky if [the SME] keeps a few invoices in a drawer somewhere,* ***but unless [it] has an accountant, the records will be shambles."***

**High direct costs**

- Even for lenders with in-country teams, **the time and expense of due diligence and monitoring** will be higher for agri-SME loans

> *"In the time that it takes me to sell an ag loan, my colleagues [in other SME sectors]* ***do at least 60%, even 100% more.*** *The field visits and due diligence take much longer, and then I still have to get the loan past the risk team."*

**Low productivity**

- Lenders we surveyed indicated that **on average, a loan officer in a non-agri business unit can handle 1.7x as many loans as an agriculture loan officer**

**Special challenges for certain segments**

- Serving new borrowers or new value chains adds more expense – **as much as a 50% increase in origination costs** due to the extra time required. This incentivizes lenders to avoid these segments

> *"The local sales managers would rather do non-agri deals - they will send agri deals up to the agri team at HQ.***"**

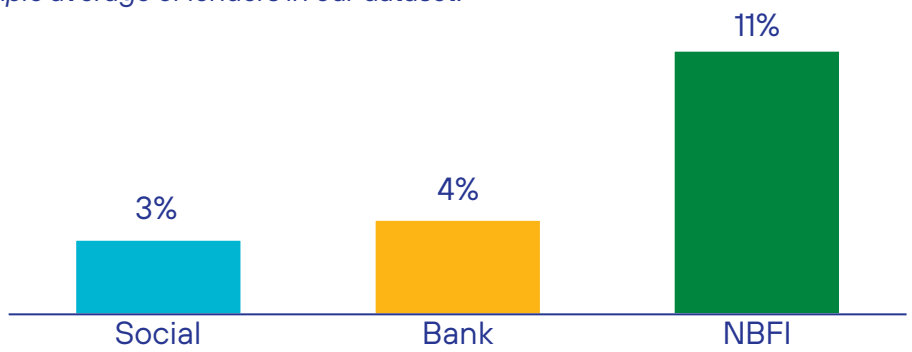


Source: Dalberg Analysis; Lender interviews. Average for productivity is the median value from 12 commercial bank interviews; averages for sector cost differentials from interviews with 9 social lenders

# 3 There is limited scope to improve lending economics by reducing cost of funds – unless funders price in impact and accept returns below 3%

**Cost of funds by lender type (%)**

*Represents the typical marginal cost of borrowing or raising deposits. Simple average of lenders in our dataset.*



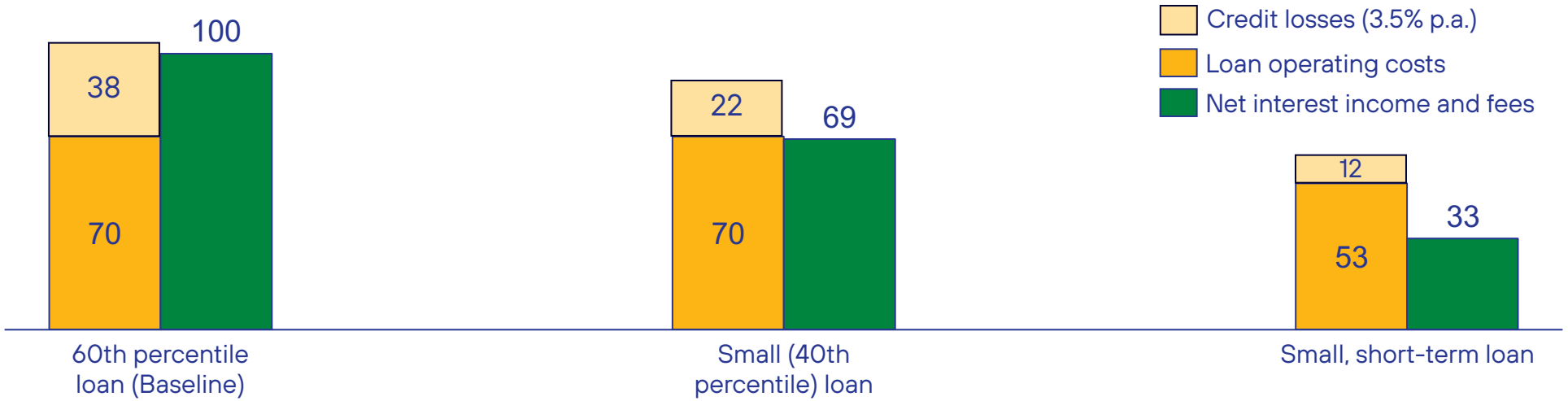

| | Social | Bank | NBFI |
|---|---|---|---|
| **Currency** | USD | Local | Local |
| **Typical source** | • Impact investors (retail and institutional)<br>• Some DFIs | • Customer deposits<br>• Some gov't and DFI | • Impact investors & DFIs |
| **Major issues** | • Lack of local currency<br>• Sourcing effort | • Short-term nature of deposits<br>• Prudential regulations | • Expense<br>• Lack of local currency<br>• Size available / sourcing effort |

- While **NBFIs** reported a high cost of funds, they make up a small share of overall lending activity. Banks and social lenders generally have access to funding at a low nominal cost, but there are issues with the nature of the funding:
  - Because **social lenders** can only access low-cost funding in hard currency, they must either absorb currency risk or limit lending to export-focused borrowers
  - Because **banks** rely mainly on deposits, they have a relatively low risk appetite due to regulations; deposits also tend to be short-term, which limits their ability to provide long-term financing at affordable rates
- While DFIs and impact investors provide debt to lenders in our sample, the main benefit is their longer tenor, as **rates are still a challenge:**
  - Larger banks in the region can obtain DFI debt in hard currency at ~3-4% or local currency at 10-12%
  - The smaller banks in our sample, however, reported paying DFIs and impact **investors 5-7% (or more) for hard currency** loans or **12-14% for local currency, when available**
- Given that these capital providers still need to generate positive returns, concessional debt providers cannot solve the lending economics problem on their own **unless non-monetary returns (i.e. development impact) can be "priced in"**

Source: Dalberg Analysis, Bank Annual Reports, lender interviews. Sample size = 13 banks, 5 NBFIs; the 3% assumption for social lenders was obtained through consensus across the group of CSAF lenders

# 4 A lender can create high *impact* through a small loan over a short but critical time (e.g., harvest) – but this loan will not create high *revenue*

**Comparison of costs and revenue for "above average" vs "below average" -sized loans (composite of bank and social lender economics)**
*Indexed, baseline net revenue = 100. For full details and actual figures by lender type, please see Annex, Section 1*




**1 *Break-even range***

*For above-average loans (e.g. 60th percentile for size), **revenue covers operating costs** and leaves **a small margin for credit losses** (but not enough to cover average default risk)*

**2 *Unsustainable***

*At smaller loan sizes, **revenue drops but costs stay the same,** leaving **no room for profit** even with minimal credit losses*

**3 *Loss***

*If the loan tenor also is reduced (e.g. for seasonal working capital), **costs fall somewhat but not as much as revenue** – presenting **even more challenging loan economics***

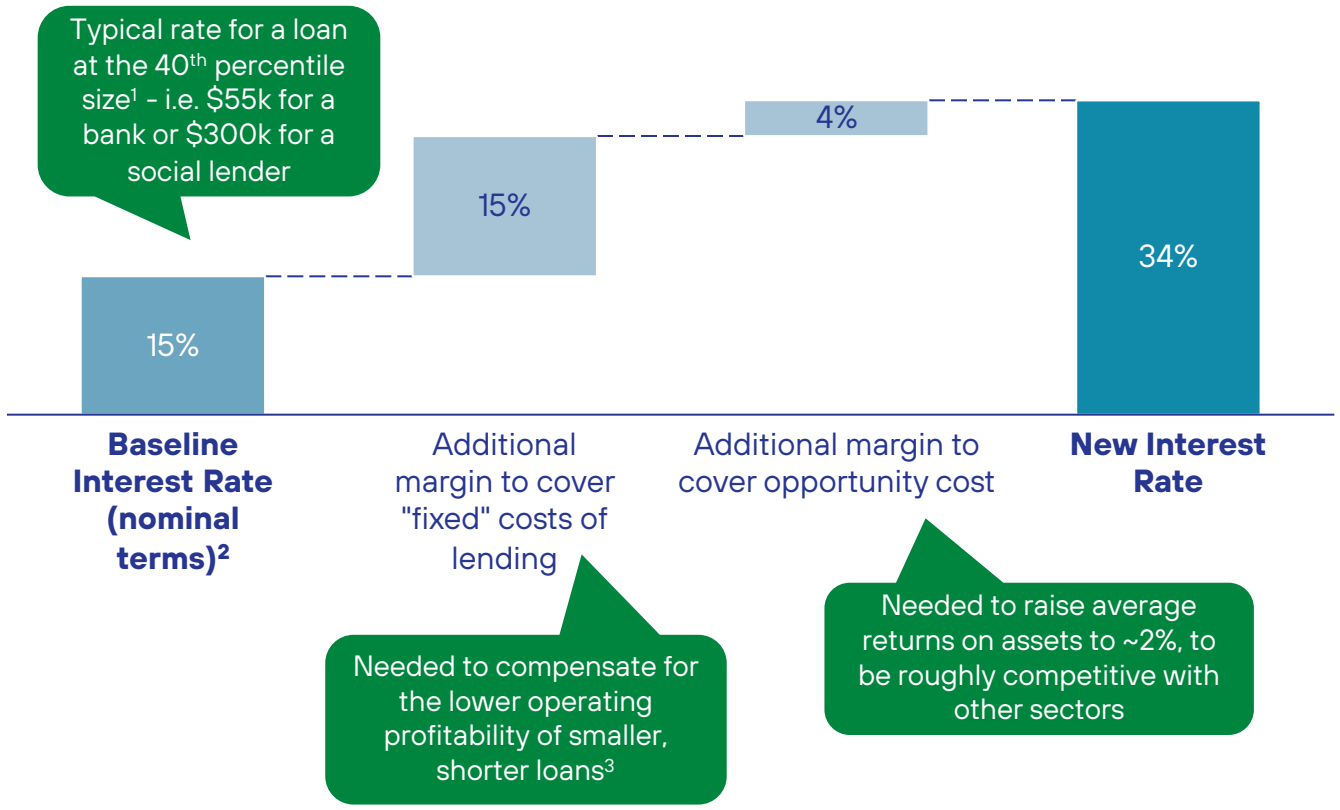
**While reducing risk can help some loans become sustainable for lenders, expanding lending at the smaller end of the market also requires increasing revenues relative to costs**

Notes: Typical = baseline loan with median tenor, 60th percentile loan size of loans in our sample; Cost to Income = Operating Cost / (Interest Income + Fee – Cost of Funds), Source: Lender loan-level data; Dalberg analysis

# 5 To cover their costs and earn a margin, lenders would need to charge small agri-SMEs 2x+ their current rates – unaffordable for most borrowers

**Comparison of actual vs required "sustainable" interest rates for small loans in dataset**

*Average of social lender and bank datasets. For full details and actual figures by lender type, please see Annex, Section 1*




- If lenders were to price in the costs associated with shorter-term and smaller loan segments and raise returns to an average sector-agnostic Return on Assets, **interest rates for smaller loans would need to double,** reaching 20-40%.
- These interest rates are common in microfinance but, given the exogenous risks, low margins, and long cash cycles in agriculture, they are **prohibitive for most agri-SMEs**
- Instead, **borrowers would likely need to forgo financing entirely** and thus scale back growth plans. This would result in lower purchases from supplying farmers, less employment in trading and processing, and less food reaching local consumers – hence the need to improve agri-SME lending economics

1. Typical loan = baseline loan of respective lender type with median tenor, 40th percentile loan size of loans in our sample, 2. Loans in our dataset at this size range are a mix of USD loans at ~8-10% and local currency loans at ~13-20% interest rates. 3. Determined as the incremental interest rate required to maintain cost to income of larger, longer loans. In this example, we calculated baseline and break-even interest rates separately for banks and then for social lenders (due to differences in each lender type's focus area); the average of the two exercises is shown here. Source: Lender loan-level data; Dalberg analysis;

# 6 Limited lending means that economic, social, & environmental benefits associated with agri-SME lending remain unrealized

***Lending to an agri-SME…***

**strengthens its suppliers**

- More stable liquidity position
- Higher farmer incomes
- Greater investment in production

**strengthens its offtaker**

- Higher capacity utilization
- Reduced aggregation costs and supply-chain risk

**With spillover effects to the local community**

- More employment
- Food security
- Decline in poverty
- Better education & health
- More sustainable production practices and alternatives to deforestation
- Improved resilience to climate change

**… and to the national economy**

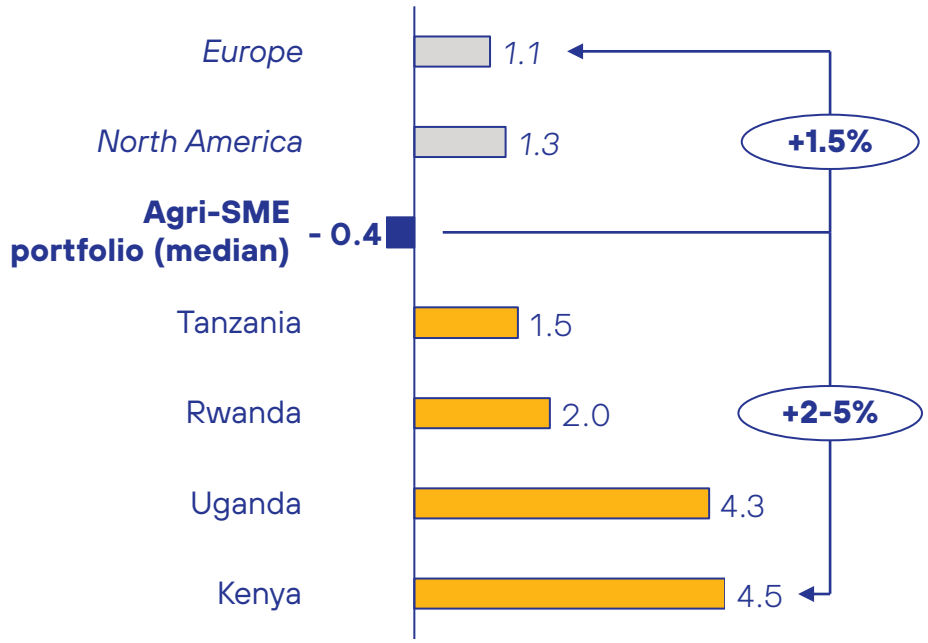
- More formal economy
- Increased tax revenues
- Increased export earnings

*These positive externalities are **not considered in a typical lender's profitability calculations** and remain unrealized when agri-SMEs lack access to credit*

# 7 For banks in particular to increase lending to agri-SMEs, the opportunity cost vs. lending to other sectors must be closed

- As shown on Slide 14, banks currently dominate the agri-SME market in East Africa and have even more room to grow, given the low share of their balance sheets currently dedicated to agriculture
- However, due to limited competition, **African commercial banks earn some of the highest returns in the world**. Therefore, activities that are less profitable, such as agri-SME lending, present **a high opportunity cost for lenders**, as shown at right**.**
- For higher-risk agri-SME segments (e.g., new borrowers, informal value chains), the **opportunity cost is even higher**, as riskier assets need to be funded by more bank equity, which is more expensive than other means of funding.
  - For example, a loan with double the credit risk vs. the average E. African bank loan should consume 25% more equity under standard frameworks – meaning the RoA gap would increase from 4-5% to 6-7% in order to yield a similar return on equity
  - Banks we spoke with already report pressure from new capital sufficiency regulations (i.e., IFRS 9) that require "Day 1" provisioning for loan losses; while important, these international regulations can reduce the attractiveness of lending to sectors such as agriculture that have higher loan provisioning requirements
- Overall, if African financial markets were more competitive, the disincentive to lend in agriculture would likely be lower. But note that even in other parts of the world, the opportunity cost remains and is narrowed by **government programs supporting agri-SME lending**, with governments viewing these programs as **necessary investments to support a key sector of the economy**

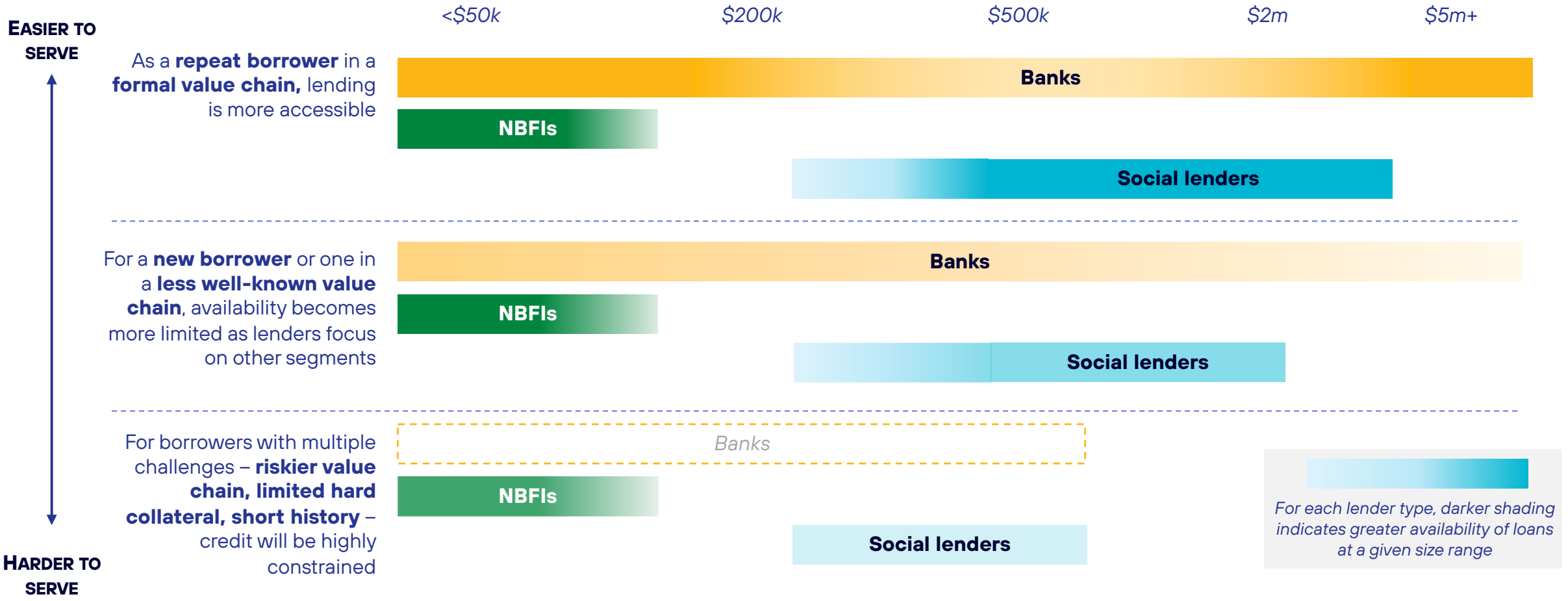
**Bank Return on Assets by region and country compared to agri-SME portfolios in our dataset (in bold)**
%, 2017 (latest year available)




Note. Sample size = 13 lenders; (1) The range of returns was relatively large due to significant differences in risk / loss experience in the portfolio as well as uncertainties around cost allocation, so then median value is used rather than the mean, Source: Lender loan-level data from 2016 to 2019; Bank Interviews; Bank annual reports; Dalberg analysis. See Annex, Section 1, for full methodology used to calculate expected return on assets.

# Overall, we find lending limited to lower risk, higher return segments, creating gaps in the agri-SME market

## Availability of credit by loan size and borrower / loan characteristics




**Limited financing constrains the ability of early stage agri-SMEs to realize their growth and impact potential**

Source: Lender database up to 2018 for social lenders, up to 2017-2019 for banks and up to 2019 for NBFIs, Dalberg analysis

# The challenges in the agri-SME lending landscape require market-level, targeted interventions

## Current state: Key challenges

- The **focus on mitigating risk** pushes lenders towards **strict standards** and **collateral requirements that exclude most SME borrowers** and market segments – but even so, loss and loan impairment experience is still high
- The **challenge of serving agri-SME borrowers in a cost-effective manner**, combined with the size-driven economics of lending, **push lenders away from serving smaller loans** to businesses that have growth potential and need finance
- While business model improvements offer potential for efficiency gains, there are no "quick fixes" and lenders still face **a trade-off between the customization** that agri-SME lending demands and **the ability to lend efficiently at scale**
- The **potential for technology to disrupt** current business models **is constrained** by the **heterogeneity of agri-SMEs** and **dearth of quality data**

## Implications

1. A **market-based approach** is necessary to promote a **diverse set of actors** offering a **range of financial products** and serving **different market segments**
2. **Providing risk mitigation,** helping lenders improve underwriting, and building borrower capacity can **reduce the actual and perceived risk** of lending and **increase addressable demand**
3. **Defraying lenders' operating costs in the short-term** will enable them to **expand lending to new borrowers in less formal segments** and spread fixed costs over a larger portfolio to **increase operating efficiency**
4. **Innovative business models** that **leverage technology** are needed to drive down operating costs in the long run **but investments today may take years to bear fruit**

# Report Contents



**Section 3** presents Aceli Africa's product offerings to bridge the gap between the supply and demand of capital for agri-SMEs with emphasis on additionality and impact

# Bridging the gap between capital supply and demand to build a more competitive market for agri-SME finance aligned with impact

## THE AGRI-SME FINANCING MARKET IS CHALLENGING

Challenges in agri-SME finance are not new and many blended finance instruments (e.g., partial credit risk guarantees, concessional finance, technical assistance) already exist.

Through extensive data collection and analysis, we found that lenders' profitability challenges persist, even though some already benefit from these blended finance instruments.

When it comes to incentivizing outreach to riskier and remotely located borrowers, current blended finance solutions are not sufficient.

## ACELI AFRICA COMPLEMENTS WHAT EXISTS

Aceli Africa ("Aceli") is a market incentive facility, launching in Q3 2020 in East Africa, to align the risk-return expectations of capital supply with the addressable demand among agri-SMEs.

Aceli is designed to cover the incremental risk and costs of lending that is high impact and high additionality. Financial incentives for lenders are paired with capacity building for lenders and technical assistance for agri-SMEs.

Aceli's offerings have been informed by the data summarized in this report and extensive consultation with lenders and other stakeholders.

## ACELI PROMOTES MARKET GROWTH, EFFICIENCY & IMPACT

By pricing in the risk and cost to serve agri-SMEs and aligning incentives with additionality & impact, Aceli aims to shift the risk-return calculus for lenders and attract more competition in the market.

As lenders gain experience they will improve risk management and achieve cost efficiencies through scale. Targeted investments in technology will lower operating costs and improve infrastructure and formalizing value chains will lower risk.

Aceli will recalibrate incentive levels to offer the minimum subsidy required as markets become more efficient.

# Existing blended finance mechanisms offer partial solutions for addressing the challenging economics of agri-SME lending…

| Agri-SME lending challenges | Issue solved? | Remaining issues to be addressed |
|---|---|---|
| **High credit risk due to agriculture and SME profile** | **Partially:** At least 6 programs offer partial guarantees in East Africa with 3 focused in a single country. Guarantees typically cover 50% of losses on a per loan basis, which many lenders view as insurance for loans they would otherwise make but not sufficient to incentivize lending to new and riskier borrowers. As a result, utilization rates vary with many lenders and guarantors reporting that guarantees are having limited impact. | **i. 50% pari passu risk guarantees are insufficient to increase lenders' appetite**. Current guarantee structures do not significantly change lending behavior, as evidenced by low uptake of some guarantee programs. Risk segments specific to agriculture remain unaddressed:<br>• **Loose and informal value chains**, **small ticket sizes,** and lending to **new borrowers**<br>• Lending to SMEs remains riskier than lending to large agri-businesses[1] |
| **Reluctance to incur the incremental risk associated with reaching underserved market segments** | | |
| **High operating costs disincentives lending to borrowers in remote areas or requiring smaller loans** | **Partially:** Concessional finance partially mitigates high operating costs but pricing is not favorable enough to incentivize lenders to make smaller loans in less formal value chains and more remote geographies | **ii.** Financial incentives targeted to **compensate lenders for higher operating costs** of reaching underserved markets and **aligned with additionality and impact criteria** |
| **Environmental & social factors not considered in lending decisions** | **Partially:** Concessional finance provides some incentives linked to impact (e.g. gender, environment), but existing programs are not tied to actual lending economics and efforts to value impact are still nascent | **iii. Capacity building** to ensure **adequate due diligence** of environmental, social, and governance (ESG**)** factors paired with **financial incentives** to motivate lenders to identify and serve higher-impact SMEs |
| **Additional risks linked to external systemic shocks** | **Partially:** DFIs and multilaterals can help mitigate risk with liquidity provision | **iv. Flexibility and swift adaptation** to unforeseen circumstances remains a challenge (as evidenced by the time to develop liquidity facilities for agri-SME finance and other responses in wake of COVID-19) |



1. Data from CSAF lenders indicates that PAR30 is highest among smaller loans (<*'$500k) compared to loans of $1m+ (CSAF Funder Survey, 2020)*

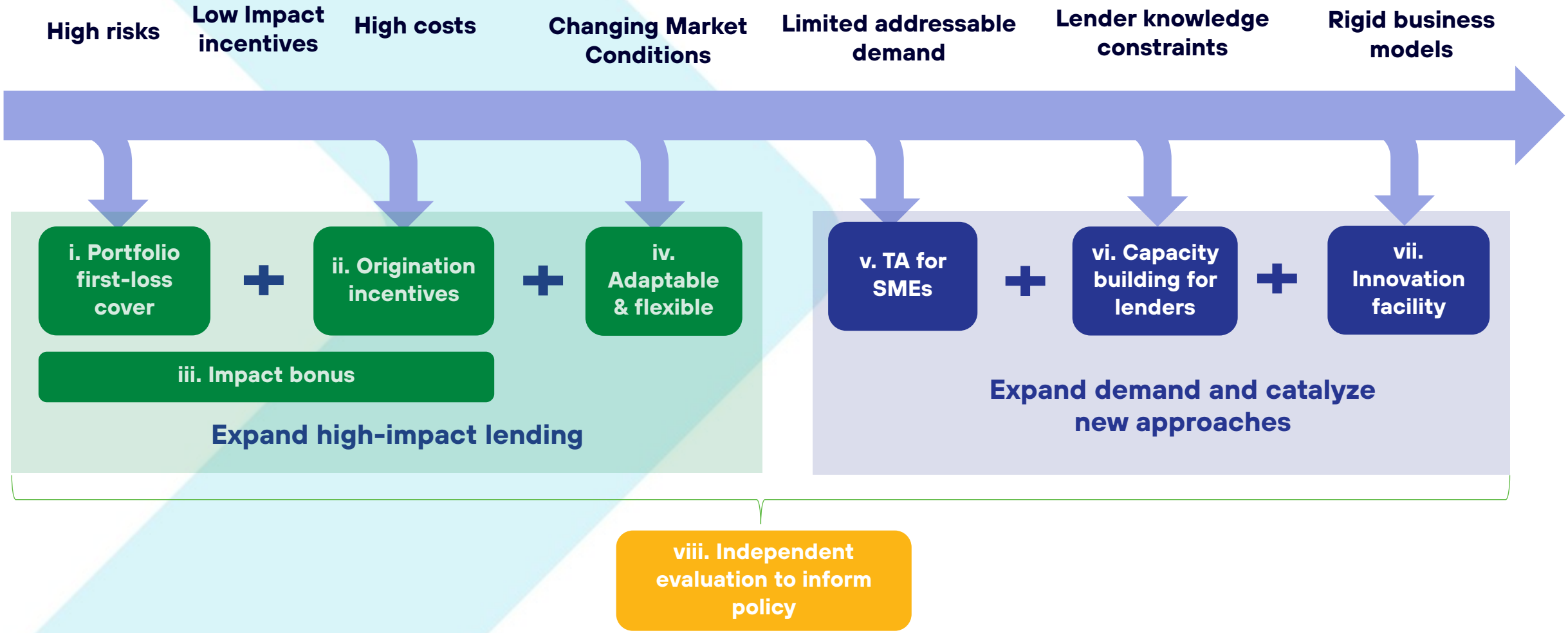
# ...as well as capacity constraints, the need for market innovation, and independent evaluation to inform stronger enabling policies

| Agri-SME lending challenges | Issue solved? | Remaining issues to be addressed |
|---|---|---|
| **Many agri-SMEs lack basic financial management and governance – necessities for bankability** | **Partially:** There are numerous TA programs to support agri-SMEs and value chain development, but demand for TA far exceeds supply in large part because the enterprises that need TA the most can least afford it. | **v.** Quality and costs of TA vary significantly and there is little coordination between TA and financing. There is a need for high-quality, cost-effective approaches; business models for TA that build an ability and willingness to pay among SMEs so that donor funding is not required in perpetuity, and improved coordination between TA providers and capital providers. |
| **Many lenders do not have dedicated agri teams, financial products, or systems and processes tailored to the agri-SME market** | **Partially:** Existing capacity-building assistance has helped some lenders develop agricultural finance expertise. However, lenders reported strong demand for increased TA funding *(see Slide 40).* | **vi.** Support lenders with building out a robust agricultural product portfolio along with the internal capacity to serve the market by offering tailored capacity-building assistance that is paired with financial incentives |
| **Profitable business models for financing agri-SMEs at scale have yet to emerge and efforts to leverage technology are nascent** | **Partially:** Technology innovation has revolutionized financial services where big data enables customer profiling. That is not yet the case in agri-SME finance because of limited datasets and customer heterogeneity. | **vii.** Nurture i) B2B technologies that can drive efficiencies in matching agri-SMEs with lenders and/or lower costs to originate and monitor loans; and ii) innovative business models for direct SME lending |
| **Agri-SMEs are lynchpins for inclusive and sustainable agricultural value chains but there is limited evidence quantifying their impacts and, consequently, weak enabling policies for agri-SME finance** | **Partially:** The evidence base for agri-SME finance is years behind microfinance. There is a dearth of peer-reviewed research with most learning in case study format, often produced by organizations with a vested interest in promoting success stories. | **viii.** Generate robust, independent data on i) the relationship between blended finance instruments and the behavior of capital providers; and ii) the the associated benefits of financing agri-SMEs on farmer and worker livelihoods, food security and nutrition, opportunities for women and youth, and climate-smart and resilient agricultural practices. |



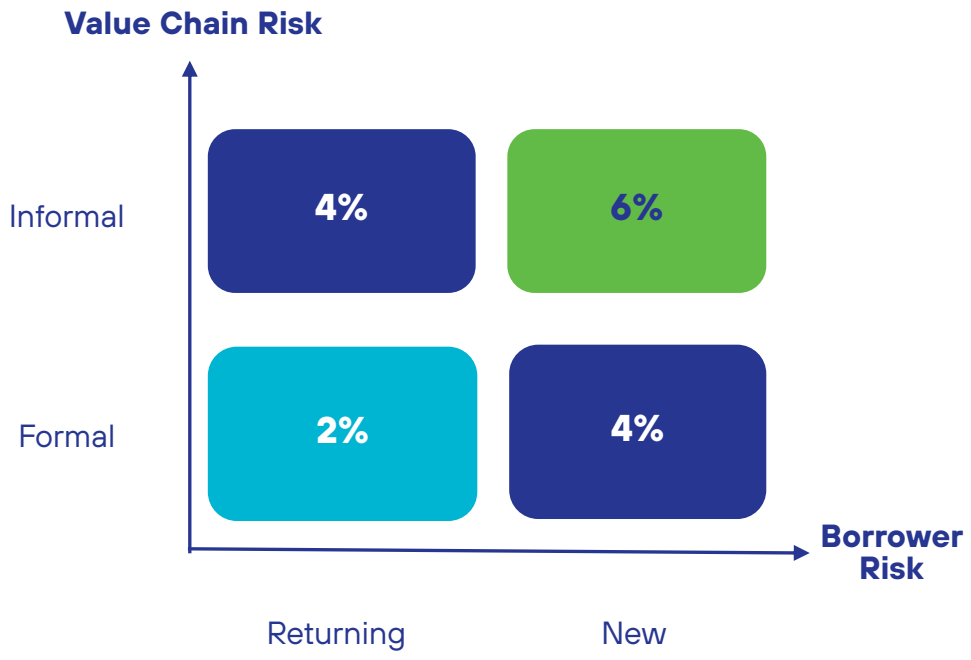
**1.** Data from CSAF lenders indicates that PAR30 is highest among smaller loans (*<'$500k) compared to loans of $1m+ (CSAF Funder Survey, 2020)*

# Aceli Africa addresses these challenges with solutions tailored to the least served segments of the market



# Risk: Portfolio first-loss increases coverage for lenders

## First-loss guarantee (% awarded per loan)




In addition to the amounts shown here, lenders can earn **up to an additional 2%** through this mechanism for certain high-impact loans *(see Slide 37)*, to help ensure that impact is "part of the equation" for lenders evaluating potential borrowers

## How first-loss protection works

- Lender makes a qualifying loan between $25K-$1.5m
- Aceli makes an **upfront deposit** into the lender's reserve account
- The upfront deposit ranges from **2-6% of the disbursed loan amount**, depending on the borrower type: more coverage is provided for a new borrower and for one operating in an informal value chain (as data indicates that these are higher risk)
- Lender's reserve account **builds up with each loan**; lender can draw on reserve as a first-loss loss cover for **any losses of loan principal from the portfolio of loans** registered in its account

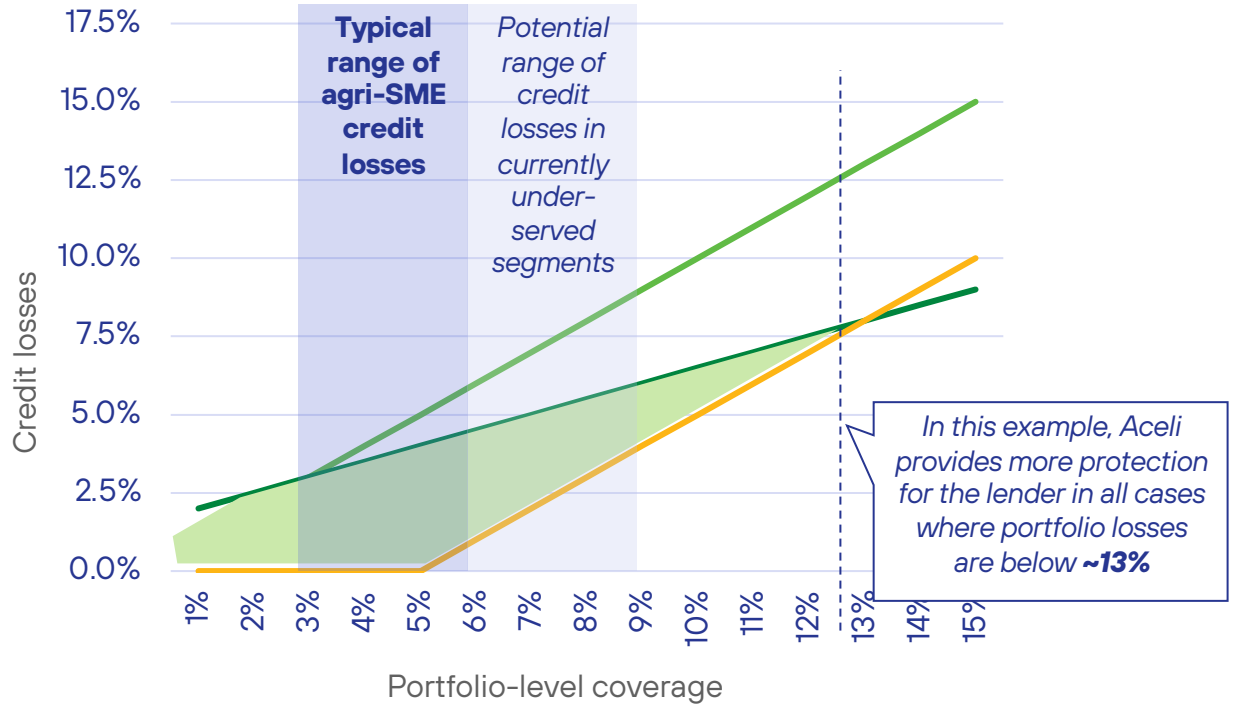
***Loan example**: Loan of $100k to coffee cooperative (formal, new borrower) qualifies for 4% coverage = $4K*

***Portfolio example**: $10m with avg coverage of 4%. The lender builds up a reserve of $400K that can be drawn as first loss in event of any losses in portfolio of qualifying loans.*

Aceli is the first "portfolio first-loss" available for agri-SME lending in East Africa (see slide 34 for the pros of this model).

# Risk: Portfolio first-loss is more advantageous than partial credit risk guarantee for the typical agri-SME loss range

## Comparison of lender retained portfolio-level losses




**Aceli's no-fee model removes barriers to lender participation**

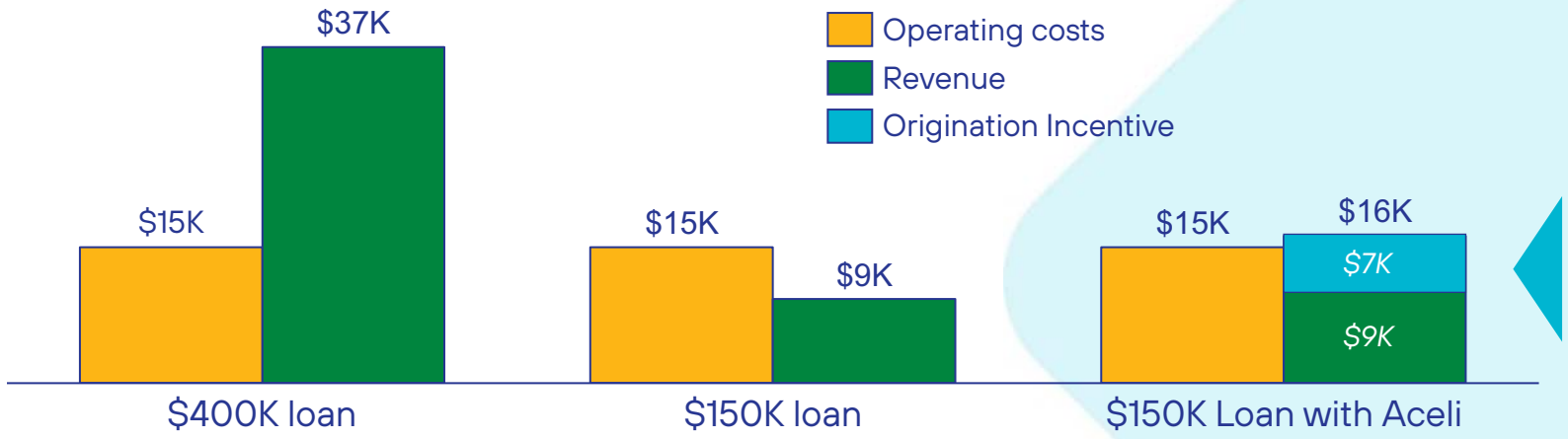
- **Partial credit guarantee schemes** usually **cover 50%** of a specific loan portfolio's or individual loans' losses after recovery
- While these schemes are effective in reducing net losses, they don't necessarily incentivize lenders to expand their reach to higher-risk but also high-impact segments, such as new borrowers in informal value chains or higher ticket sizes
- Current guarantee schemes also come with **fees that further impacts loan profitability**:
  - Upfront fees vary between 0-3%
  - Annual commissions are between 0.5-2% of the guaranteed amount
- Within the typical range of agri-SME credit losses (3 to 6%), **first-loss protection is stronger than a partial credit risk guarantee**



Note: Portfolio guarantee fee example is based on a 1% annual utilization fee and a 1% origination fee amortized over 2 years. Actual fees are in many cases higher than this, especially for guarantees with low or uncertain utilization, creating an even further disincentive for lenders, relative to the Aceli model.

# ii Cost: Origination incentives increase returns by compensating for higher per-loan operating costs for smaller loans

## Costs vs revenue for 1-year working capital loans made by a more efficient[1] bank




**1** *For large loans, revenue comfortably exceeds costs, even for shorter-term loans*

**2** *But at small sizes, revenue fall short of costs even among more efficient lenders, creating a disincentive to serve new & smaller borrowers*

**3** *Aceli origination incentives, provide additional revenue to make smaller loans more attractive*

**Aceli is the first program to offer tailored "origination incentives"** aimed at the $25k-500k segment

- Aceli provides **up to $6K in origination incentives** for returning borrowers
- This is raised to **$10K for new borrowers**, to compensate for higher costs[2]
- Incentive levels are fixed for all lenders, **creating a level playing field that attracts competition and rewards efficiency**
- Lenders can earn **up to an additional $4K** for high-impact loans *(see next slide)*, lowering the break-even size even further
- **Incentive levels are adjusted down** as the market becomes more efficient



1. I.e. for a bank at the 75th percentile of annualized operating costs in our dataset. 2. For example, in our cost-allocation exercise, social lenders reported up to 50% higher origination costs, due to the need for in-person visits and more research to understand the dynamics in a new value chain or market

# iii Aligning for Impact: Bonuses incentivize lenders to seek high-impact borrowers

**Incentives based on risk, loan size and borrower status** + **Impact bonuses** → **Total incentives**

**First loss incentives**
- Based on borrower risk
- 2-6% of loan facility in reserve account

**Origination incentives**
- Based on loan size & new or returning borrower
- $0-10k payment to lender

**Women's economic empowerment**

**Food security & nutrition**

**Climate-smart & agriculture**

**Up to 2% additional incentive**

**Up to $4k in additional incentive**

Incentives are designed to:
- Address risky market segments
- Reward high-impact lending
- Vary along a smooth curve to account for threshold effect

## ...and internalize some of the positive externalities of agri-SME lending

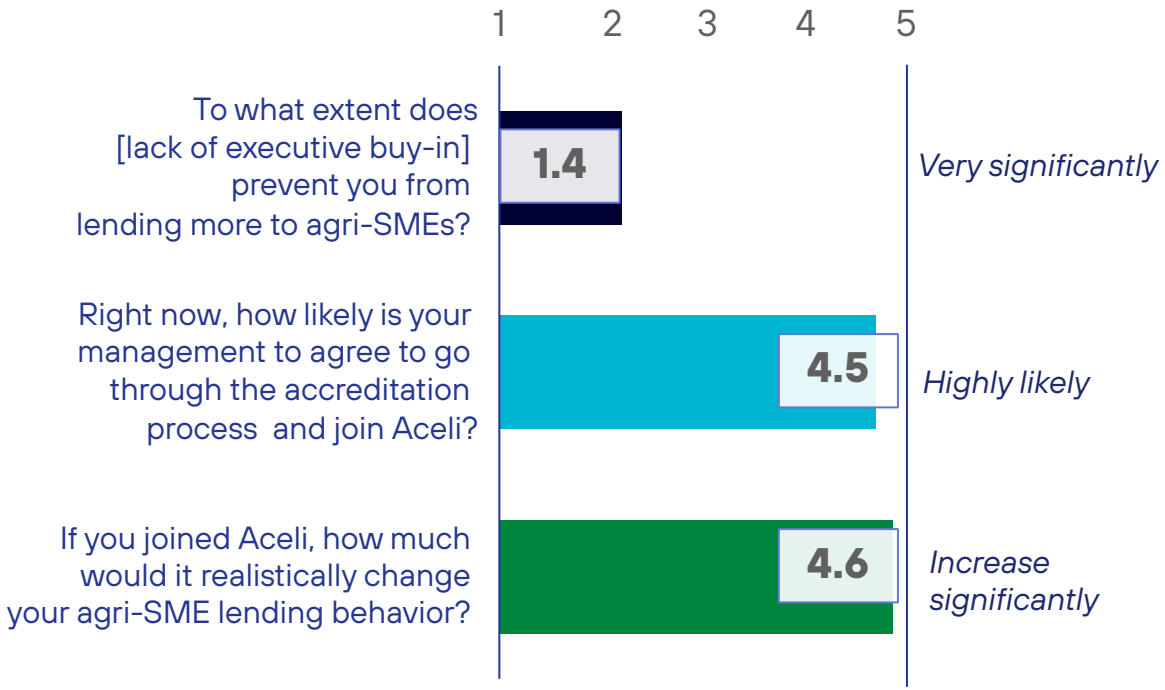
# iv Aceli has developed specific rules to avoid over-subsidizing lenders

| Potential problem | Aceli's rules |
| --- | --- |
| **Multiple risk mitigation products**<br>Some lenders may use multiple risk mitigation products for the same portfolio | Lenders are required to **disclose their risk mitigation products;** Aceli signs MOUs with notable guarantors & limits combined coverage |
| **Variation in loan types & strategies**<br>Some lenders have a model of making multiple back-to-back short term loans instead of one larger, flexible facility | Only one loan per borrower per year is eligible, but all loan structures and tenors are equally eligible |
| **Flexible loan terms**<br>Credit lines may not be fully utilized by the borrower. Incentives linked only to stated facility size may result in over-subsidizing. | Funding amounts for first-loss and origination incentives are based on the **outstanding balance** for a period of time |
| **Threshold effect**<br>Lenders just below or above a given incentive threshold may benefit or be penalized in funding amounts | Actual funding amounts vary along a **smooth curve** to limit the threshold effect |
| **Geographic market specificities**<br>Regional mechanisms that apply the same rules across multiple countries may not be suited to the market realities in each country | **Incentive thresholds vary by country**; where markets for smaller loans are more developed, incentive thresholds are higher |

# Lenders have been engaged throughout the design process and report strong enthusiasm for Aceli's planned offerings

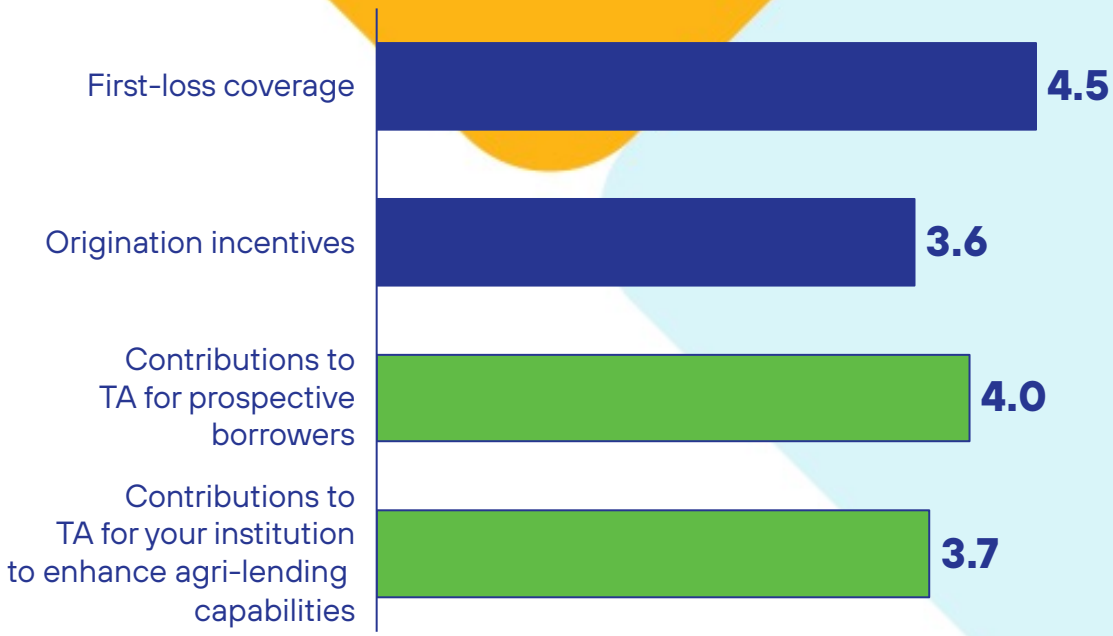
## Lenders are supportive of Aceli across a number of dimensions

Average survey answer scores (n = 11)




## Lenders report strong interest in each of the planned Aceli offerings

Survey answers for "For the same level of donor investment, what would be your preferred intervention?", 1= not preferred; 5 = highly preferred (n = 11)




**Aceli will start with origination incentives and first-loss coverage to build lender engagement; TA for SMEs(launching Q4 2020) and capacity building for lenders (Q1 2021) will soon follow**

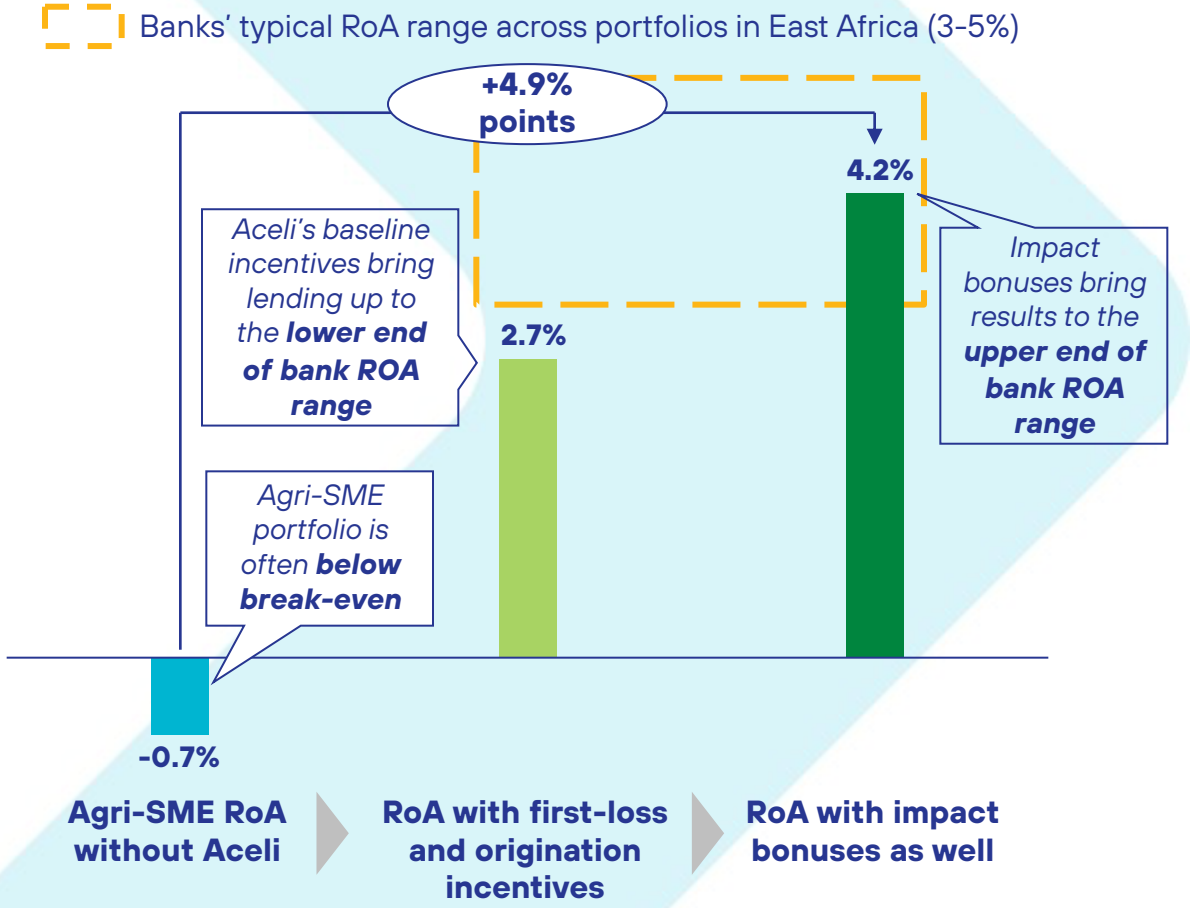


Source: Dalberg Analysis, Survey of E. African commercial banks; Sample Size: 11

# Combined, Aceli's financial incentives for lender bring agri-SME lending risk-returns closer to other segments

i-iv

## Example agri-SME portfolio loan economics prior and post-Aceli funding (% return on assets, annualized)




- **RoA is 3.5 points higher with the Aceli first-loss coverage and origination incentive** (but before impact bonuses) and is close to typical bank-wide RoAs in East Africa
- If the loan meets all three impact criteria, RoA is **~5 points higher than without Aceli funding,** bringing results in line with more profitable bank segments
  - Recall **Slide 28** where we noted that average bank returns on assets range from ~2% in Tanzania to ~5% in Kenya
- Lenders retain some level of risk after Aceli funding, but the **risk/return ratio is improved** and closer to other market segments

Note: Based on typical bank data, the illustration of Aceli loan profitability assumes: 1) Loan size ~$300k; 2) 13% annual interest rate and 3.5% annual cost of funds; 3) 6% probability of default; 4) Full utilization of facility size; 5) Borrower is returning and part of a formal value chain

# v-vii Aceli will also build capacity for lenders and SMEs to bridge the financing gap and support market innovation

## v Technical Assistance to Agri-SMEs

- **Pre- and post-investment stage TA** focused on **business and financial management** so more agri-SMEs can access and manage financing
- First program launching October 2020 targeting agri-SMEs with revenues in $50k-500k range: six-month, fully online program in partnership with Africa Management Institute
- Other TA programs to be launched in 2021 both for agri-SMEs in the $50k-500k revenue size and large SMEs
- Approach includes referrals from lenders, value chain development programs, and other ecosystem actors; coordination between TA and lenders; cost-share with agri-SMEs

## vi Capacity Building for Lenders *(under development)*

- Objective to **increase staff expertise**, **tailor product offering** to agri-SME needs, and **improve systems and processes** for agri-SME lending
- Considering mix of **standardized training for front-line loan officers** and more **custom training for managers and key staff** in other units (e.g., risk, treasury, senior management) that inter-face with agri-units and make decisions re: strategy and capital allocation
- In addition, may offer cost-share for strategic engagements focused on **change management** to build culture and processes to grow agri-SME lending at institutional level

## vii Innovation Facility *(under development)*

- Objective to **seed and grow technologies, services, and business models** that can **drive efficiencies** in the market to reduce need for donor-funded financial incentives and TA over time
- Focus on:

  i) **B2B technologies and services** and that can be offered across a marketplace of actors to improve operating efficiencies; and

  ii) **innovative business models** for direct SME lending

# viii Independent evaluation by expert data & learning partners to build evidence base and inform policy engagement

Aceli seeks to **build the evidence base for scaling up similar offerings** in East Africa and across the continent, and has established partnerships with three leaders in their respective fields

Dalberg

- Mission-driven strategic advisory firm focused on emerging and frontier markets
- Performs **financial benchmarking of loan- and portfolio-level economics** to inform calibration of Aceli financial incentives

IGC International Growth Centre

- Research center based at London School of Economics whose aim is to promote sustainable growth in Africa & South Asia by providing demand-led policy advice based on frontier research
- **Evaluates impact of Aceli's financial incentives for lenders and TA for SMEs** on enterprise growth and farmer & employee livelihoods
- Engages policymakers on findings to promote stronger enabling environment for agri-SME finance, including long-term support of Aceli-like product offerings

MIX

- Housed at Accion as a unit within the Center for Financial Inclusion, MIX's catalytic data initiatives encourage the growth of inclusive markets and support informed thinking on the future of financial services
- Creates a **data platform with aggregated & anonymized lending & financial performance** data to support market growth

# Report Contents



**Section 4** synthesizes the framework used to design Aceli and suggests other sectors where a similar approach could be used to mobilize capital flows for development impact

# Aceli's design journey was a 3-step process involving continuous engagement with stakeholders

## Identify the missing market

Agri-SMEs in Sub-Saharan Africa face a **$65bn financing gap**, with highest unmet needs in the $25k-$1.5m loan segment

**Several types of lenders** are active in the agri-SME lending market and target different segments, while substantially **under-serving the riskier borrowers** comprised of first-time borrowers in informal value chains **looking for a) relatively small and short-term loans** or **b) capital asset financing with more manageable collateral requirements**

## Collect & analyze data

Loan-level and lender-level profitability data was collected from a large and diverse sample of lenders to inform the expected and realized risk level, revenues, and costs,

This data was complemented with extensive lender interviews and stakeholder engagement

The data analysis found that while **credit risk was an important hindrance** to lending, **operating costs made the profitability equation even more difficult**, especially for smaller and shorter-term loans

## Design facility

**Aceli responds to the risk and return pain points** observed for agri-SME lending, with incentives calibrated to increase profitability aligned with impact while minimizing market distortions

**Aceli** will also **enable lenders to scale up and become more efficient**, creating a virtuous cycle

**Other facility components** will target capacity gaps both at lender and borrower-level, and support for emerging business models, which both contribute to a more efficient and competitive market

**Aceli was co-created with lenders, funders, TA providers, and other ecosystem actors to ensure that its offerings respond to market challenges in a user-centric way**

# Aceli's design approach can be applied to expand the market for financing or other services in sectors with similar criteria

## High impact, low profitability

Service providers – whether offering financial services or goods and services such as education, energy, or health – decide which markets to serve based on profitability and are not rewarded for social and/or environmental benefits their activities generate

As a result of this mismatch between customer demand and profitability for the financier or service provider, large segments of the market are unserved or under-served

## Measurable activity

Financing (or other service delivery) is for a finite time period, over which capital providers' ex-ante and ex-post risk, return, and major cost components can be estimated

## Marketplace approach

We are likely to see better results if a wide range of current and potential finance / service providers compete in the market, rather than a single provider that can be supported directly

## Potential for learning and efficiency

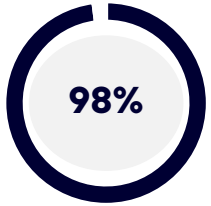
If market participants increase their activity, their learning may trigger greater cost efficiency, improved product offerings, or new competition, expanding access and increasing the impact on underserved populations

**Potential sectors satisfying these criteria are: SME-lending in non-agri sectors, microfinance, insurance, private financing or service delivery models for social goods (e.g., education, health)**

# Example: applying Aceli's design process to microinsurance in Africa

## What is the microinsurance market gap?

Microinsurance covers products such as crop, livestock, credit, funeral, health, life or accident insurance.




In Africa, **98%** of the estimated 700 million low-income population **is not insured**[1]

## What data to collect?

Data on insured and targeted customer base

- E.g. Age, gender, country, economic sector

Data on microinsurance portfolio

- Gross and net written premiums, historical claims occurrence and claims ratios, client churn

Data on insurers' profitability

- Portfolio profitability and claims ratio, reinsurance premiums, OpEx incl. product design, marketing, and claims adjustment costs

## Does this market satisfy the design criteria?

✓ **Low profitability but high positive externalities**

Many insurers post losses due to high product design and servicing costs vs. small transactions. Service providers are unable to capture financial value from the positive impact of increased household resilience

✓ **Marketplace approach**

Insurance companies of various sizes operate in each country, creating an opportunity for market-level intervention

✓ **Measurable activity**

Insurance policies are time-bound products. Policy-level and insurer-level profitability can be analyzed by risk and return components

✓ **Potential for learning and efficiency**

Coverage scale-up could result in cost efficiency, better underwriting data (i.e. lower risk), and more product innovation to serve consumers

## What could the facility offer?

### Operating cost support or cost-sharing

- To cover costs associated with serving smaller customers or introducing innovative products, or enable a premium decrease

### Risk transfer or risk-sharing facilities

- In case reinsurance premiums are deemed to be unaffordable or if there is limited reinsurance available

### Impact bonuses

- To target riskier but high-impact customers

### Technical assistance

- To help insurers build up relevant knowledge and product offering



1. Landscape of Microinsurance in Africa 2018, The Microinsurance Network

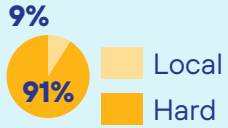
# Report Contents

# Social lenders focus on working capital loans from $100k-$2.5m

## Global social lenders

### Lender overview

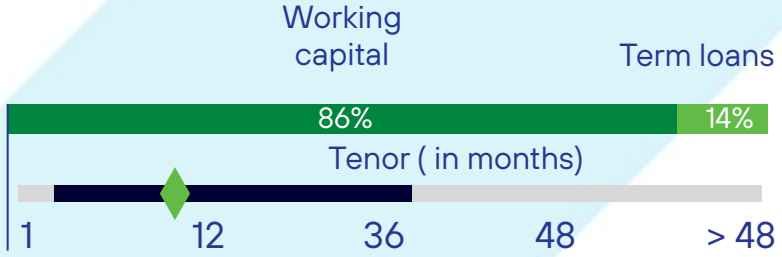
- Internationally-based lenders, impact-oriented
- Lending from $100k -$2.5m
- Unsecured lending provision often tied to seasonal production in absence of formal collateral
- E. Afr. currency split:



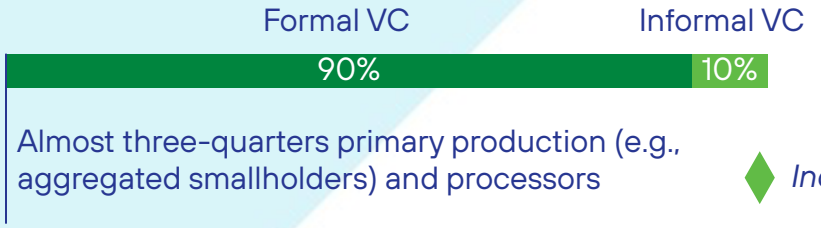

- Dataset analyzed:
  - 11 social lenders[3]
  - 4,165 loans ($2.9bn in volume) of which 535 ($340m) are loans to East African countries
  - Median size in E. Africa is ~$410k

### Dataset

### Product types[2]

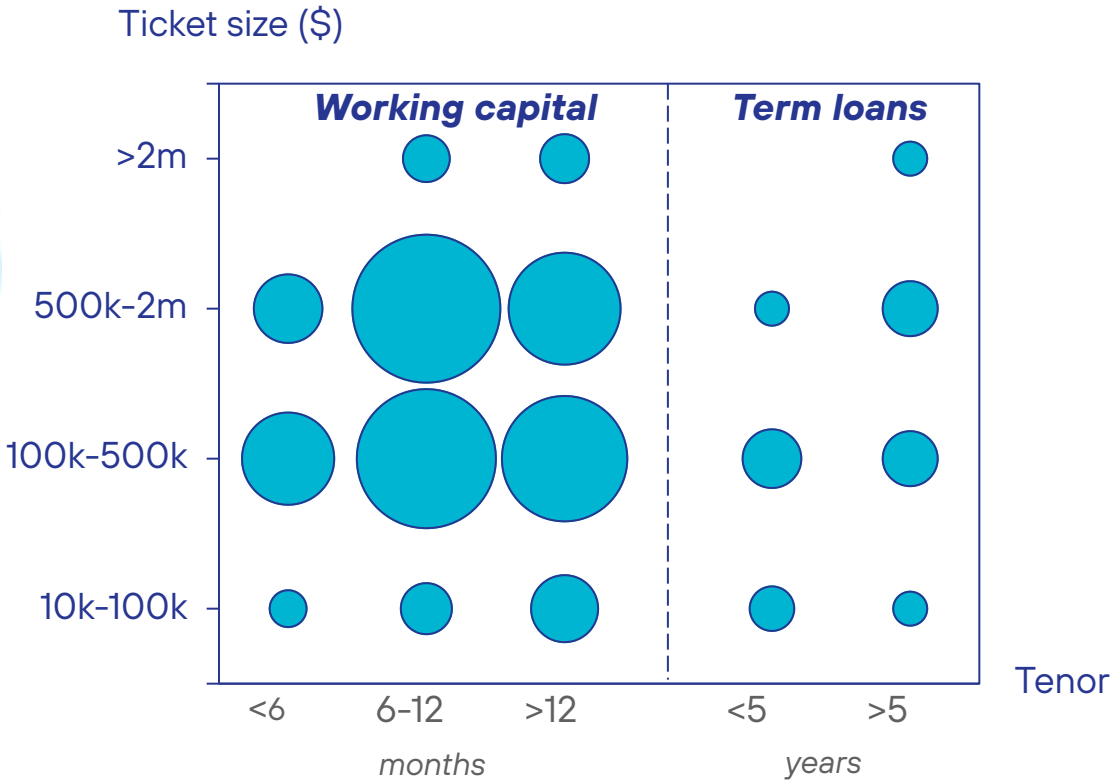



### Borrower types[2]




Almost three-quarters primary production (e.g., aggregated smallholders) and processors

### Distribution of social lenders' E. African agri-SME loans (by number) by product, loan size and tenor[1]




*Indicates median tenor*



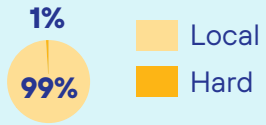
1. Dalberg analysis. 2. Loan distribution is expressed in **number** of loans 3. One social lender had no loans in E. Africa and is not included in data shown on this slide.

# NBFIs focus on smaller term loans or leases, generally remaining under $50k

## Non-bank financial institutions (NBFIs)

### Lender overview

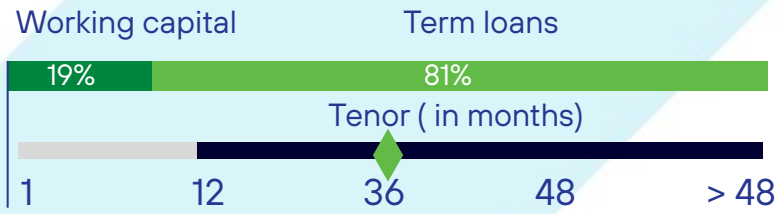
- Locally-registered impact-oriented lenders, often with international backing
- Lend at a very small ticket size
- Moving towards higher loan / lease sizes while remaining well under $100k
- Currency split:



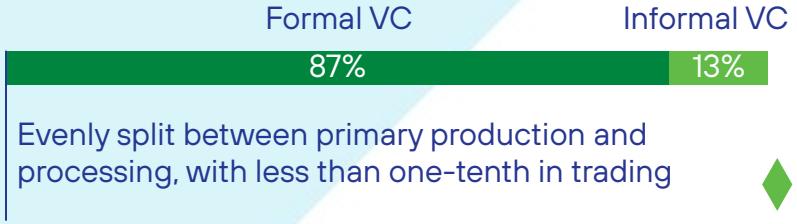

### Dataset

- Dataset analyzed:
  - 6 NBFIs[3]
  - 645 loans ($24m in volume)
  - Median loan size ~$25k; mean ~$35k

### Product types[2]

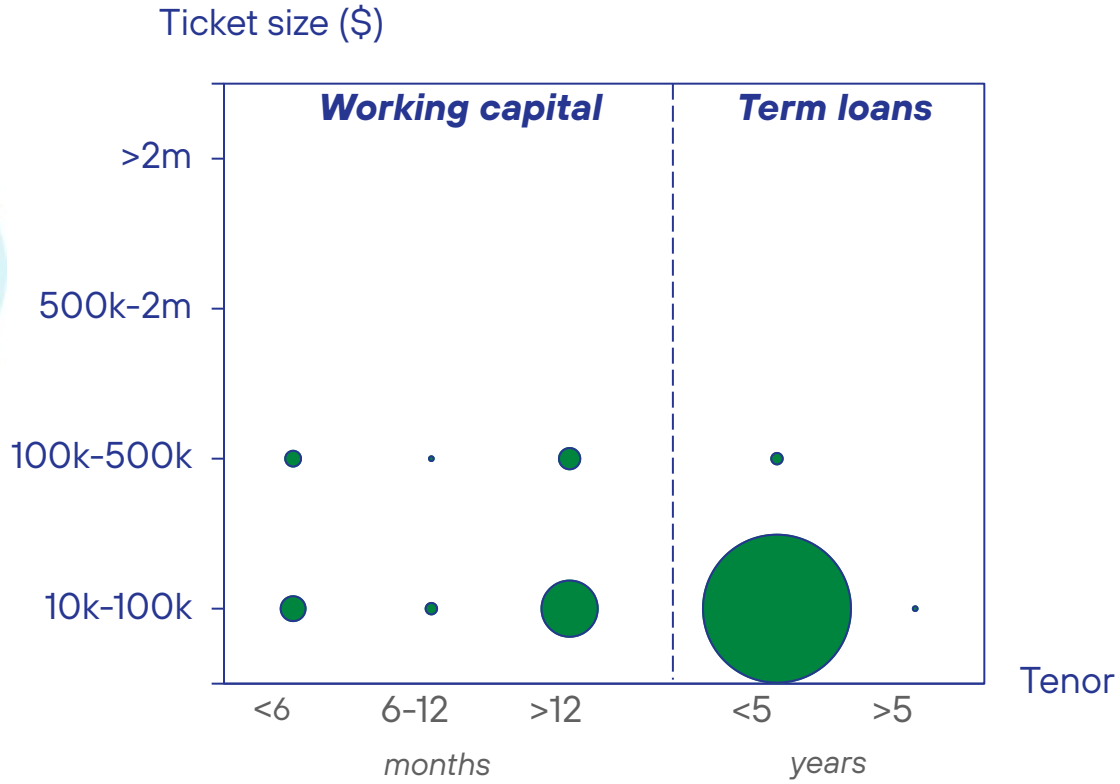



### Borrower types[2]




Evenly split between primary production and processing, with less than one-tenth in trading

### Distribution of NBFIs' agri-SME loans (by number) by product, loan size and tenor[1]




*Indicates median tenor*



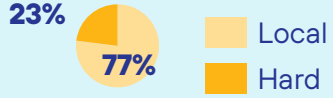
1. Dalberg analysis. 2. Loan distribution is expressed in **number** of loans 3. Including 2 country subsidiaries of the same regional organization

# Banks mostly offer collateralized term loans and some smaller short-term working capital or trade finance facilities

## Banks

### Lender overview

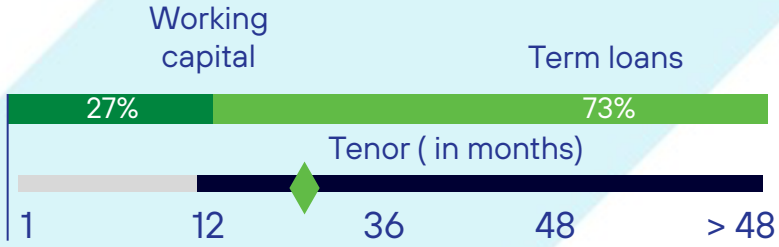
- Deposit-taking lenders, with some banks having dedicated agri-business units serving both SMEs and corporates
- Mostly lend for short-term working capital and small ticket term loans
- Usually require fixed asset collateral
- Currency split:




### Dataset

- Dataset analyzed:
  - 12 commercial banks[3]
  - 4,230 loans ($730m in volume)
  - Median loan size ~$30k, but mean is much larger ($175k)

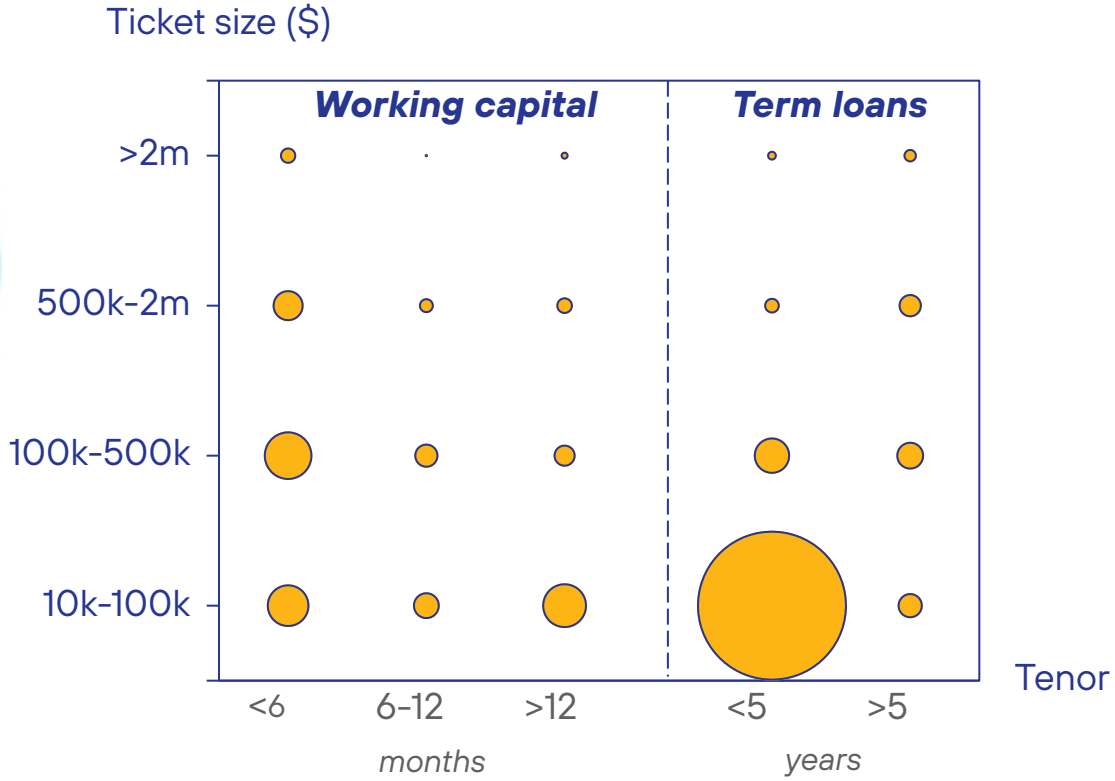
### Product types[2]




### Borrower types[2]


Banks do not always gather data on borrower type or role in the VC, leading to some information gaps

**Distribution of banks' agri-SME loans (by number) by product, loan size and tenor[1]**



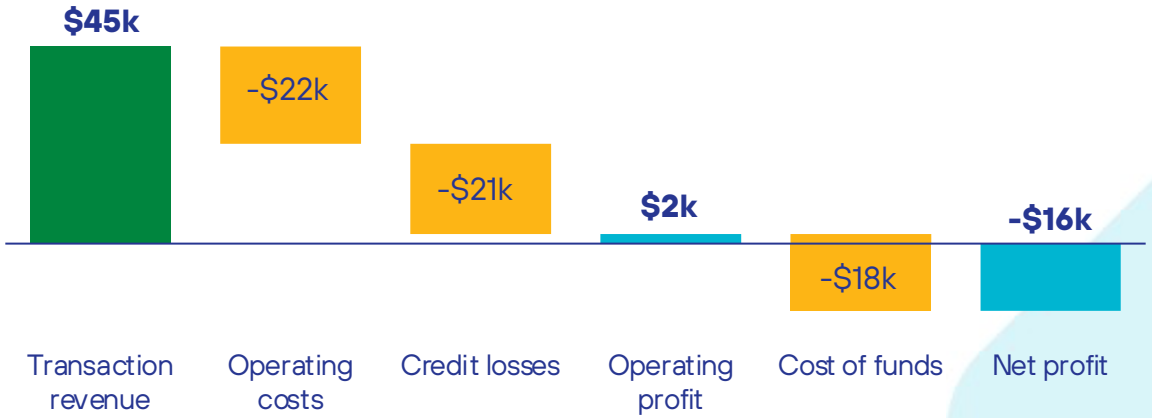

*Indicates median tenor*



1. Dalberg analysis. 2. Loan distribution is expressed in **number** of loans. 3. Two additional banks participated in the research but are not included in this analysis: One only provided portfolio-level data and one is located outside of E. Africa

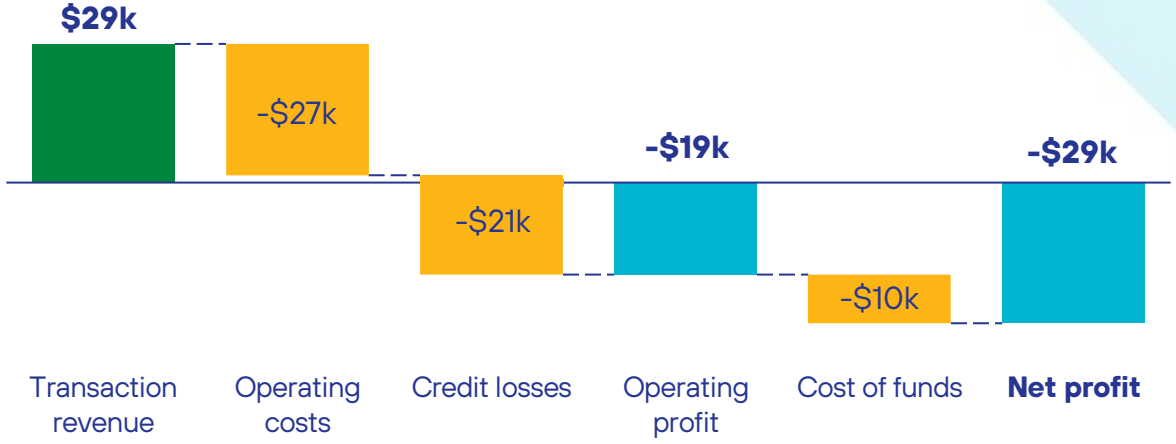
# The average agri-SME loan by a social lender in East Africa loses $29k vs. an average $16k loss for Latin America

## Average Loan Economics: Latin America




| | |
|---|---|
| Number of lenders | 9 |
| Number of loans | 2,900 |
| Avg loan size ($) | $680k |
| Avg Tenor (months) | 16 |
| RoA (%) | -2.7% |

## Average Loan Economics: East Africa

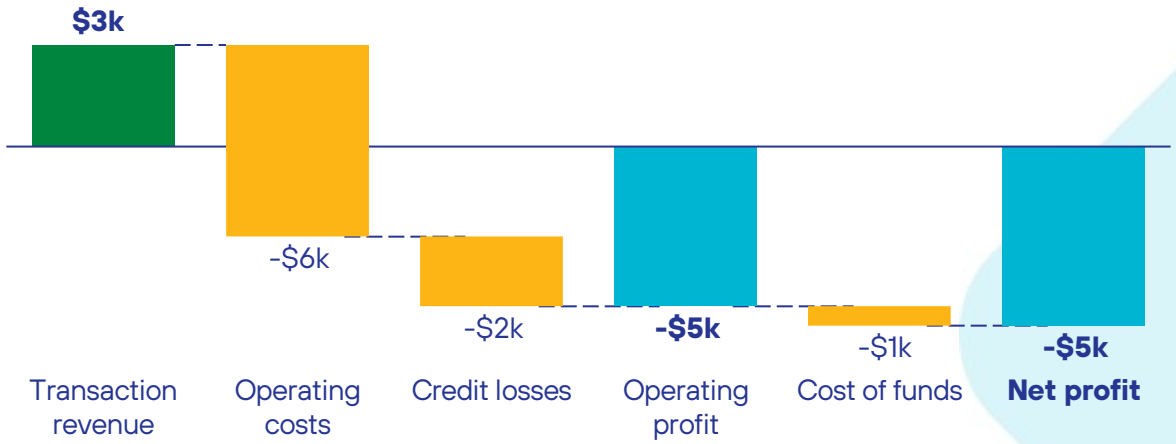



| | |
|---|---|
| Number of lenders | 8 |
| Number of loans | 496 |
| Avg loan size ($) | $620k |
| Avg Tenor (months) | 18 |
| RoA (%) | -6.8% |

Source: "CSAF Financial Benchmarking: Final Learning Report," Council on Smallholder Agriculture Finance and USAID, Dalberg Analysis

# The average agri-SME loan by an NBFI loses an estimated $5k with a return on assets of -12%

## Average Lifetime Loan Economics




| | |
|---|---|
| Number of loans | **630** |
| Avg loan size ($) | **$32k** |
| Avg Tenor (months) | **30** |
| RoA (%) | **-12%** |

## Loan statistics for different lenders

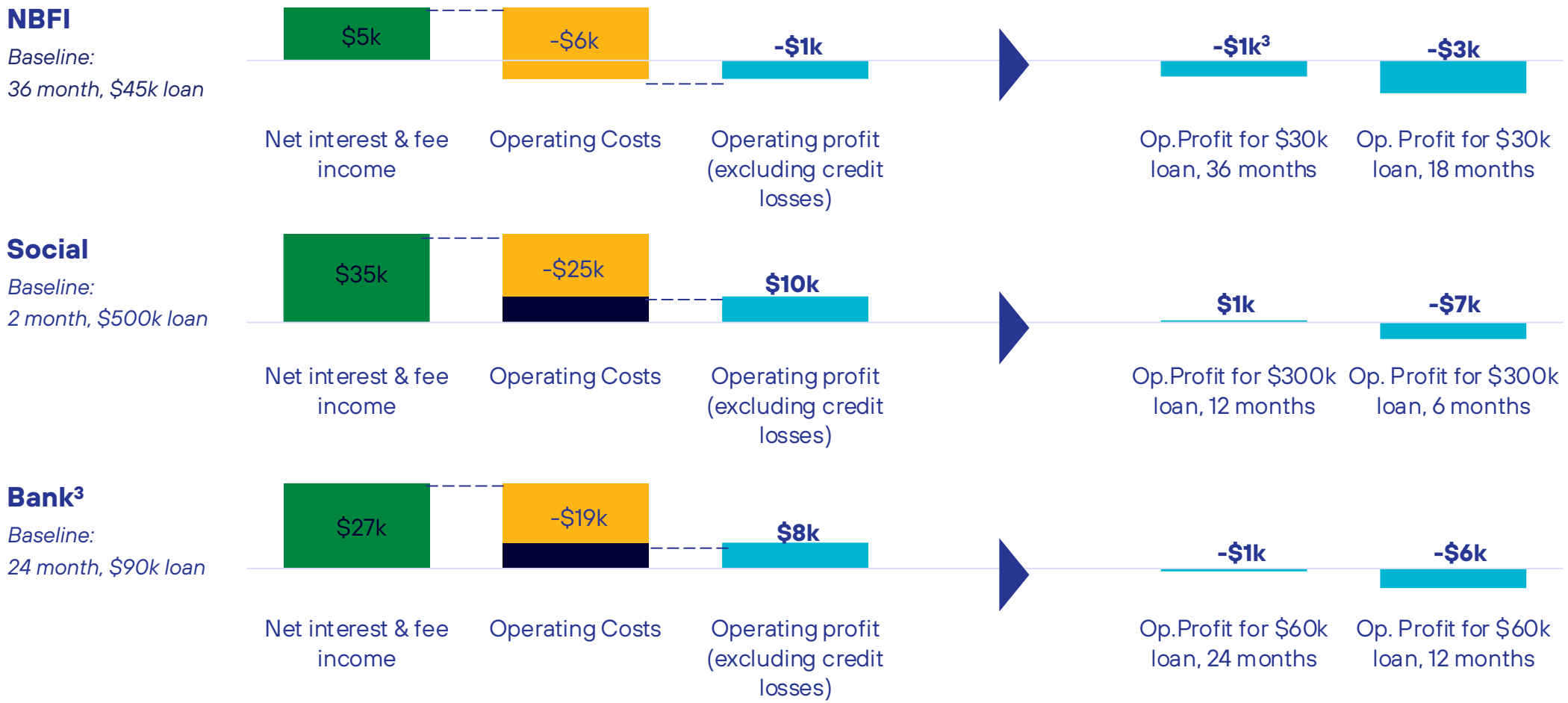
| NBFI | Avg Loan Size ($) | Avg Loan Tenor (y) |
|---|---|---|
| **Lender 1** | 20-30k | 1 |
| **Lender 2** | 20-30k | 2-3 |
| **Lender 3** | 20-30k | 1-2 |
| **Lender 4** | 50-100k | 1-2 |

Source: Lender loan databases, Dalberg Analysis

# Detailed example: The nature of lending revenue means shorter-term or smaller loans are even more difficult to serve profitably

**Expected operating economics *(excluding credit losses)* for loan of "above-average"[1] size and median tenor**

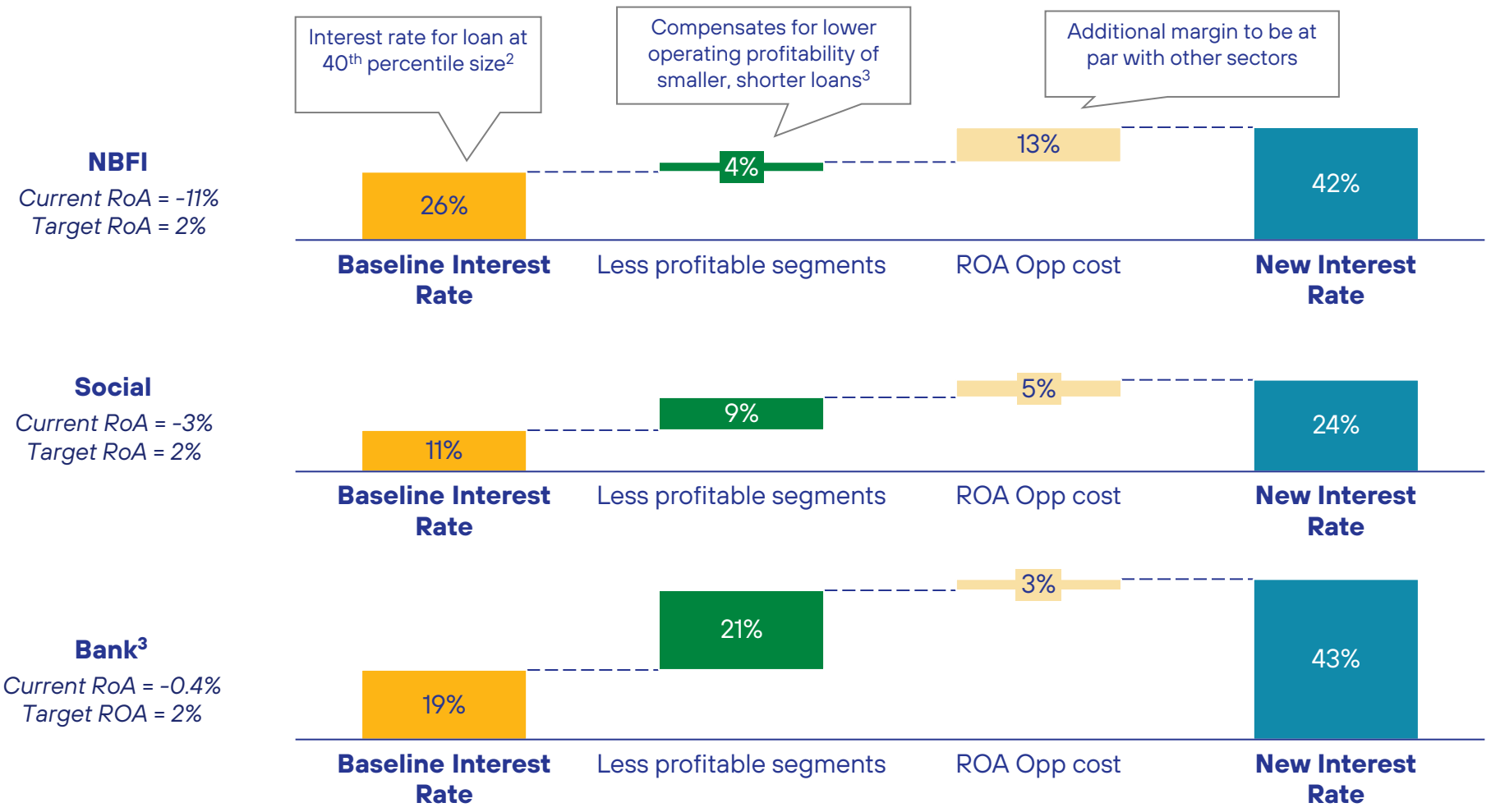
**Operating economics as 1) loan is reduced to "below-average" size and 2) loan is then shortened to half the median tenor**




1.Typical = baseline loan with median tenor, 60th percentile loan size of loans in our sample, 2. Cost to Income = Operating Cost / (Interest Income + Fee – Cost of Funds), 3. cost to income offset by higher average interest rates at 40th percentile loan size. Source: Lender loan-level data; Dalberg analysis;

# Detailed example: If lenders transferred the cost of financing more costly borrower segments, growth of agri-SMEs would be inhibited

**Increase in nominal interest rate to maintain profitability (% points)**




1. $ROA_0$ represents the average ROA of the lender type, 2. Typical loan = baseline loan of respective lender type with median tenor, 40th percentile loan size of loans in our sample, 3. determined as the incremental interest rate required to maintain cost to income of larger, longer loans. Source: Lender loan-level data; Dalberg analysis.

# Based on balances in arrears at year-end snapshots, banks in the sample show a wide range of credit loss expectations

## Expected losses for agri-SME portfolios as a percentage of outstanding balance

Based on balances in arrears at year-end. Only banks that submitted loan-level data are shown

| Bank | Baseline: assuming bank-specific haircuts | Assuming standard haircut |
|---|---|---|
| **Notes on Methodology:** | Expected losses according to national or bank regulations, typically:<br>• *30-89 days 0%;*<br>• *90-179 days 25%;*<br>• *180-359 days 50%;*<br>• *360+ 100%* | Expected losses as follows (same as used for NBFIs and social lenders):<br>• *30-89 days 25%;*<br>• *90-179 days 50%;*<br>• *180-359 days 75%;*<br>• *360+ 100%* |
| Bank 1 | ~3.9% (1) | ~19% |
| Bank 2 | 1.1% | 4.7% |
| Bank 3 | 0.2% | 0.2% |
| Bank 4 | 1.4% - 2.0% | 3.7% |
| Bank 5 | 1.0% (2) | 1.8% |
| Bank 6 | 2.3% (2) | 5.0% |
| Bank 7 | 7.5% (2, 3) | 21% |
| Bank 8 | 6% (4) | 6% (4) |
| **Average** | Mean 3.0%<br>Median 2.2% | Mean 7.7%<br>Median 4.9% |

Notes: 1) Bank provided aggregate balance aging tables at year-end, rather than loan-level data. 2) Bank provided multiple annual snapshots, allowing for multi-year estimates – a weighted average across years was used. 3) Bank provided write-off data and balance aging data separately. (4) Bank provided full transaction data, allowing a comparison of defaulted loan balances to annual average balances outstanding over a multi-year period

# Bank operating costs for agri-SME lending were calculated based on reports, interviews, and loan data shared

*Agri-SME Operating Costs = Agri-SME Staff Costs (**Front Office + Back Office**) + Agri-SME **Non-Staff Costs***

## 1 Agri-SME Front Office Staff Costs

$$= Bank\ Staff\ Cost \times \frac{Front\ Office\ Staff}{Total\ Staff} \times \%\ Agri\ lending \times \frac{Cost\ to\ manage\ AgriSME\ book}{Cost\ to\ manage\ other\ sectors}$$

**Lender example:**

$$= \$56m \times {}^{700\ front\ office\ staff}/_{1100\ total\ staff} \times 3\%\ Agri\ lending \times 0.4x\ Agri\ cost$$

Annual Report (700 front office staff / 1100 total staff) · Annual Report (3% Agri lending) · Loan data shared (0.4x Agri cost) · Interviews

$$= \$430k$$ *Front Office Costs*

## 2 Agri-SME Back Office Staff Costs

$$= Bank\ Staff\ Cost \times \frac{Back\ office\ Staff}{Total\ Staff} \times \%\ Agri\ lending$$

**Lender example:**

$$= \$56m \times \left[{}^{400\ front\ office\ staff}/_{1100\ total\ staff}\right] \times 3\%\ Agri\ lending$$

$$= \$610k$$ *Back Office Costs*

## 3 Agri-SME Non-Staff Costs

$$= [Bank\ operating\ Cost\ - Bank\ Staff\ Cost] \times \%\ Agri\ lending$$

**Lender example:**

$$= [\$105m\ -\ \$56m] \times 3\%\ Agri\ lending$$

$$= \$1.5m$$ *Nonstaff Costs*

## Loan-level Cost

$$= \frac{Agri\ SME\ op\ cost}{AgriSME\ loans} \times 30\% origination + \frac{Agri\ SME\ op\ cost}{AgriSME\ loans} \times 70\% variable\ cost^{1} \times Tenor(y)$$

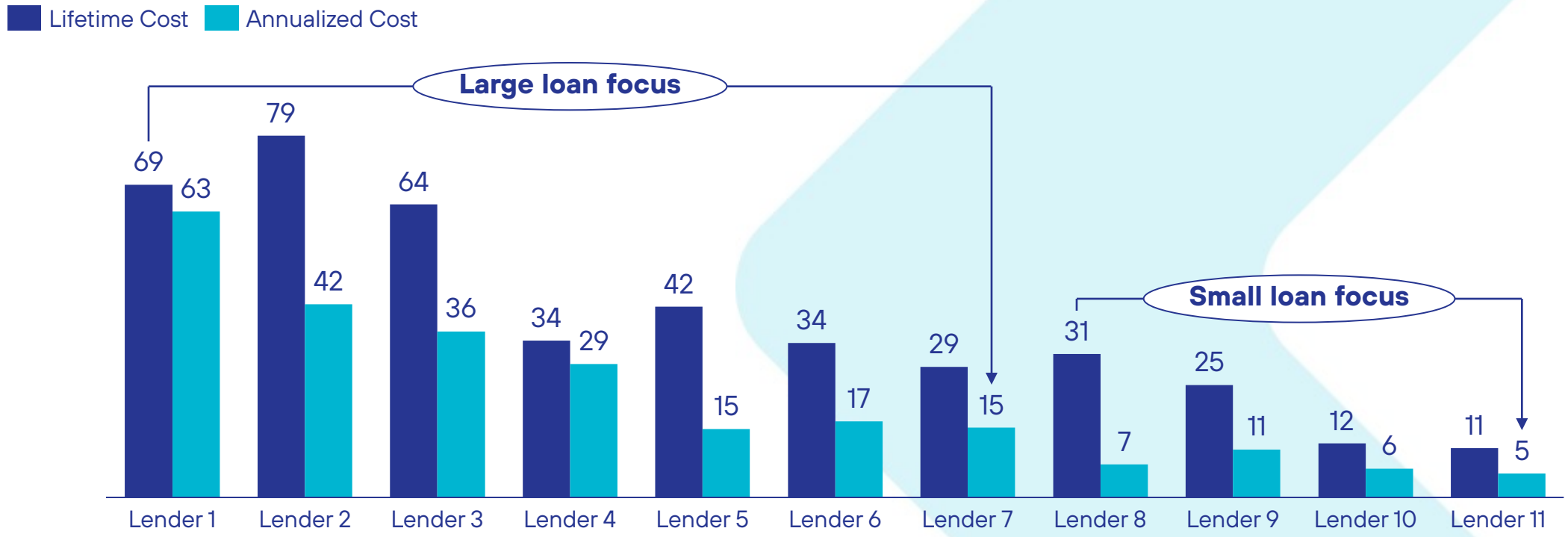
$$= {}^{\$2.6m}/_{170} \times [30\% + 70\% \times 3.6y]$$

**$\approx \$43k$ *Agri SME loan operating cost***

1. Variable costs include servicing and overhead that vary with tenor
Source: Annual reports, Interviews, Lender loan databases

# Banks with Agri-SME portfolios can be split into two categories based on their target average loan sizes and operating costs

## Average Operating Cost per Loan ($k)

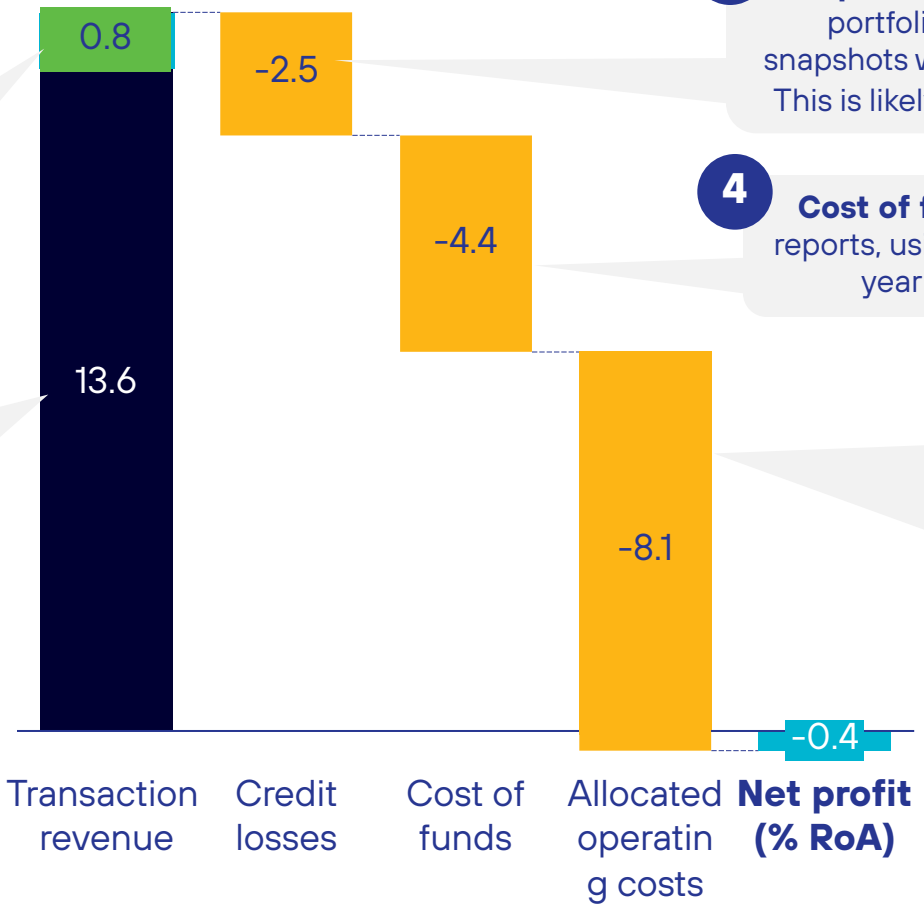



| | Lender 1 | Lender 2 | Lender 3 | Lender 4 | Lender 5 | Lender 6 | Lender 7 | Lender 8 | Lender 9 | Lender 10 | Lender 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Average Tenor (y)** | 1.1 | 2.3 | 2.1 | 1.3 | 3.6 | 2.5 | 2.3 | 5.8 | 2.9 | 2.2 | 2.5 |
| **Average loan Size ($)** | 602k | 179k | 307k | 170k | 259k | 175k | 195k | 110k | 95k | 18k | 21k |

Source: Annual reports, Interviews, Lender loan databases

# Methodology: We used agri-SME portfolio data, annual reports, and expert assumptions from banks to estimate bank agri-SME profitability

**Components of agri-SME estimated return on assets for banks in our sample, and calculation / estimation methodology**
This graph shows the median values across 11 banks in our dataset for each item, as a percentage of average agri-SME assets




**1** **Fee income** is from portfolio snapshots or interviews, adjusted for average loan tenor to give an annualized amount

**2** **Interest income** is a weighted average of headline interest rates from portfolio snapshots (or interviews if snapshots not available)

**3** **Expected Credit losses** were calculated from arrears data in portfolio snapshots (see earlier slide for details). In 3 cases, snapshots were not provided, so we used bank-level write-off rates. This is likely to be a **conservative** estimate for the agri-SME book.

**4** **Cost of funds** was taken from bank annual reports, using the most relevant year (the latest year that the bank submitted data)

**5** **Operating costs** were allocated using each bank's cost to income ratio, adjusted for the relative difficulty of serving agri-SMEs. We estimated (from interviews and annual reports) the share of expenses associated with *front-office staff* and then scaled this portion up or down depending on the agri-SME business unit's perception of the relative efficiency of serving agri-SME customers.

This may be **conservative**, given that (1) *back-office costs* may also be slightly higher (due to the increased intensity of screening and monitoring of agri-borrowers) and (2) *overheads* might also be higher, given the rural nature of agri-borrowers, who are more reliant on less-efficient rural branch infrastructure



**Note:** Data shown represents the median for all 11 banks that were able to provide specific cost, risk, and revenue parameters for their agricultural or agri-SME loan books. 2 other banks took part in the qualitative portion of the Aceli research but were unable to provide BU-specific parameters (only bank-level data) and were thus excluded from the analysis.

# Report Contents

Section 1 – Finance gap for African agricultural SMEs

Section 2 – Agri-SME lending profitability analysis

Section 3 – Aceli's response to the agri-SME lending challenge

Section 4 – How Aceli Africa's approach can be replicable

**Appendix**

- Additional analysis on surveyed lenders' agri-SME portfolio

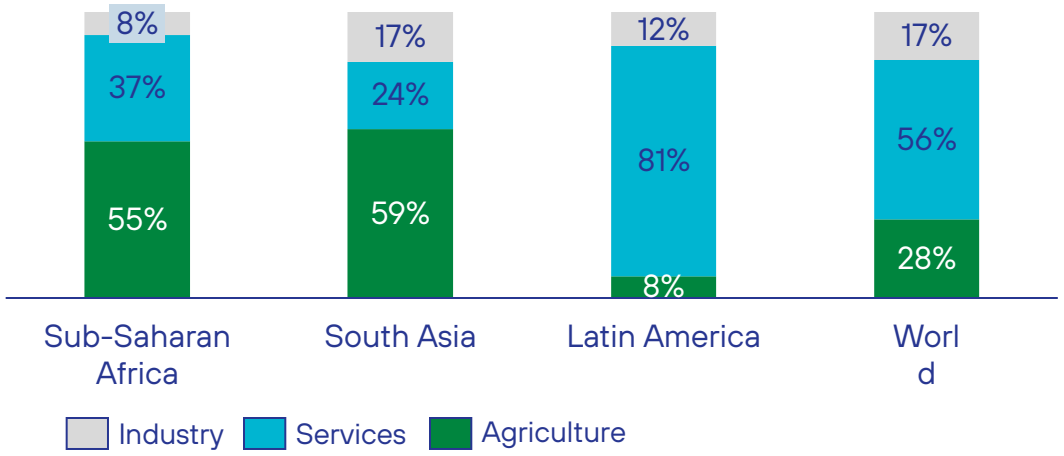
-Agri-SME landscape in Sub-Saharan Africa

- Aceli's methodology

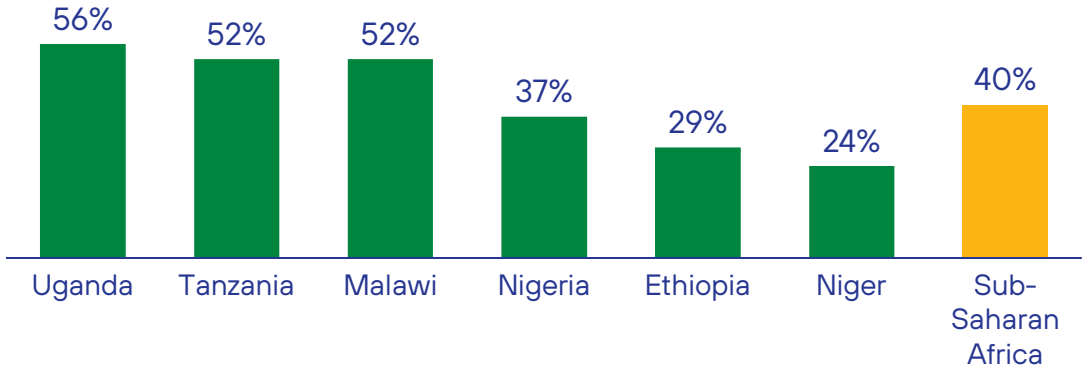
**Appendix** provides additional analysis on agri-SMEs' relevance from a gender perspective, presents Aceli's methodology in more detail, presents more detailed analysis on surveyed lenders' agri-SME portfolio, and lists contributors.

# The agriculture sector is key to women labor force inclusion even though gender inequalities in land ownership remain

**Female employment in agriculture as % of total female employment by region, 2019[1]**




**Selected Sub-Saharan Africa countries' share of female labor in crop production (% of total agriculture labor, 2018)[2]**

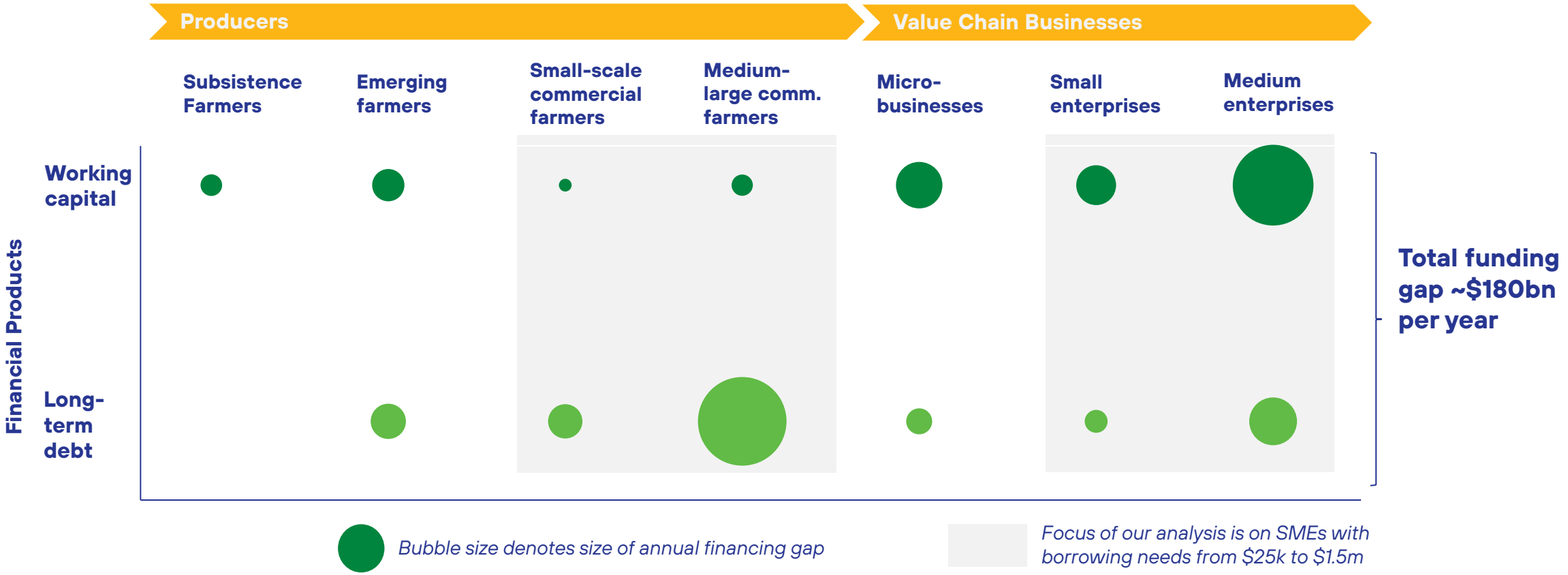



- Agriculture absorbs more than **50% of total female employment** in Sub-Saharan Africa and is the first sector for employment of unskilled women
- In Sub-Saharan Africa, women represent on average **40% the agricultural labor force in** crop production, with wide disparities across countries
- However, **a gender gap remains in land ownership** across the region
  - In Uganda and Tanzania, the proportion of women's control of land is on average **50% lower than that of men[3]**

1. World Bank database, ILOSTAT. 2. World Bank publication, "Women, Agriculture and Work in Africa." 3. Women Deliver, "Women's Land: Closing the Gender Gap in Sub-Saharan Africa."

# Emerging and large commercial farms need long-term debt, while working capital is crucial to support growing downstream businesses

**Current gap in agricultural financing in the market by product type and business size in Sub-Saharan Africa, (2018)[1]**




**While nearly all aspects of the African agricultural economy are under-financed to some degree, we are focusing on the debt needs of SMEs that find themselves in the "missing middle"**

Note. SMEs considered have funding needs between $25k and $1.5m.

- 1. Dalberg and KFW, "Africa Agricultural Finance Market landscape," 2018.

# Aceli's solutions fit well alongside other lender support programs in East Africa[1]

| Lender support schemes (non-comprehensive) | Partial credit guarantee | First-loss guarantee | Concessional debt funding | Incentive payments | Borrower Tech. Assistance | Lender Tech. Assistance | Countries covered[1] |
|---|---|---|---|---|---|---|---|
| *aBi Finance* | ✓ | | | | ✓ | | 🇺🇬 |
| *PASS Trust* | ✓ | | | | ✓ | | 🇹🇿 |
| *Agricultural Credit Facility* | ✓ | | ✓ | | | | 🇺🇬 |
| *Kenya Investment Mechanism* | | | | ✓[2] | ✓ | ✓ | 🇰🇪 |
| *African Guarantee Fund* | ✓ | | | | | ✓ | 🇷🇼 🇹🇿 🇺🇬 🇰🇪 |
| *US Development Finance Corporation* | ✓ | | ✓ | | ✓ | | 🇷🇼 🇹🇿 🇺🇬 🇰🇪 |
| *IFC (GAFSP)* | | | ✓ | | ✓ | | 🇷🇼 🇹🇿 🇺🇬 🇰🇪 |
| *ARIZ* | ✓ | | | | | | 🇷🇼 🇹🇿 🇺🇬 🇰🇪 |
| ACELI AFRICA | | ✓ | | ✓ | ✓ | ✓ | 🇷🇼 🇹🇿 🇺🇬 🇰🇪 |

✓ *No guarantee fees* ✓ *Guarantee fees charged*

🇰🇪 *Kenya* 🇷🇼 *Rwanda* 🇹🇿 *Tanzania* 🇺🇬 *Uganda*

Source. Rabobank Foundation, "Critical Capital for African Agri-food SMEs," 2018, and Dalberg analysis

1. Only Kenya, Rwanda, Tanzania and Uganda are shown given Aceli's initial footprint. Some of these programs operate outside East Africa as well.
2. Kenya Investment Mechanism provides results-based grants in proportion to the size of the originated portfolio. This can incentivize banks to target the larger end of the market and microfinance institutions to expand farmer finance, but does not specifically target the "missing middle"

# Report Contents

# Dalberg analyzed the financial data of 9,104 loan transactions totaling $3.7bn from 31 participating lenders

## Collect data

- Dalberg collected **quantitative data** on each participating lender's agriculture lending portfolio from 2010-2019 in up to three areas:
  - **Loan-level time series data**: schedule of loan disbursements and repayments, including fees, interest, and credit losses (write-offs)
  - **Portfolio breakdown of loan characteristics**: borrower and loan details such as country, value chain, product type, tenor, etc.
  - **Operating cost data**: annual cost data by region and business unit where possible, including compensation, legal and professional fees, back-office resources, and other overheads
- Quantitative data was complemented with **surveys and structured interviews** with 31 lenders, seeking to understand main hurdles faced by lenders in the agri-SME lending segment

## Standardize

- Dalberg **cleaned the loan data** and standardized value chains (formal vs. informal), facility types (working capital vs. term loans) and borrower types (new vs. returning)
- A **weighting factor** (dollar-years of lending) was utilized to allow a like-for-like comparisons of profitability drivers across different loan tenors
- Total annual operating costs were **divided across the originated and active portfolio** for each year, and allocated across the stages of the loan lifecycle
- Dalberg **validated initial results** and cost allocations with each lender through bilateral conversations, surveys, and other validation exercises

## Analyze

- Using the cleaned, standardized data, Dalberg determined the **financial profit and accounting profit** for each of the loans provided
- Dalberg also incorporated each lender's typical cost of funds to determine the income net of cost of funds
- This resulted in a **unique and anonymized database** that allows analysis of the economics of lending to agriculture SMEs across various dimensions such as country or product type

# Answers to frequently asked questions about Aceli (1/2)

*Aceli has been developed through an extensive process of engagement with lenders and other stakeholders. Below are some of the questions frequently posed to Aceli, and taken into consideration in its design.*

**If lenders struggle to serve agri-SMEs despite development finance efforts, why not support agri-SMEs directly?**

- Aceli believes that to bridge the financing gap for agri-SMEs, interventions are needed on both the capital supply and demand side. To expand addressable demand, we facilitate technical assistance directly to SMEs to strengthen management capacity and better prepare them to access financing. On the capital supply side, we take a market systems approach to shift the lending economics and incentivize a range of market actors, offering different financial products, to serve more of the unmet demand.

**Why has Aceli created a complex market incentive facility as opposed to setting up a new fund to reach the underserved segments of the market?**

- Setting up new lending facilities for borrowers is time-consuming and expensive, and portfolio growth is often slower than expected. Typically, new funds established to serve agri-SMEs gravitate to larger ticket sizes and more formal value chains in order to achieve solid financial performance first with the goal of going down-market later. Given that our data has identified 25+ lenders already making more than 1,000 loans per year to East African agri-SMEs, we believe working with existing lenders to expand lending at the margins offers a much quicker route to expanding the market to underserved segment than starting a new facility that directly supports agri-SMEs.

**How did Aceli pick the 31 lenders that provided data? Why not all lenders active in the agri-SME market?**

- The current set of lenders comprises those institutions in East Africa (where Aceli will launch) who were willing to participate in the initial data collection and analysis phase to calibrate the incentive levels.

- Lenders that participated in the data process were then invited to submit applications to access financial incentives through Aceli Africa. Aceli conducted a formal due diligence process on each of the 25 lenders, out of 31, that applied and will actively monitor lender activity to ensure compliance with Aceli's requirements.

- Aceli is a market-based incentive facility and remains open to any lender that is interested in expanding its agri-SME portfolio and is able and willing to provide quality loan-level data. The group of partner institutions is therefore expected to expand in the future.

# Answers to frequently asked questions about Aceli (2/2)

**Social lenders, NBFIs and commercial banks all have different business models. Why not support only the most cost-efficient one(s)?**

- While they indeed exhibit different challenges, each type of lender has its comparative advantage and often serves complementary segments of the agri-SME market. Social lenders tend to focus on working capital loans between $100k to $2.5m, while NBFIS provide smaller ticket term loans. Commercial banks offer a mixed of working capital and collateralized term loans. To cover all borrowers needs, we believe it is important to support lenders' diverse product offerings and promote competition that will bring cost efficiencies and innovation into the market.

**Other non-traditional market players, such as digital finance platforms, have started disrupting the African lending market. Why doesn't Aceli focus on innovative players?**

- The African financing landscape is going through a period of intense innovation, but most of these emerging models remain focused on mobile money targeted to retail customers and therefore continues to be limited innovation in financial products or delivery channels for agri-SME finance. We are convinced that technological innovation is needed to close the financing gap for agri-SMEs. Aceli is therefore open to providing incentives to any non-traditional lenders that apply and meet our established criteria and we are also developing an Innovation Facility focused on identifying and growing the most promising innovations in both B2B services to improve market functioning as well as direct agri-SME lending models.

**How long will Aceli be needed?**

- Aceli's goal is to contribute to building a more efficient financial infrastructure, over whatever time horizon is required. Today, there is limited lender competition and many actors currently serving agri-SMEs are sub-scale. We expect that the financial incentives offered by Aceli will stimulate competition and operational efficiencies to improve the economics of agri-SME lending, and so incentive levels will be reviewed and adjusted every 18 months. Overall, we expect that the level of financial incentives will decline by at least 50% by Year 5 of operations as some market segments become fully commercial and no longer require incentives, while others are not yet fully commercial but require reduced incentives as they become more efficient.

- We also recognize that some segments of the market may require continued support beyond the term of the project. This is to be expected considering the on-going public funding to stimulate lending for SMEs and in agriculture in European and North American economies. While these subsidies in developed economies are heavily influenced by political agendas – and we recognize that similar efforts in Africa will not be immune to distortions either – Aceli's data-driven model for promoting a competitive marketplace on a level playing field offers a blueprint for how public investments can be targeted to optimize for impact and additionality. We envision that following the five-year demonstration and engagement period, African governments will be willing to match commitments from a donor-funded challenge fund that phases down, such that donors can exit by 2030.

ACELI AFRICA

**To learn more about Aceli's product offerings, please download a programmatic overview or contact info@aceliafrica.org**