supply chain finance

Market Assessment

KENYA

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International Finance Corporation
WORLD BANK GROUP
Creating Markets, Creating Opportunities

UKaid
from the British people

Contents

01

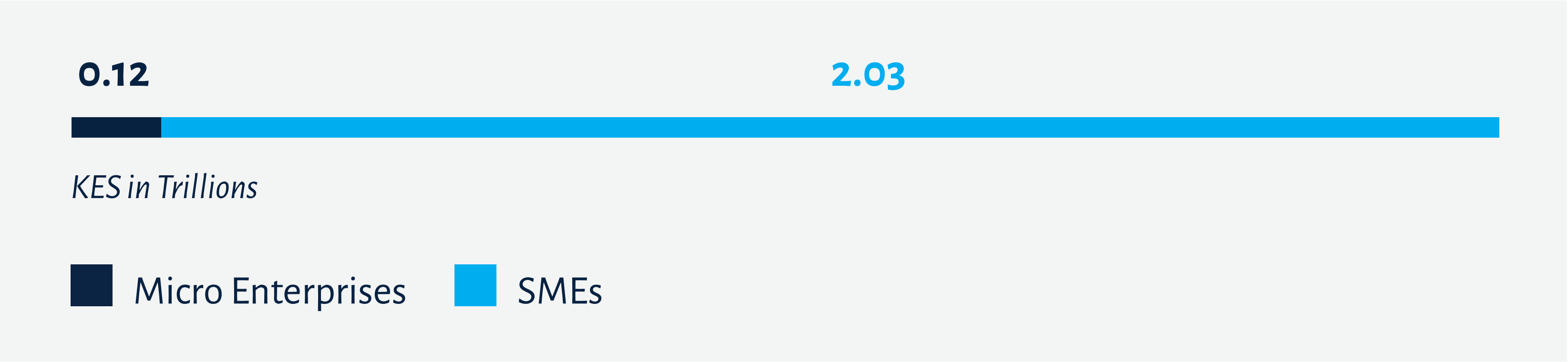
Introduction

Micro, small and medium enterprises (MSME) are abundant in Kenya comprising 80 percent of businesses, but their contribution to gross domestic product (GDP) remains limited.[1] Increasing MSME productivity will drive economic recovery in the wake of the COVID-19 pandemic over the short term, and has the potential to unleash sustained economic growth in time.

However, MSME productivity remains constrained by numerous barriers including insufficient access to finance.

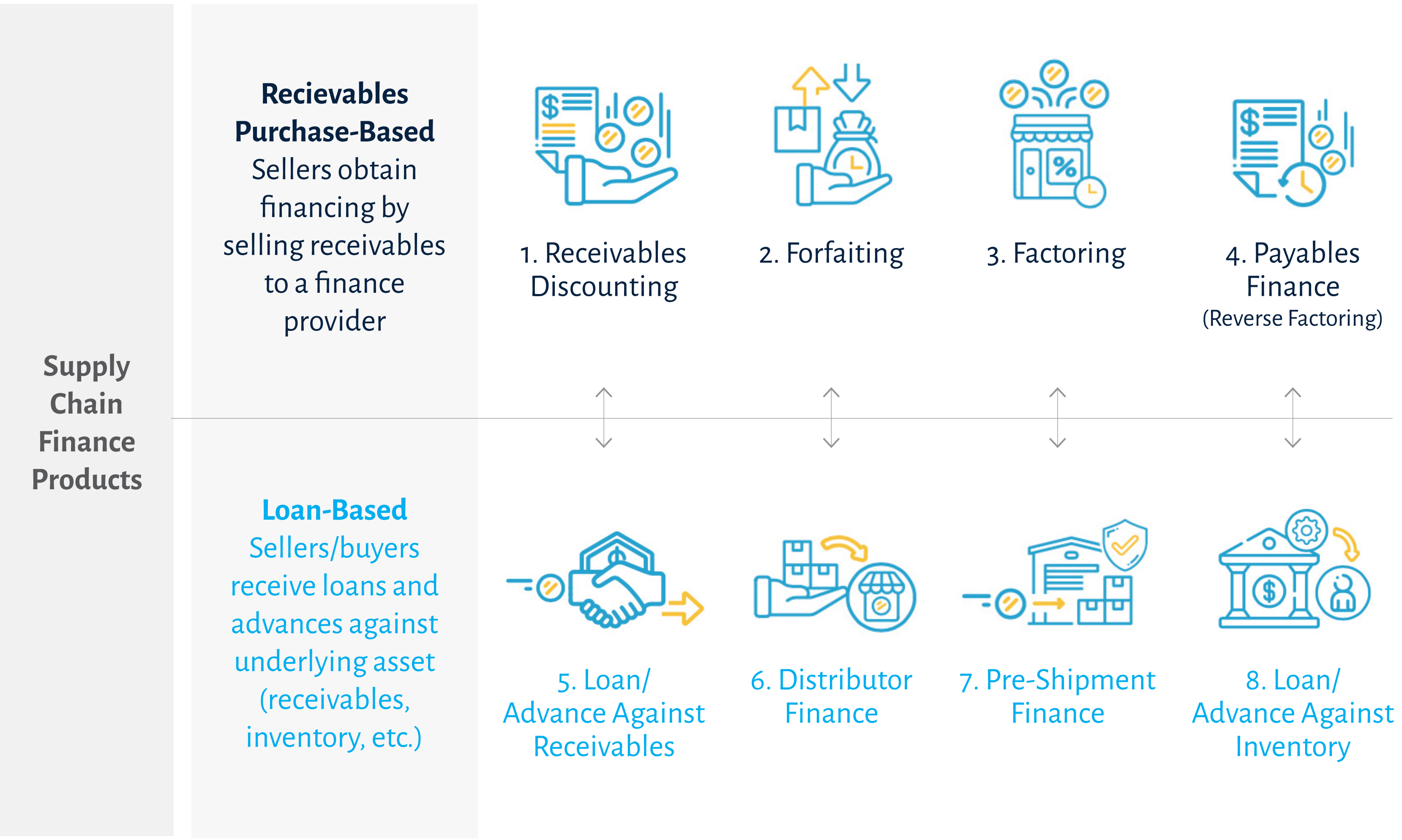
Despite Kenya's reputation as a leader in financial innovation, MSMEs confront a 2.2 trillion Kenyan shillings ($19.3 billion) financing gap.[2,3] While micro enterprises benefit from a robust microfinance industry, MSMEs feel the sharp edge of the financing gap due to a persistent "missing middle", or lack of finance products ranging between 100,000 to 1 million Kenyan shillings ($900 to $8,900). As a result, many small and medium enterprises are unable to access the financing required to maintain and grow their businesses.[4]

Figure 1. Composition of the MSME Financing Gap



Scaling supply chain finance (SCF) has the potential to expand access to financing for MSMEs, particularly small and medium sized enterprises in well-integrated supply chains. The eight principal SCF products address barriers to financing in two ways: by leveraging MSMEs' relationships with anchor firms to reduce lender reliance on riskier smaller firms, and by facilitating the bulk onboarding of small business clients, which lowers acquisition and processing costs. As a result, financial intermediaries offering SCF can effectively and profitably serve MSMEs.

Figure 2. The Eight Principal SCF Products[5]



Yet, the supply of SCF in Kenya remains limited, only reaching between 7 to 10 percent of the estimated market.[6] The growth of the SCF industry is contingent on a variety of macro, market, and firm-level factors and the interactions among them. While individual actors may be able to generate demand for, or increase the supply of, SCF to some extent, sustainably expanding the industry will require concerted efforts and collaboration across stakeholders.

This IFC assessment explores the SCF ecosystem in Kenya, identifies opportunities and barriers to scaling SCF, and highlights actionable recommendations to drive growth in the industry. On the demand side, it suggests generating demand for SCF by building awareness among MSMEs via enhanced communication campaigns and strategic partnerships with industry associations, and supporting enterprise readiness for SCF by facilitating digitization of payment and invoicing processes. To capture growing demand, the assessment also urges ecosystem actors to support the development of customer

Key Findings Scorecard

- Estimated market size for SCF is **2.8 trillion Kenyan shillings**.
- MSMEs account for **1.2 trillion shillings (42 percent)** of SCF demand.
- Current SCF supply only meets about **7-10 percent** of demand.
- Kenyan banks report offering all **eight primary SCF products**.
- **All eight** SCF products are viable in Kenya from a legal perspective.

1 *Singh, Anup, Diana Siddiqui, and Aparna Shuka. 2021. "MSMEs in Kenya amid COVID-19: A Question of Survival." Microsave Consulting. https//www.microsave.net/2021/01/19/msmes-in-kenya-amid-covid-19-a-question-of-survival/#_ftn1*
2 *1 United States Dollar = 111.55 Kenya Shillings as of November 4, 2021. This exchange rate is used throughout this report.*
3 *SME Finance Forum. 2018. "MSME Financing Gap Database." International Finance Corporation. https://www.smefinanceforum.org/data-sites/msme-finance-gap*
4 *Central Bank of Kenya. 2021. "2020 Survey Report on MSME Access to Bank Credit." https://www.centralbank.go.ke/uploads/banking_sector_reports/1275966539_2020%20Survey%20Report%20on%20MSME%20Access%20to%20Bank%20Credit%20-%20Final%20-%2015%2007%2021.pdf*
5 *International Finance Corporation. 2014: "Supply Chain Finance Knowledge Guide." World Bank Group. SCF+Knowledge+Guide+FINAL.pdf (ifc.org)*
6 *The supply of SCF is calculated based on reported SCF exposure compared to their total financing portfolio amongst interviewed banks and extrapolated to the broader market.*

centric SCF products and improve access to funding to enable financial institutions to scale high-volume product lines like SCF. Despite notable improvements in the enabling environment, the assessment highlights opportunities for the government to drive the growth of SCF by enhancing financial sector architecture and regulation.

The findings are based on desk and field research conducted between June and December 2021. Field research included key informant interviews with 12 financial institutions, two regulators, and 11 anchor firms, as well as 60 in-depth interviews with banked MSMEs in five sectors, namely: agriculture, construction, manufacturing, pharmaceuticals, and wholesale and retail. Findings from the field research are complemented by secondary research exploring sources such as government publications and research from industry advisors including the African Development Bank, Financial Sector Deepening Kenya, and the World Bank, among others.

"The provision of supply chain finance in Kenya remains limited, only reaching between 7 to 10 percent of the estimated market."

Working Capital in **the Supply Chain**

"Availability of working capital is a big issue even for big companies. The issue[s] of government payments [and] delays in payment by government is a huge challenge for businesses. The large contractors...have suffered delayed payments."

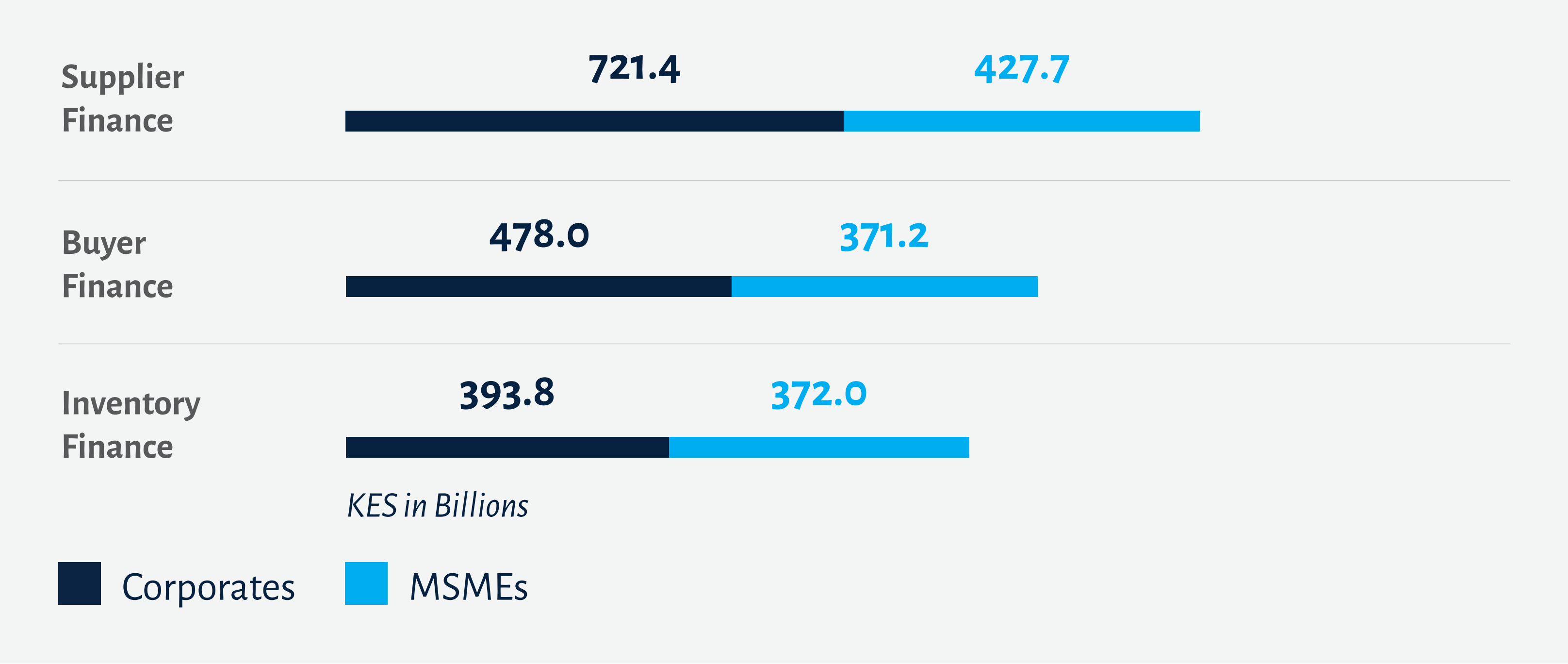
- Anchor Firm in the Construction Sector

02

Market Opportunity

The estimated market for SCF in terms of the annualized value of financial payables, receivables, and inventory reaches 2.8 trillion Kenyan shillings ($24.8 billion) or 25.1 percent of GDP. The estimated market for SCF includes three parts of the supply chain: (1) anchor firm procurement (supplier finance); (2) anchor firm sales (buyer finance); (3) outstanding inventory (inventory financing).

Figure 3. Estimated SCF Market Size in Kenya in Terms of the Annualized Value of Financeable Payables, Receivables, and Inventory.



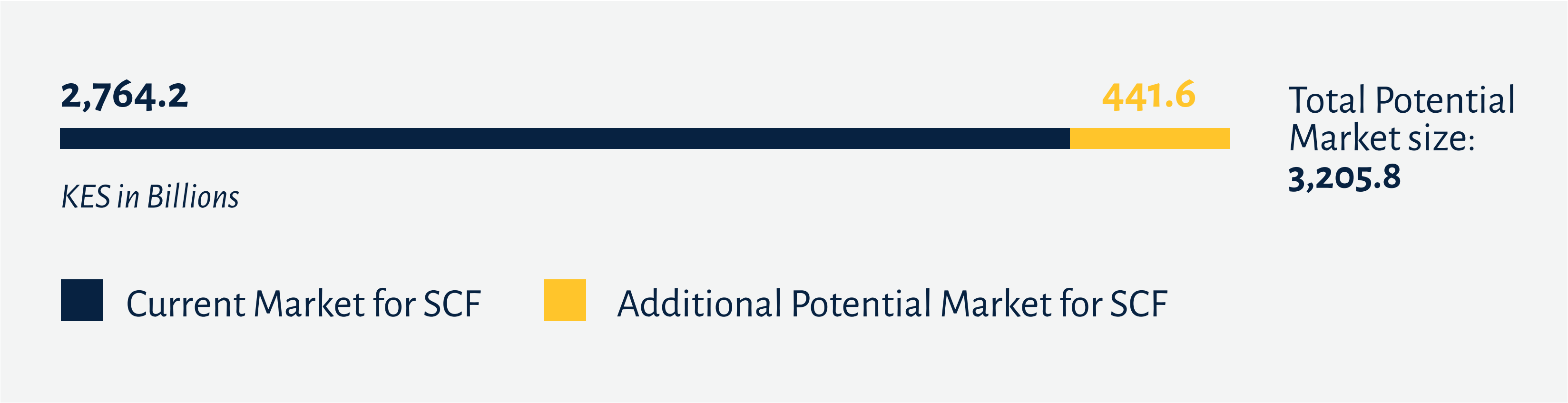
MSMEs generate about 42 percent of the market for SCF, valued at 1.2 trillion shillings ($10.5 billion). Scaling SCF could address as much as 54 percent of the MSME financing gap in Kenya, which is estimated to be 2.2 trillion shillings ($19.3 billion).

The manufacturing sector generates nearly 40 percent of the market for SCF, resulting from the high volume of transactions in the sector's supply chains. Manufacturing comprises a sizeable market for SCF as it generates an estimated one-third of the total cost of goods sold and sales in Kenya. It is also conducive to SCF owing to the structure of its supply chains. Specifically, several anchor firms purchase from numerous MSMEs via comparatively well-integrated supply chains.

There is also demand for more financing in the sector, particularly among upstream actors. In addition to the manufacturing sector, the agriculture and construction sectors also present large markets for SCF.

The estimated size of the market for SCF in Kenya is constrained by limited uptake of formal financial services, particularly among MSMEs. The current market sizing is discounted to account for lower uptake and use of financial services by Kenyan firms compared with those in high-income economies. If Kenyan firms were as likely to access financing from formal financial institutions as firms in high-income countries, the estimated size of the SCF market would increase to 3.2 trillion shillings ($28.7 billion), which is 29.1 percent of GDP. Unlocking the potential market for SCF in Kenya will require generating additional demand, expanding the supply of SCF, and enhancing the enabling environment via implementation of best-in-class policies and regulations.[7]

Figure 4. The Size of the Potential Market for SCF in Terms of the Annualized Value of Financeable Payables, Receivables, and Inventory.



Market Sizing **Methodology**

For each component of the market, the model leverages national accounts data to estimate total COGS, sales, and inventory in each target economy. It then discounts these values based on benchmarks for the proportion of COGS, sales, and inventory typically financed via SCF, as well as MSME financial services uptake in Kenya. The result is then multiplied by average DPO, DSO, or DIO per year to determine the annualized value of financeable payables, receivables, and inventory. For a detailed methodology, please see Marketing Sizing Methodology on page 13.

7 *The potential market sizing model measures the volume of financeable payables, receivables, and inventory in an optimal ecosystem for SCF. It is a theoretical measurement, and the market size will likely fall somewhere between the current market size and the potential market size. This calculation does not measure demand for SCF.*

03

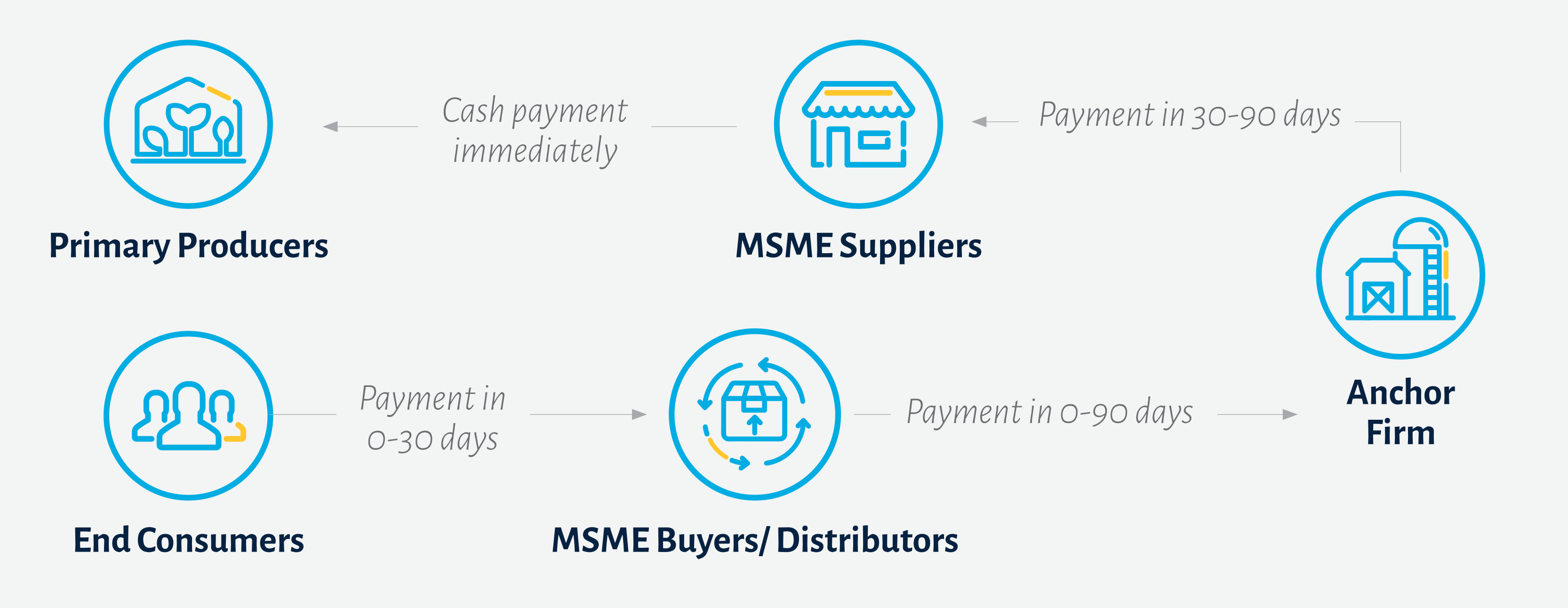
Demand for Supply Chain Finance

The scale of the market for SCF reflects long payment periods in most supply chains. As a result of long payment terms and delayed payments, both MSMEs and anchor firms face significant liquidity gaps.

MSME Demand for Supply Chain Finance

MSME suppliers report waiting more than 90 days for payment. MSME buyers, on the other hand, must often pay their suppliers either upfront or within 30 days, despite waiting up to 90 days for payment from their clients. As a result, many MSMEs struggle to manage cashflow and cannot buy inventory, generating demand for working capital financing.

Figure 5. Payment Periods in a Representative Kenyan Supply Chain



To meet their working capital needs, about one-third of Kenyan firms rely on financing from banks. Yet, many interviewed MSMEs indicate that existing working capital finance solutions are sub-optimal, largely due to the high cost of funds. While SCF may provide a more affordable financing option by reducing transaction costs and decreasing risk (and risk-based pricing) associated with serving smaller and riskier firms, less than 60 percent of interviewed MSMEs—all of whom have bank accounts—are aware of SCF products in the market that may better align with their financing needs.

In addition to improving awareness, generating demand for SCF will require overcoming significant barriers to uptake. More than half of all interviewed MSMEs indicated cost as the greatest barrier to using SCF. As Kenyan MSMEs generally operate in competitive markets with price-sensitive buyers, their margins are often just above the cost of financing. Most financing, including SCF, is consequently “too expensive”. Additional barriers to uptake include concerns that financial institutions may interrupt relationships with key buyers, lack of flexibility in terms of repayment, and general distrust of the financial sector.

Despite these concerns, interviewed MSMEs cited numerous benefits of SCF for their businesses. Benefits include accelerating the cash conversion cycle, improving access to inputs, expanding access to working capital financing, and increasing productivity. Interviewed participants know how SCF could support business management and growth along the entire supply chain, provided products are structured to align with their needs.

Given these benefits, many interviewed MSMEs expressed interest in SCF and underscored that they already have much of the digital infrastructure to streamline its adoption. More than 80 percent of interviewed MSMEs already send electronic or digital invoices to at least some clients and 92 percent use digital payments for at least some transactions, creating business records that can be leveraged to access SCF. Use of digital enterprise resource planning, or customer relationship management systems lags slightly, with 75 percent of interviewed MSMEs reporting that they use such platforms. The gap between the use of digital enterprise resource planning platforms, or customer relationship management systems and digital invoicing and payment may stem from challenges in integrating these systems with those of suppliers and buyers, and of other service providers such as financial institutions.

Anchor Firm Demand for Supply Chain Finance

Payment terms vary among anchor firms, with most reporting that they pay suppliers in 30 to 90 days and receive payment from buyers along similar timelines. Yet, the availability of working capital is still considered a challenge. Anchor firms that are unable to quickly pay

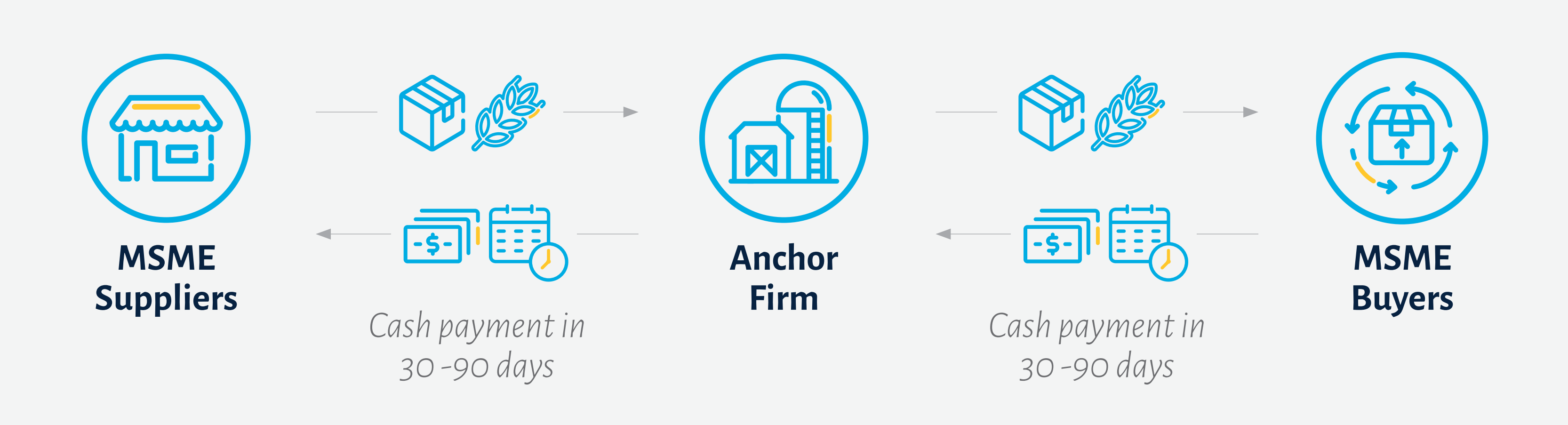
Leveraging SCF to **Reach MSMEs**

"Most SME clients have working capital and liquidity constraints. Hence, they are constantly seeking for working capital solutions that they [could] find in SCF."

- Key Informant from a Kenyan Bank

their suppliers often find that they cannot procure the needed inputs. These challenges can be exacerbated if the anchor firm is also selling to even larger buyers, such as the government, that delay payments to anchor firms. In this context, optimizing working capital remains a top priority for many anchor firms.

Figure 6. Illustrative Anchor Firm Supply Chain in Kenya



To better manage working capital along their supply chain, all interviewed anchor firms maintain relationships with multiple banks and other formal financial intermediaries. By using multiple banks, anchor firms can compare products and services and choose the options most aligned with their needs. The introduction of demand driven SCF products to facilitate optimization of working capital could be an important differentiator, enabling banks to capture a greater portion of priority corporate clients' wallet share. In some cases, anchor firms with existing bank relationships seek out new bank relationships to roll out SCF solutions in their supply chains.

About half of all interviewed anchor firms already leverage SCF solutions. Commonly used products include pre-shipment finance and loans/advances against inventory. Interviewed anchor firms are largely satisfied with existing SCF products but note opportunities for financial institutions to enhance products and processes to better align with their needs. Specifically, they suggest further adapting solutions to the specific needs of the diverse segments of MSMEs to drive uptake and ensure relevance to their suppliers; creating a more transparent application process to ensure the availability of SCF for qualifying firms; and providing ongoing support to anchor firms to ensure a seamless client experience, from on-boarding through repayment.

Interviewed anchor firms highlighted the importance of digitization in driving uptake and use of SCF. While almost half of the interviewed anchor firms report engaging suppliers via integrated digital systems, and an additional 10 percent consider digital integration a top priority, anchor firms cite frequent challenges in the shift to end-to-end digital engagement owing to incompatible systems between suppliers, buyers, and auxiliary service providers, including banks. Technology-enabled solutions that better integrate supply chain actors and banks will not only streamline anchor firm operations but may unlock additional opportunities to expand SCF.

Digital integration **in Supply Chains**

> Management of transaction data has a complexity in the sense that there is no single platform for every customer/supplier, there will be need for integration for the different systems to transparently see invoices and orders between customers, banks and the anchor company.
>
> - Anchor Firm in the Construction Sector

04

Provision of Supply Chain Finance

A diverse range of financial services providers, including commercial banks, microfinance banks, microfinance institutions, factoring companies and fintechs, offer SCF solutions in Kenya.[8] However, the total supply of SCF remains low.

Supply Chain Finance from Commercial Banks

Commercial banks are the largest providers of SCF in Kenya, reaching an estimated 195 to 295 billion shillings ($1.7-2.6 billion). Most banks offer several SCF products. Interviewed banks attribute the introduction of SCF products to the need to capture new clients for increased market share and profitability. In a competitive market, many perceive that they have little control over pricing and other profit drivers, thus their focus on new clients. This sentiment may be exacerbated by the Central Bank of Kenya's past interest rate caps, which restricted banks' control over pricing.

Expanding the offering of SCF in the market could play an important role in mobilizing financing for MSMEs. Although abundant in Kenya, only about one-fifth of bank lending reaches MSMEs. Many banks recognize the quantum of unmet demand for financing among MSMEs but struggle to build a pipeline of bankable enterprises. Interviewed banks report rejecting as many as 60 percent of MSME loan applications. Common reasons include the absence of adequate collateral, limited financial transparency, the lack of a clear business model, and a high debt-to-equity ratio. SCF products implicitly address many of these constraints and could facilitate access to financing for MSMEs.

Commercial banks will need to overcome significant barriers to scale SCF. Specific concerns include minimal knowledge of SCF among target segments; limited internal capacity to design compliant SCF solutions and effectively market them to prospective clients; lack of digitization and digital integration both internally and externally; and weak contract enforcement mechanisms impacting both payments along supply chains and bank repayment.

Integrating international best practices in banks' underlying operating models, in addition to strengthening the enabling environment, are necessary to drive the growth of the SCF industry.

Despite these challenges, commercial banks underscore the positive commercial outlook for SCF. Banks believe that receivables purchase products may be particularly appealing to anchor firms, which are especially attractive bank clients. The outlook for each SCF product varies significantly, however.

Table 1. Commercial Outlook for Receivable Purchase Products

PRODUCT	COMMERCIAL OUTLOOK
Receivables Discounting	Interested banks believe that receivables discounting products will appeal to anchor firms that are interested in accelerating their cash conversion cycles to strengthen their financial positions. However, it is likely more appealing to MSMEs as many fail to survive as a result of delayed cash receipts and limited access to bank finance to bridge the gap between payment and receipt.
Forfaiting	No interviewed banks specifically noted an interest in introducing and/or scaling forfaiting, nor any reservations about it. This suggests forfaiting isn't top-of-mind for most banks.
Factoring	Factoring is commonly offered by interviewed banks. Banks offering factoring largely offer non-recourse factoring products, which suggests that they are convinced of buyers' creditworthiness. Factoring could be particularly interesting in sectors with very strong anchor firms that have good credit ratings.
Payables Finance / Reverse Factoring	Interviewed banks are driven by the need to expand their customer base to increase profits. Buyer-led products like payables finance could facilitate access to new clients at scale, through an anchor firm streamlining customer acquisition processes. Most SCF products in the market target suppliers or distributors, creating an opportunity for banks to carve a niche in the market by providing buyer-led products.

Figure 7. Indicative Financial Institutions Offering Supply Chain Finance in Kenya

- Commercial Banks
- Microfinance Banks
- Microfinance Institutions
- Factoring Companies
- Fintechs

8 *Microfinance banks are authorized to mobilize client deposits and they are overseen by the National Bank of Kenya, whereas microfinance institutions can only provide credit to clients.*

Banks also believe that loan based SCF products present a substantial opportunity to serve MSMEs.

Table 2. Commercial Outlook for Loan-Based Products

PRODUCT	COMMERCIAL OUTLOOK
Loan / Advance Against Receivables	Banks believe a loan/advance against receivables is relatively straightforward, which makes it more appealing to potential clients with limited knowledge of SCF. However, it is currently only offered by 14 percent of interviewed banks.
Distributor Finance	Distributor finance is the most offered SCF product, with many banks citing it as an important tool for reaching retail and distribution MSMEs. There is still a market opportunity in distributor finance since more than 57 percent of registered MSMEs are in the retail and distribution sector.
Loan / Advance Against Inventory	Banks suggested that a loan/advance against inventory may be more attractive to potential MSME clients because the financing structure is easily understood and may not require extensive business records. This suggests an opportunity for scale, particularly in sectors with high days inventory outstanding like health, manufacturing, tourism, or agriculture.
Pre-shipment Finance	One interviewed bank suggested that pre-shipment finance generates the most demand of all SCF products, indicating a considerable market opportunity. However, the same bank also notes that it considers pre-shipment finance riskier than other financing options.

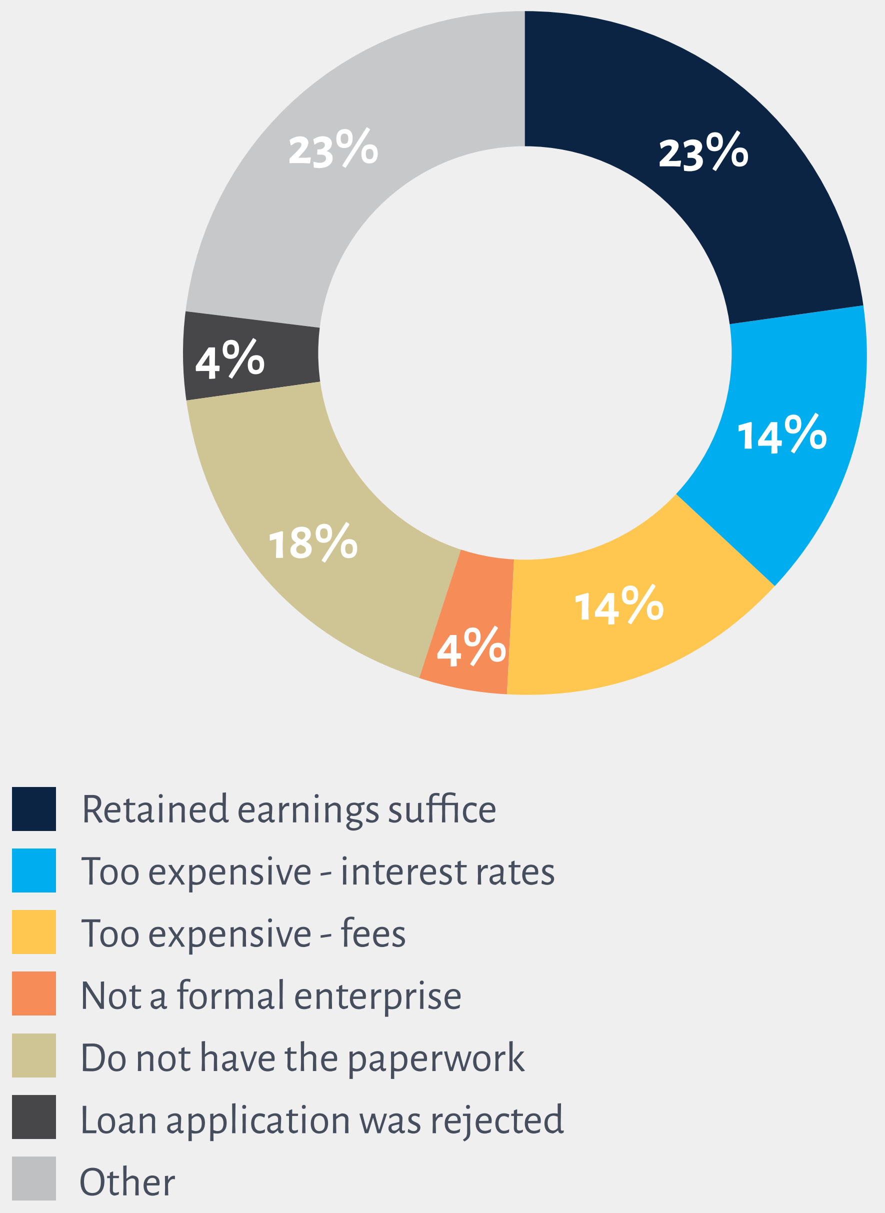
Supply Chain Finance from Non-Bank Financial Institutions

Non-bank financial institutions such as microfinance banks, microfinance institutions, factoring companies, and fintechs are important sources of MSME finance in Kenya. Some non-bank financial institutions have launched SCF products to meet unmet demand for working capital financing for MSMEs. Microfinance banks and institutions, for example, offer diverse SCF solutions ranging from receivables discounting to distributor finance. However, they do not yet offer forfaiting, factoring, and payables finance/reverse factoring. A handful of factoring companies are meeting unmet demand for factoring and payables finance/reverse factoring.

Microfinance banks, microfinance institutions, and factoring companies aim to capture nascent demand in the market but confront formidable barriers to growth. Frequently cited challenges include limited market awareness of SCF, lack of access to affordable capital (particularly among non-deposit-taking institutions), and frequent late payments or default compounded by weak enforcement mechanisms. Microfinance banks and microfinance institutions also indicated underdeveloped internal capacity to design products, low levels of digitization, challenges registering outstandings on the collateral registry, and complex International Financial Reporting Standards requirements as additional barriers to scaling SCF.

Legacy financial institutions, including non-bank financial institutions, must also confront growing competition from an emerging cohort of fintechs offering SCF products. While most fintechs have relatively small SCF portfolios, high levels of digital uptake suggest significant potential for future growth. However, many fintechs offering SCF are still struggling to define viable business models, and many have closed within a few years after their launch.

Figure 8. Top Reasons Interviewed MSMEs Do Not Borrow From Banks (N=27)



05

Enabling Environment for Supply Chain Finance

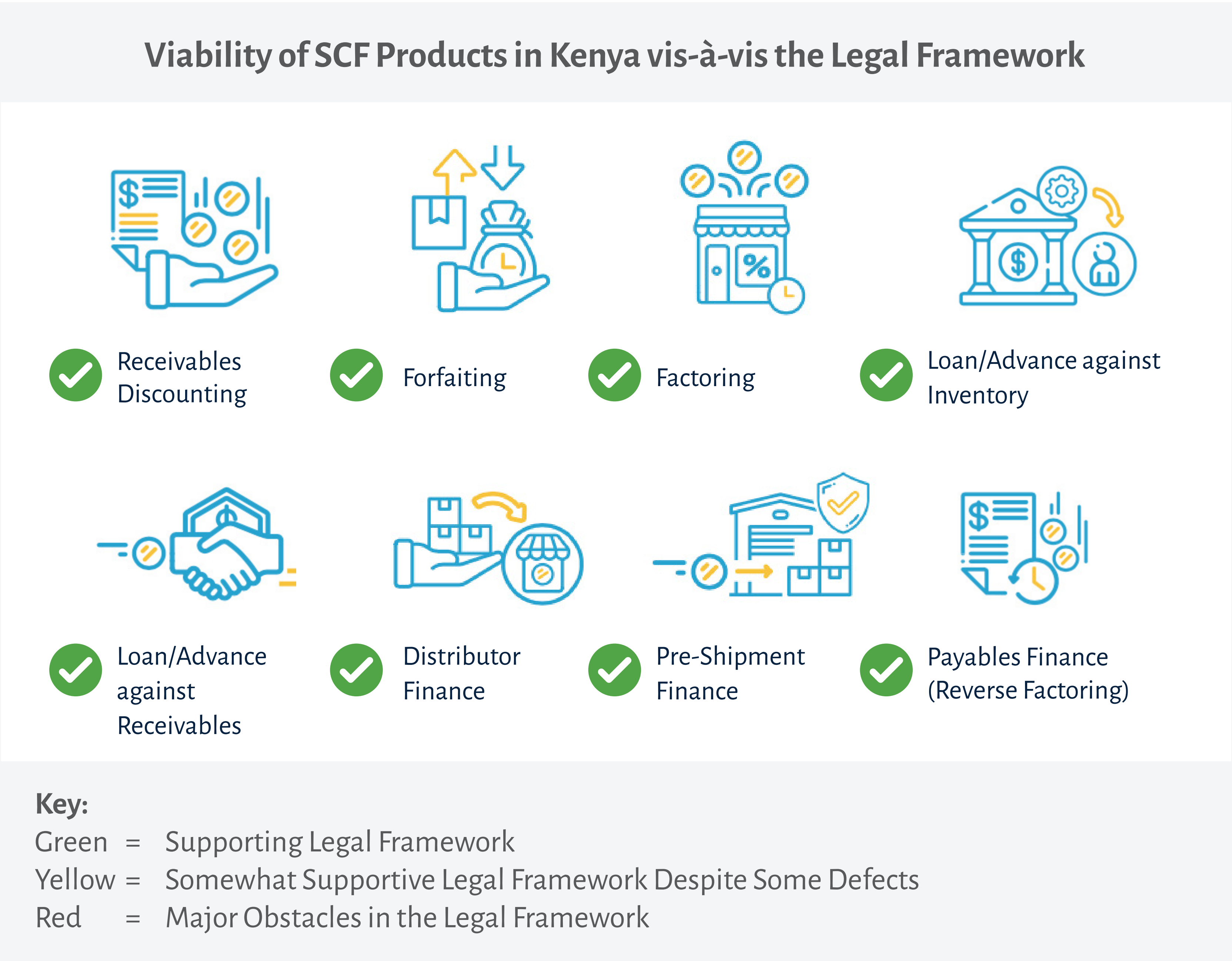
The government has operationalized much of the financial sector architecture and regulation requisite for the growth of the SCF industry. It passed the Movable Property Security Rights Act (2017) creating an Office of Registrar of Security Rights to facilitate the registration of ownership of intangible assets. This enabled registration of receivables, thereby decreasing risk when offering receivables-based financing products. It also launched a small claims court via Small Claims Act (2016) to adjudicate and streamline disputes, such as SCF-related disputes, valued at less than 1 million shillings ($9,000). However, its efficacy is debatable according to interviewed financial institutions. Lastly, the government has laid the foundations for digital transactions along the supply chain, which can facilitate the growth of SCF, by reaffirming the enforceability of e-signatures via the Business Laws Amendment Act (2020) and launching an electronic invoicing platform in 2021.

Despite notable improvements, bottlenecks in the enabling environment continue to limit growth. Much of the new financial sector architecture facilitating SCF is reportedly difficult to use. The small claims court lacks streamlined processes and, although digitized, registering assets on the movable asset registry can be cumbersome and labor-intensive. Likewise, lengthy Central Bank of Kenya approval processes for new financial products and services disincentivizes innovation. In terms of regulation, interviewed financial institutions report that the International Financial Reporting Standards for SCF, which treat SCF products like any other lending product, can be confusing and difficult to apply, which discourages the rollout of SCF.

The feasibility of SCF also reflects the legal framework governing secured transactions. The Kenyan legal framework for secured transactions largely complies with accepted international standards. Specifically, the Movable Property Security Rights Act and supporting regulations facilitate the transfer of outstanding receivables and inventory and the movable asset registry provides additional security for SCF transactions. Yet, enduring shortcomings in the legal framework, such as the lack of full harmonization between the Movable Property Security Rights Act and other relevant laws like the Insolvency Act, may increase the costs of rolling-out SCF.

Despite the contradictions in the legal framework, all eight SCF products are viable from a legal perspective.

Figure 9. Supply Chain Finance Product Heatmap[9]



Accelerate Cash **Conversion Cycle**

> "If we are able to get money from the bank in terms of [SCF], it means...we will pay [our supplier] now without having to [buy on credit], so it is the same that will happen if the suppliers are granted the same facility, they are able to supply materials without necessarily delaying."
>
> -Small Enterprise in the Construction Sector

9 *Adapted from IFC's legal analysis for SCF in Kenya.*

06

Recommendations

Unlocking the 2.8 trillion shillings ($24.8 billion) market for SCF in Kenya will require coordinated efforts from diverse ecosystem actors to generate demand for and expand the supply of SCF, in addition to enhancing the enabling environment.

As a first step, financial institutions and the government will need to generate awareness of SCF among target segments, in addition to strengthening MSME readiness for SCF.

Table 3. Recommendations to Generate Demand for SCF

FINANCIAL INDUSTRY ACTORS

CATEGORY	RECOMMENDATION	TIMELINE
Increasing Market Awareness	Financial institutions should enhance their relationship managers' understanding of available SCF products to enable them to more effectively cross-sell the products to generate demand for SCF.	Short-term
Increasing Market Awareness	Financial institutions should host booths at MSME trade fairs, sponsored by the Micro and Small Enterprise Authority, to provide more information on SCF products in the markets as well as the requirements to access them.	Medium-term
Enhancing Enterprise Readiness for SCF	Financial institutions and/or industry associations in sectors with significant potential for SCF should develop partnerships with digital enterprise resource planning providers (e.g. SAP or QuickBooks) to sell their systems to anchor firms and MSMEs at reduced prices. The use of similar systems will foster further integration along supply chains and unlock opportunities for SCF.	Medium-term

GOVERNMENT AND PUBLIC ACTORS

CATEGORY	RECOMMENDATION	TIMELINE
Enhancing Enterprise Readiness for SCF	The government and industry associations should provide technical assistance to MSMEs that are still engaging in manual transactions or conduct select components of their payment processes digitally. This will enable MSMEs to develop the records requisite for SCF.	Short-term
Increasing Market Awareness	The government should host booths at MSME trade fairs, sponsored by the Micro and Small Enterprise Authority, to provide more information on SCF products in the markets as well as the requirements to access them.	Medium-term
Increasing Market Awareness	The government should launch communications campaigns to build market awareness of SCF among MSMEs. Communications campaigns should be targeted at specific subsegments with high potential to generate demand for SCF such as agriculture and manufacturing, which both align with the government's priorities.	Medium-term

Successfully capturing growing demand for SCF will require developing products that are responsive to customers' needs, in addition to facilitating access to funding to roll out high-volume product lines. Nearly 90 percent of interviewed financial institutions are willing to invest resources in SCF product development and other ecosystem actors can provide technical assistance and resources to jumpstart this process.

Table 4. Recommendations to Enhance the Provision of SCF

FINANCIAL INDUSTRY ACTORS

CATEGORY	RECOMMENDATION	TIMELINE
Enhancing Product Design	Financial institutions should design and structure additional SCF products for MSMEs, including distributor finance, pre-shipment, and invoice discounting. This will enable them to capture more of their existing MSME clients' wallet share and take advantage of a gap in the market.	Short-term
Increasing Automation	Banks should build on the existing digital technology to integrate platforms for SCF. Despite high levels of digitization overall, many banks still rely on manual processes for SCF, which limits the potential for scale.	Long-term

GOVERNMENT AND PUBLIC SECTOR ACTORS

CATEGORY	RECOMMENDATION	TIMELINE
Enhancing Product Design	Development finance institutions, or another advisor, could provide technical assistance to banks or non-bank financial institutions to design and rollout innovative SCF products that meet the needs of underserved segments including agriculture and manufacturing.	Medium-term
Improving access to funding	Development finance institutions or the government should provide risk-sharing support to financial institutions to reduce capital adequacy requirements tied to the use of SCF.	Medium-term
Improving Access to Funding	Development finance institutions should consider offering lines of credit to bank and financial institutions offering SCF that lack the funding required to scale their SCF portfolios and meet existing demand. This is particularly relevant for non-bank financial institutions that cannot mobilize deposits.	Medium-term
Strengthening the Business Model	The government should sponsor an acceleration or incubation program for promising fintech start-ups including those offering SCF to strengthen participating start-ups' business models and position them to access the financing required to scale. This may reduce the number of start-ups offering SCF in Kenya that fail.	Long-term
Improving Access to Funding	Development finance institutions should explore structuring a risk-sharing facility in which the development finance institution shares risk on a portfolio of SCF products with a local bank on a 50:50 basis. This will enable the bank to scale its SCF portfolio without the need to hold extra capital to meet capital adequacy requirements.	Long-term

Expanding the provision of SCF requires further enhancement of the enabling environment, despite notable improvements over the past five years. The government can build on relatively new financial infrastructure to create a more promising environment for SCF.

Although all are important, these recommendations can be sequenced based on the priorities of relevant ecosystem actors. By implementing these recommendations in the near-term, ecosystem actors can accelerate the growth of the SCF industry and meaningfully scale access to finance for Kenyan MSMEs. In turn, this may jumpstart a period of sustainable economic growth following the economic downturn resulting from the COVID-19 pandemic.

Table 5. Recommendations for Enhancing the Enabling Environment for SCF

GOVERNMENT AND PUBLIC SECTOR ACTORS

CATEGORY	RECOMMENDATION	TIMELINE
Enhancing Financial Sector Regulation	The government should issue soft guidelines and a white paper on SCF for banks and non-bank financial institutions are new to SCF or planning to launch SCF.	Short-term
Enhancing Financial Sector Regulation	The government should undertake a campaign to drive awareness of the use and enforceability of electronic signatures to increase uptake. By encouraging businesses to digitize transactions, the government would spur the development of formal payables and receivables that can be used for SCF.	Short-term
Enhancing Financial Sector Regulation	The Central Bank of Kenya should hold public-private dialogues with key private sector actors including the Kenya Bankers' Association to determine the root of misunderstandings regarding accounting requirements relating to SCF. They could identify additional training or other activities that could address misperceptions to ensure that accounting requirements do not remain a roadblock to the development of SCF solutions.	Short-term
Enhancing Financial Sector Regulation	The government could consider establishing an SCF forum with industry associations and banks to understand regulatory bottlenecks to SCF from the supply-side perspective.	Short-term
Enhancing Financial Sector Regulation	The government could consider providing more flexibility in terms of product approval and pricing. Approval requirements should be reduced if a product meets the standard SCF criteria or pricing falls within certain thresholds for each type of financial product. Exempting financial institutions from these requirements (real or perceived) will streamline product development and foster innovation.	Medium-term
Enhancing Financial Sector Regulation	The government should review cybersecurity and data protection laws that foster reluctance among anchor firms and MSMEs to integrate their enterprise resource planning systems with banks to facilitate automated SCF solutions. If any bottlenecks emerge, development finance institutions, or other stakeholders, may be able to provide advisory services to facilitate the design of best-in-class policies and regulations.	Medium-term
Strengthening Financial Sector Architecture	An international advisor could partner with the government to assess pain points in the use of the small claims court established for contract enforcement and provide technical assistance to overcome them as needed.	Medium-term
Strengthening Financial Sector Architecture	While the collateral registry is digitized, banks report that it is still cumbersome and difficult to access and register notification of rights to receivables or other types of collateral. The government should undertake a process mapping exercise to identify pain points and streamline the use of the registry.	Medium-term
Incentivizing Tax Compliance	The government could provide incentives for MSMEs to formalize and integrate with the e-invoicing system to facilitate payment of value-added tax (VAT). This will drive the use of e-invoicing, which will lay the groundwork for increased uptake of SCF.	Long-term

07

How the Research Was Done

All findings and recommendations included in this assessment have been derived from qualitative and quantitative research designed to generate insights into dynamics within the Kenyan SCF ecosystem. The research team conducted all components of the field research and analysis between June and December 2021.

The field research of the project consisted of five principal components.

- **In-depth interviews:** Sixty in-depth interviews were conducted with MSMEs in five sectors: agriculture, construction, manufacturing, pharmaceuticals, and wholesale and retail. Each in-depth interview explored topics including MSMEs' working capital financing needs, and knowledge of SCF products in the market, in addition to conducting a concept test for SCF products to elicit feedback on the perceived benefits and concerns of participants regarding each one.

- **Key informant interviews with financial intermediaries:** The research team conducted 12 key informant interviews with financial intermediaries, including nine commercial banks and four non-bank financial institutions, to collect quantitative and qualitative data. The key informant interviews focused on each financial intermediary's current use of SCF and perspective on opportunities and barriers to scaling SCF, as well as the financial intermediary's relationships with corporate and MSME clients and strategic priorities to expand corporate and MSME lending.

- **Key informant interviews with anchor firms:** This report incorporates findings from 11 key informant interviews with anchor firms in five sectors: agriculture, construction, manufacturing, pharmaceuticals, and wholesale and retail. The key informant interviews focused on anchor firms' current relationships with their suppliers and/or buyers and working capital financing in their supply chains, as well as their current use of SCF and perspective on opportunities and barriers to scaling SCF.

- **Key informant interviews with regulators:** The research team conducted two key informant interviews with Kenyan regulators to understand existing policies and regulations governing SCF and MSME finance, as well as any planned changes to the regulatory regime.

- **Secondary research:** This report has been informed by an extensive review of publications on economic development in Kenya, the state of MSME access to finance in Kenya, and policies and regulations governing the financial sector, among other topics.

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08

Market Sizing Methodology

The assessment included the development of a market sizing model using a data-driven approach to quantify the potential market for SCF in Kenya. The market sizing methodology draws on macro-economic data from the Kenya National Bureau of Statistics, as well as firm-level data from 476 firms to estimate the total market size for SCF in Kenya.

The model calculates the potential market size for working capital solutions by assessing the market size for the following three groups of products.

- Supplier Finance
- Buyer Finance
- Inventory Finance

Market Sizing Methodology

1. **Estimate total value of cost of goods sold (COGS), sales, and inventory in the market.** Total COGS and sales in sectors conducive to SCF in Kenya are proxied based on inputs (COGS) and outputs (sales) in the 2013 input-output tables (IO tables). The sum of total inputs for each sector were forecast through 2020 based on Kenya National Bureau of Statistics data on the total value of production by sector per year.

   The total value of inventory is then calculated based on the ratio of inventory-to-COG for corporates and MSMEs in each sector in a sample of 476 firms. The ratio is then multiplied by the total value of COGS in each sector to determine the total value of inventory.

2. **Determine the value of COGS and sales attributable to corporates and MSMEs respectively.** The share of total COGS and sales attributable to corporates and MSMEs respectively is based on MSMEs contribution to GDP in Kenya. As MSMEs contribute 40 percent of GDP, it is estimated that 40 percent of COGS and sales in each sector will be generated by MSMEs. The remaining 60 percent of COGS and sales in each sector is attributed to corporates.

3. **Calculate the total value of discountable COGS in each sector. Not all COGS are discountable, particularly among corporates.** The total value of non-discountable COGS for corporates in each sector is determined based on a cross-sector benchmark (21 percent) in the IFC SCF Knowledge Guide. As such, only 79 percent of the total value of corporate COGS in each sector is considered financeable and included in the market sizing model. MSMEs, on the other hand, often have a fully discountable spend so all COGS generated by MSMEs are included in the model. This step does not apply to sales nor inventory.

4. **Determine the total value of financeable COGS, sales, and inventory in each sector.** Most firms will not finance the total value of COGS, sales, and inventory using SCF given fees and other costs involved. Per the IFC SCF Knowledge Guide, firms will finance an average of 71 percent of COGS and inventory via SCF in a well-developed SCF market, whereas they will only finance 60 percent of sale in well-developed markets. These benchmarks are derived from IFC assessments of the share of COGS, sales, and inventory financed via SCF in 20 robust SCF programs worldwide. As such, only 71 percent of the value of discountable COGS among corporates and MSMEs, 60 percent of sales among corporates and MSMEs, and 71 percent of inventory among corporates and MSMEs is considered financeable.

   The benchmark for the share of discountable COGS, sales, and inventory financeable via SCF for corporates is then further discounted to account for lower levels of financial inclusion in Kenya and some in-depth interview participants' reticence to engage with banks. It is discounted by the ratio of the percentage of large firms in Kenya that have a loan or a line of credit from a bank (58.9 percent) compared with the average percentage of corporates in 29 high-income countries (59.3 percent) per the World Bank Enterprise surveys. This ratio is 99 percent. As such, the value of discountable COGS, sales, and inventory generated by corporates is multiplied by 99 percent to determine the total value of financeable discountable COGS, sales, and inventory among corporates in each sector. The product is then multiplied by the total discountable COGS, sales, and inventory for corporates in the sector to determine financeable COGS, sales and inventory among corporates.

   This process is then repeated to determine financeable COGS, sales, and inventory among MSMEs in each sector. Rather than applying the ratio of large firms in Kenya that have a loan or a line of credit from a bank compared with the average percentage

Key Assumptions in the Market Sizing Model

- Annual growth in inputs and outputs by sector can be estimated by the percentage increase in production by sector.
- The percentage of COGS, sales, and inventory financed in Kenya will be less that global benchmarks (71 percent for supplier finance and inventory finance and 60 percent for buyer finance) found in the IFC Supply Chain Finance Knowledge Guide due to low levels of financial inclusion in Kenya and many in-depth interview respondents' reticence to engage with banks. As such, the global benchmarks drawn from the IFC Supply Chain Finance Knowledge Guide must be discounted (see methodology below).
- Financial institutions typically will not provide financing for more than 120-150 days. As such, all DPO, DSO, and DIOs in excess of 150 days were reduced to 150 days.
- Corporates and MSMEs listed in database of firm-level financials have relatively similar payment structures and business dynamics as the universe of corporates and MSMEs in Kenya.

of corporates in 29 high-income countries, it applies the ratio of the percentage MSMEs with a loan or line of credit in Kenya (35.2 percent) compared with the average percentage of MSMEs with a loan or line of credit in 29 high-income countries (48.1 percent) per the World Bank Enterprise surveys. This ratio is 73 percent. The product is then multiplied by the total discountable COGS, sales, and inventory for MSMEs in the sector to determine financeable COGS, sales and inventory among MSMEs.

5. **Calculate the average days payable outstanding (DPO), days sales outstanding (DSO) and days inventory outstanding (DIO)**. Given the lack of firm-level financial data available in Kenya, the model relies on a database with anonymized financial data from 630 firms to calculate DPO.

   i. First, the database is segmented by sector and enterprise size (as determined by IFC definition for micro, small, medium, and large enterprises).

   ii. All firms that cannot be categorized, engage in business activities that are not conducive to SCF, or have financial ratios that do not align with normal business behavior, are removed from the sample leaving 476 firms. Once the dataset has been organized, the model calculates average DPO, DSO, and DIO for corporates and MSMEs in each sector per the following formulas:

   - DPO = Average Accounts Payable 2020 / (COGS/365).
   - DSO = Average Accounts Receivable 2020 / (Sales/365).
   - DIO = Average Inventory 2020 / (COGS/365).

   Average DPO, DSO, and DIO for some firms exceeded 150 days. Given that financial institutions typically would not apply a financing period beyond 120-150 days, the model capped DPO, DSO, and DIO at 150 days. If the average DPO exceeded 150 days, the value was reduced to 150 days.

   The model then calculates a weighted average for DPO, DSO, and DIO among corporates and MSMEs in each sector using the firm-level DPO, DSO, and DIO.

   The sector average among corporates and MSMEs respectively is applied to all financeable COGS in the model in a given sector.

6. **Estimate the annualized value of outstanding payables, receivables, and inventory among corporates and MSME respectively.** The total value of corporate COGS, sales, and inventory financeable via SCF is multiplied by the average corporate DPO, DSO, and DIO in each sector and divided by 365 to determine the total annualized value of financeable payables, receivables, and inventory outstanding for corporates. This process is then repeated for MSMEs.

7. **Determine the total annualized value of outstanding payables, receivables, and inventory in the market.** The model then sums the total outstanding payables among corporates and MSMEs to determine the total market size for supplier finance in Kenya. It repeats this step leveraging total receivables and inventory to determine the total market for buyer finance (outstanding receivables) and inventory finance (outstanding inventory).

8. **Calculate the total market size for SCF.** The total value of supplier, buyer and inventory finance are summed to determine the total market for SCF.

   The total value of financeable payables outstanding is used to proxy the market size for supplier finance.

Glossary

MSME, IFC DEFINITION	
Microenterprise	An enterprise qualifies as a micro, small or medium if it meets two out of three criteria of IFC MSME definition (employees, assets and sales). A microenterprise has < 10 employees; < $100,000 in assets; and <$100,000 in annual sales.
Small Enterprise	An enterprise qualifies as a micro, small or medium if it meets two out of three criteria of IFC MSME definition (employees, assets and sales). A small enterprise has 10-49 employees; 100,000-3 million in assets; and $100,000 – 3 million in annual sales.
Medium Enterprise	An enterprise qualifies as a micro, small or medium if it meets two out of three criteria of the IFC MSME definition (employees, assets and sales). A medium enterprise has 50-300 employees; $3-15 million in assets; and $3-15 million in annual sales.
WOMEN-LED ENTERPRISE	
Women-Led Enterprise	An enterprise qualifies as woman-owned if it meets the following criteria: (a) ≥ 51% owned by woman/women; OR (b) ≥ 20% owned by woman/women; AND (i) has ≥ 1 woman as CEO/COO/President/Vice President; AND (ii) has ≥ 30% of the board of directors composed of women, where a board exists.
SUPPLY CHAIN FINANCE PRODUCTS	
RECEIVABLES PURCHASE PRODUCTS	
Receivables Discounting	Receivables discounting is a form of receivables purchase, flexibly applied, in which sellers of goods and services sell individual or multiple receivables (represented by outstanding invoices) to a finance provider at a discount.
Forfaiting	Forfaiting is a form of receivables purchase, comprising the without-recourse purchase of future payment obligations represented by financial instruments or payment obligations (normally in negotiable or transferable form), at a discount or at face value in return for a financing charge.
Factoring	Factoring is a form of receivables purchase, in which sellers of goods and services sell their receivables (represented by outstanding invoices) at a discount to a finance provider (commonly known as the 'factor'). A key differentiator of factoring is that the finance provider typically becomes responsible for managing the debtor portfolio and collecting the payment of the underlying receivables.
Payables Finance / Reverse Factoring	Payables finance is provided through a buyer-led program in which sellers in the buyer's supply chain can access finance by means of receivables purchase. The technique provides a seller of goods or services with the option of receiving the discounted value of receivables (represented by outstanding invoices) prior to their actual due date and typically at a financing cost aligned with the credit risk of the buyer. The payable is settled by the buyer at the due date.
LOAN-BASED PRODUCTS	
Loan or Advance Against Receivables	Loan or advance against receivables is financing made available to a party involved in a supply chain on the expectation of repayment from funds generated from current or future trade receivables and is usually made against the security of such receivables but may be unsecured.
Distributor Finance	Distributor finance is the provision of financing for a distributor of a large manufacturer to cover the holding of goods for re-sale and to bridge the liquidity gap until the receipt of funds from receivables following the sale of goods to a retailer or end-customer. Goods in inventory can serve as collateral.
Loan or Advance Against Inventory	Loan or advance against inventory is financing provided to a buyer or seller involved in a supply chain for the holding or warehousing of goods (either pre-sold, un-sold, or hedged) and over which the finance provider usually takes a security interest or assignment of rights and exercises a measure of control.
Pre-Shipment Finance	Pre-shipment finance is a loan provided by a finance provider to a seller of goods and/or services for the sourcing, manufacture or conversion of raw materials or semi-finished goods into finished goods and/or services, which are then delivered to a buyer. A purchase order from an acceptable buyer, or a documentary or standby letter of credit or bank payment obligation, issued on behalf of the buyer in favor of the seller, is often a key requirement in motivating the finance. In addition the seller must be able to perform under the contract with the buyer.

Acronyms

	DEFINITION
COGS	Cost of Goods Sold
DIO	Days Inventory Outstanding
DPO	Days Payables Outstanding
DSO	Days Sales Outstanding
GDP	Gross Domestic Product
MSME	Micro, Small, and Medium Enterprise
KES	Kenya Shilling
SCF	Supply Chain Finance
USD	United States Dollar
VAT	Value-Added Tax

Supply Chain Finance Market Assessment

This report is part of a series of market assessments on supply chain finance produced by IFC's Financial Institutions Group Advisory Services Africa to highlight opportunities and challenges in the provision of supply chain finance in a number of African markets.

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