supply chain finance

Market Assessment

UGANDA

February 2023

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IFC International Finance Corporation
WORLD BANK GROUP
Creating Markets, Creating Opportunities

Contents

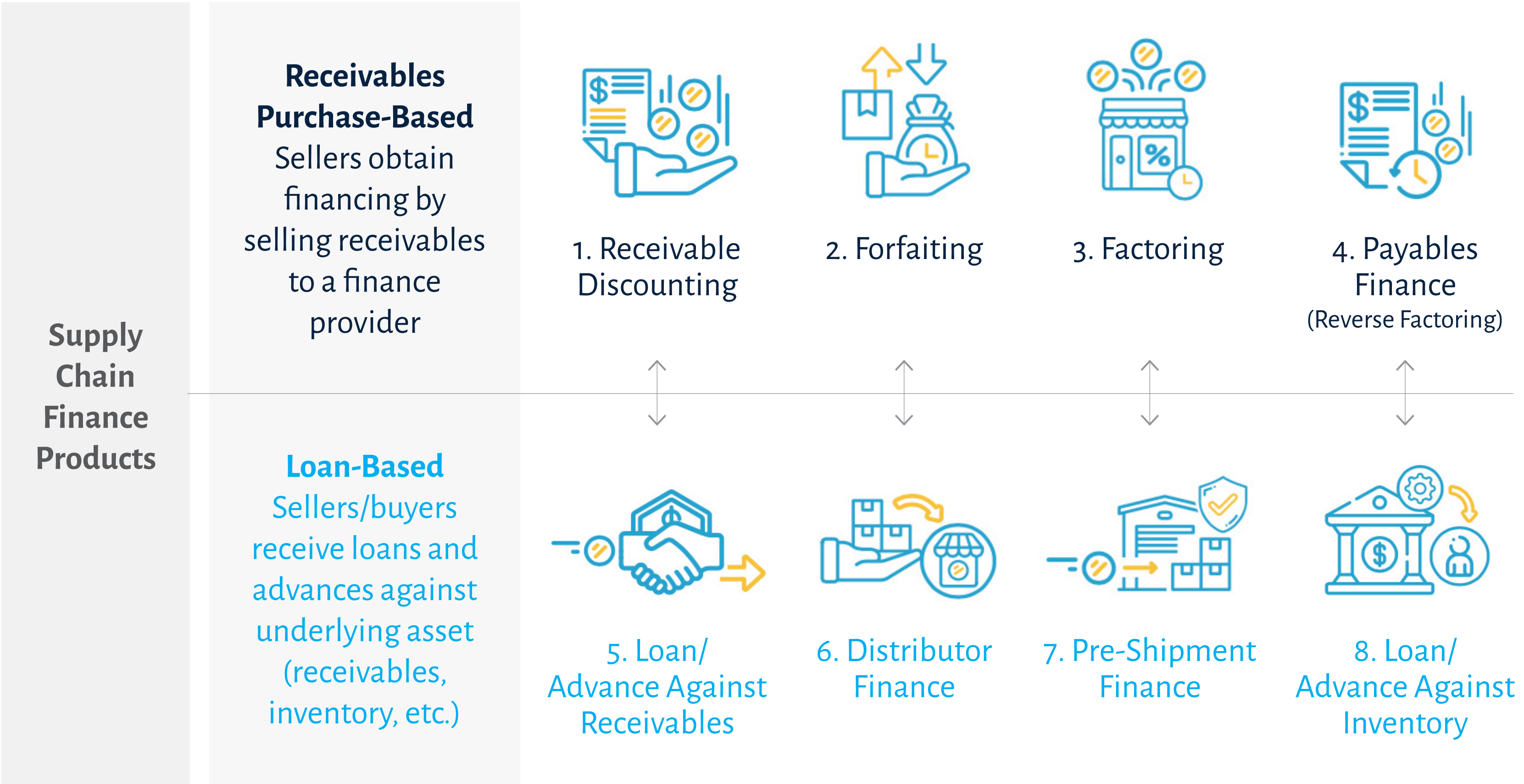
01

Introduction

Micro, small, and medium enterprises (MSME) drive the Ugandan economy, comprising 90 percent of enterprises and generating 75 percent of gross domestic product (GDP). [1] However, the potential for Ugandan MSMEs to catalyze further economic growth is often hampered by limited access to financing due to its high cost, or lack of hard collateral such as real estate. Whereas an average of 35.2 percent of MSMEs in neighboring Kenya have a loan or line of credit from a financial institution, only 8.9 percent of Ugandan MSMEs have these.[2] As a result, Ugandan MSMEs confront a 31.4 trillion Ugandan shillings ($8.8 billion) financing gap, which is an estimated 24 percent of GDP. [3, 4, 5]

Scaling supply chain finance (SCF) in Uganda has the potential to unlock access to financing for MSMEs, catalyzing business growth, and further economic development. The eight principle SCF products address barriers to financing in two ways: by leveraging the relationships MSMEs have with anchor firms to reduce lender reliance on riskier smaller firms, and by facilitating bulk onboarding of small clients to lower acquisition and processing costs. As a result, financial intermediaries offering SCF can effectively and profitably serve MSMEs.

Figure 1: The Eight Principle Supply Chain Finance Products[6]



But the SCF industry in Uganda is still nascent. Its growth is contingent on a variety of macro, market, and firm-level factors and the interactions between them. Different conditions and forces affect demand, supply, and the enabling environment for SCF, as well as the overall trajectory of the industry. 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 effort and collaboration across stakeholders.

This IFC assessment explores the SCF ecosystem in Uganda and identifies opportunities and barriers to scaling SCF in this market. Specific recommendations include generating market awareness via more effective engagement with current and potential bank clients and partnerships with industry associations in sectors conducive to SCF; upskilling bank staff to enhance SCF product design through an improved understanding of best practice and deeper sector-level expertise; and introducing anchor-firm-led customer acquisition models to drive down pricing and mitigate risk.

The findings are based on desk research and field research conducted in the second half of 2021. Field research included key informant interviews with nine banks, four non-bank financial institutions (NBFI), and 10 anchor firms, as well as 60 in-depth interviews with MSMEs in five sectors. Findings from the field research have been complemented by secondary research, exploring sources including government publications and research from industry advisors such as the Food and Agriculture Organization, the United States Agency for International Development, and the World Bank, among others.

Key Findings Scorecard

- Estimated market size for SCF is **7.5 trillion** Ugandan shillings.
- MSMEs account for **3.8 trillion Ugandan shillings (65 percent)** of SCF demand.
- Current SCF supply only meets about **15 percent** of estimated demand.
- Ugandan banks report offering **all eight primary SCF products** except forfaiting.
- **All eight** SCF products **are viable** in Uganda from a legal perpective.

1. *Nathan Associates. 2015. "National Small Business Survey of Uganda." Financial Sector Deepening Uganda. https://www.nathaninc.com/wp-content/uploads/2017/10/National-Small-Business-Survey-report.pdf*
2 *World Bank. 2013 and 2018. "Enterprise Surveys: What Businesses Experience." https://www.enterprisesurveys.org/en/enterprisesurveys*
3 *International Finance Corporation. 2021. "Market Bite Uganda: Challenges and Opportunities for MSME Finance in the time of COVID-19." World Bank Group. IFC+Market+Bite+Uganda_November+2021.pdf*
4 *World Bank. 2021. "Gross Domestic Product: Uganda." https://data.worldbank.org/country/UG*
5 *United States Dollar = 3,537 Uganda Shillings as of September 20, 2021. This exchange rate is used throughout the report.*
6 *International Finance Corporation. 2014: "Supply Chain Finance Knowledge Guide." World Bank Group. SCF+Knowledge+Guide+FINAL.pdf (ifc.org)*

02

Market Opportunity

The estimated market for SCF in terms of the annualized value of financial payables, receivables, and inventory reaches 7.5 trillion Ugandan shillings ($2.1 billion) or 5.7 percent of GDP. The estimation of the market for SCF includes three parts of the supply chain: (1) anchor firm procurement (supplier finance); (2) anchor firm sales (buyer finance); and (3) inventory financing.

MSMEs generate approximately 1 trillion Ugandan shillings ($293 million) or 14 percent of the estimated market for SCF. Should Ugandan financial institutions be able to meet this demand, they could potentially contribute to closing the MSME financing gap and help overcome a key constraint to MSME growth in Uganda.

SCF is highly concentrated in the manufacturing sector, which generates more than half of the estimated market. The manufacturing sector is particularly promising given the volume of transactions—it generates more than 50 percent of costs of goods sold (COGS) and sales in Uganda—as well as the structure of the supply chain. Days payables outstanding (DPO), days sales outstanding (DSO), and days inventory outstanding (DIO) in the manufacturing sector align closely with other sectors. In addition to manufacturing, construction presents a large market for SCF, 12 percent, as well as wholesale, retail, transport, education, health, and services, at six percent each.

Improvements in the financial sector and the SCF ecosystem to generate demand for, increase the supply of, and strengthen the enabling environment will unlock a larger market.

Figure 2: Estimated SCF Market Size in Uganda in Terms of the Annualized Value of Financeable Payables, Receivables, and Inventory

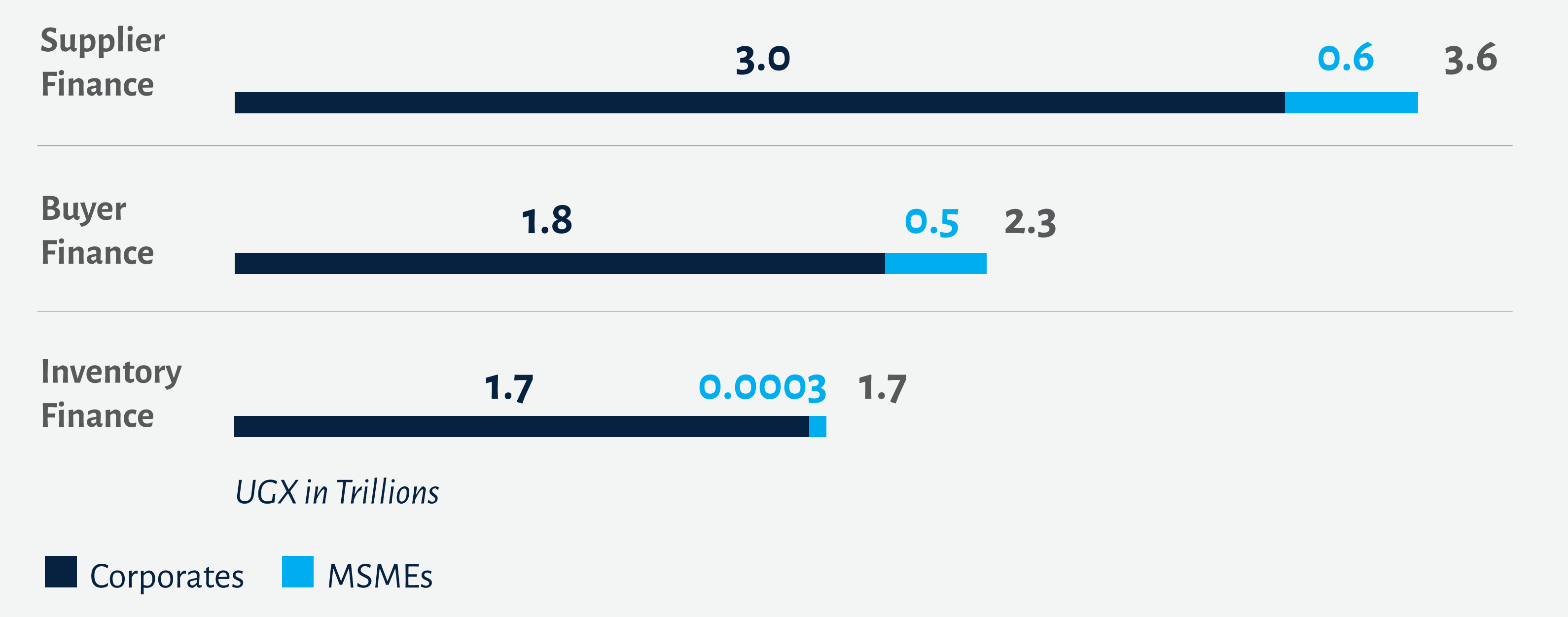


Figure 3: Potential Market for Supply Chain Finance in Uganda in an Optimal Environment

> If Uganda were to attain similar levels of financial services use among its MSMEs as in high-income countries and implement best-in-class financial sector policy and regulation, the potential market for SCF could be as high as 21.1 trillion Ugandan shillings ($6.0 billion) in terms of the annualized value of financeable outstanding[7].

Market Sizing **Methodology**

For each component of the market, the model leverages national accounts data to estimate total cost of goods sold, sales, and inventory in each target economy. It then discounts these values based on benchmarks for the proportion of costs of goods sold, sales, and inventory typically financed via SCF, as well as MSME financial services uptake in Uganda. The result is then multiplied by average DPO, DSO, or DIO per year to determine the annualized value of financeable payables, receivables, and inventory. A detailed methodology can be found in part 7, How the Research Was Done.

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.*

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Demand for Supply Chain Finance

The estimated market size for SCF in Uganda is driven by long payment periods across most supply chains. Such extended payment periods result in significant liquidity gaps and working capital requirements, resulting in demand for working capital financing.

MSME Demand for Supply Chain Finance

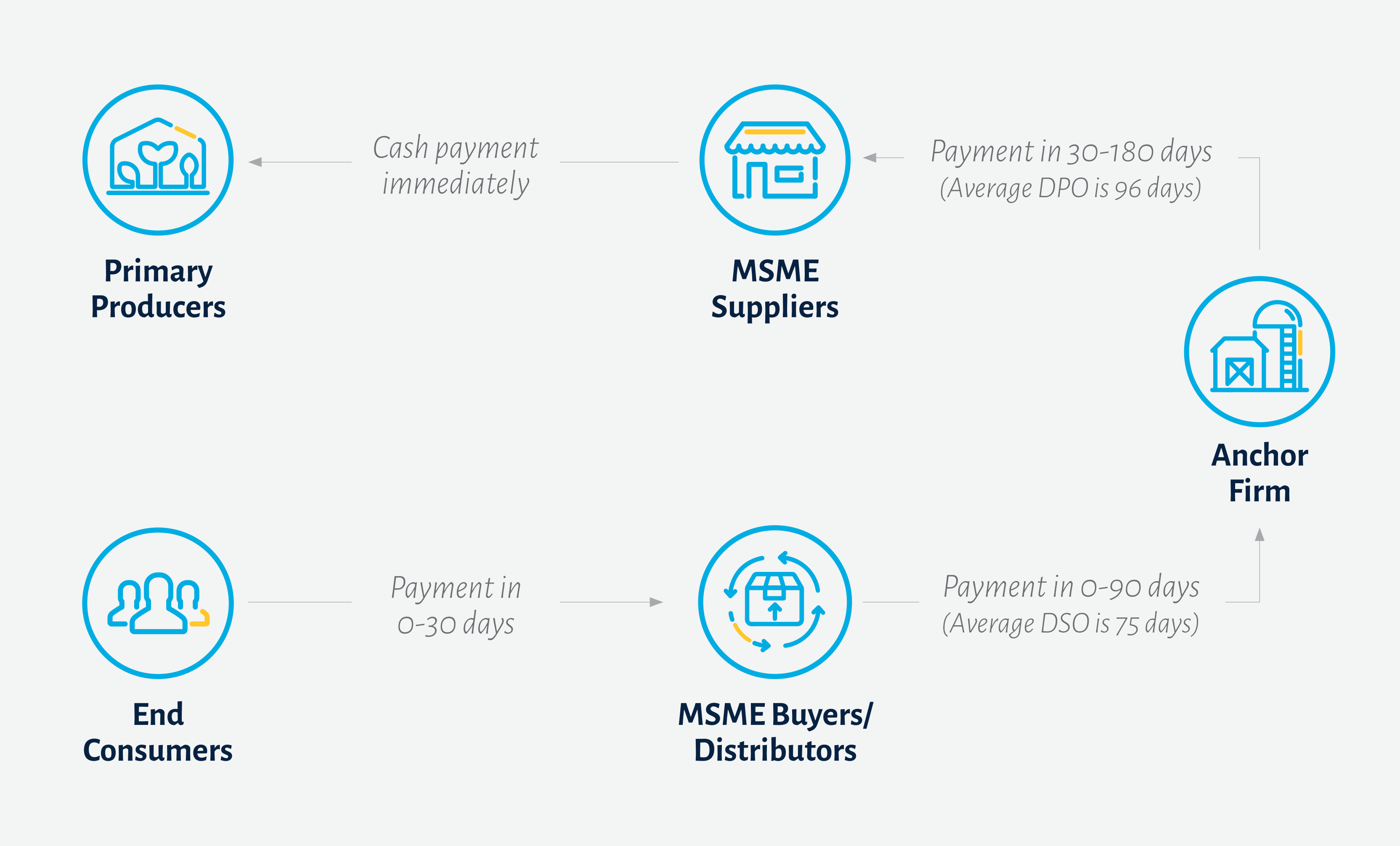
MSMEs supplying downstream actors, for example, must often contend with 30-180 day payment periods, while still paying for inputs on delivery. Conversely, MSMEs buying from anchor firms must often pay for goods within 30 days, despite waiting up to 90 days for payment from their clients. MSMEs consequently struggle to obtain the working capital required to sustain production while awaiting payments regardless of where they sit within the supply chain.

Long payment periods result from extended terms and endemic late payments in many sectors. To offset these challenges, nearly 60 percent of interviewed MSMEs indicate that they provide discounts that range from two to 20 percent for earlier payments. MSMEs' willingness to reduce prices despite thin margins underscores the extent to which many require access to additional working capital to facilitate ongoing business operations. It also suggests some readiness to pay for SCF products.

While financial institutions could ostensibly provide financing to address the working capital needs of MSMEs, many interviewed MSMEs do not obtain financing from financial institutions due to the high cost of funds, protracted turnaround times, and the inability to meet rigid collateral requirements. Many SCF products have the potential to address these common barriers to the uptake of formal financial services.

- **Reducing Cost of Funds:** SCF can leverage the financial strength of anchors and allow lenders to reduce their risk-based pricing through price and credit arbitration techniques, thereby decreasing costs for MSMEs.
- **Decreasing Turnaround Time:** SCF products can reduce turnaround time by enabling banks to accelerate the processing of applications through specialized technology and underwriting techniques.
- **Lowering Collateral Requirements:** SCF products reduce collateral requirements by leveraging trade commitments to finance underlying trade transactions with self-liquidating loan structures as opposed to hard collateral.

Figure 4: Average Payment Periods in Ugandan Supply Chains



Despite the potential for SCF to overcome common barriers to financial services uptake, demand for SCF in Uganda is tempered by limited awareness. About half of the interviewed MSMEs report knowledge of SCF. Most often, banked MSMEs learn about SCF from relationship managers at financial institutions, although many still cite key barriers to uptake as being incomplete information or an inadequate understanding of products. Unbanked MSMEs are largely unaware that SCF is available. They may be less inclined to engage financial institutions based on the perception that they may not qualify for traditional financing products, which rely on hard collateral for underwriting.

Challenges from Long Payment Periods

"In many cases, we [must wait] for a payment to take on the next contract. This greatly affects our work output. Operational costs are affected; the tax body is affected; employees are affected; rent; some of these [expenses] cannot wait."

- Medium Enterprise in the Construction Sector

Once introduced to SCF, almost all interviewed MSMEs identified how it could drive business growth. Frequently cited benefits include increased liquidity, enhanced access to inputs, reduced costs of financing, stronger client relationships, timely production, and streamlined collections. All of which will result in new opportunities to introduce products, increased production, and the ability to fulfill larger contracts. Despite recognizing the benefits of SCF, few interviewed MSMEs indicated a willingness to pay more than five percent of the value of the outstanding amount for financing. This may be due to relatively thin profit margins.

The limited capacity and unwillingness of MSMEs to pay more than five percent aligns closely with their largest concern about SCF, its cost. Additional concerns include the potential for financial institutions to disrupt key client relationships, suggesting a lack of trust in these institutions. Lengthy turnaround times, risks related to weak contract enforcement mechanisms, and an inability to repay financing if a client fails to make payment were also cited. Additionally, informal MSMEs cited requirements to formalize their business operations as barriers to using SCF. For most, the advantages of improved access to financing do not outweigh the increased tax burden and other challenges associated with registering their businesses.

Anchor Firm Demand for Supply Chain Finance

Like MSMEs, many interviewed anchor firms expressed interest in using SCF to finance working capital and accelerate their cash conversion cycles. Anchor firms cited additional benefits, including improved supply chain integration. Many mentioned difficulties in consistently procuring high-quality inputs from their suppliers. In particular, those purchasing from primary producers report that many suppliers fail to provide the anticipated quantity and quality of goods stipulated in local purchase orders. With limited access to finance, suppliers often side-sell goods to the first possible buyer to meet immediate liquidity requirements. Moreover, many suppliers lack the financing to consistently produce high-quality inputs. Anchor firms, therefore, often cannot obtain the quantity and quality of goods required to maintain production and address market demand for their products.

Unfortunately, anchor firms are generally unable to accelerate payment to suppliers due to long payment periods on the buying side of the supply chain. To compete and capture shelf-space, anchor firms must often sell on credit, resulting in long cash-conversion cycles. As a result, nearly half of all interviewed anchor firms consider optimizing working capital as a strategic priority.

Interviewed anchor firms largely rely on sales proceeds and financing from banks to manage working capital. However, neither solution is optimal, nor do they fully meet the requirements. Sales, for example, often prove insufficient. Several anchor firms reported having forgone business opportunities due to a lack of funding. Some banks provide working capital to anchor firms in the construction sector and in some cases SCF, particularly for receivables discounting products. However, bank financing often proves undesirable because of high interest rates that reportedly range from 18-25 percent per annum.

Many interviewed anchor firms expressed interest in SCF to address unmet working capital needs. The interviewed anchor firms clearly underscored the potential benefits for their businesses, including increased anchor firm liquidity and expanded production.

Anchor firms also noted that further digitizing their supply chains is a prerequisite for efficiently rolling-out SCF. Most anchor firms rely on digital and manual processes to engage suppliers and distributors. The use of digital or manual processes often reflects whether the supplier or distributor is registered and has obtained a tax card. Only about one-third of MSMEs have a tax card, which enables them to use the Uganda Revenue Authority's e-invoicing platform, the Electronic Fiscal Receipting, and Invoicing Solution. Incentivizing increased business formalization and tax compliance will be an important prerequisite for further digitizing the supply chain and unlocking additional opportunities for SCF.

Awareness of **Distributor Finance**

"Yes, I have some knowledge of supply chain financing from a provider in the market [where our supplier holds an account]. They have contacted me several times on giving us a product but the follow through was not there and they didn't provide enough information on the variety of products that they have."

-Small Enterprise in the Wholesale and Retail Sector

High Cost **of Financing**

"SCF is expensive. For instance, if I have to discount an invoice, we will definitely be losing money."

-Micro Enterprise in the Manufacturing Sector

04

Provision of Supply Chain Finance

The Ugandan financial sector comprises commercial banks, credit companies, microfinance deposit-taking institutions, microfinance institutions, and unregulated entities. Although banks and non-bank financial institutions (NBFIs) can offer SCF products, only a fraction of the total value of financing from formal financial institutions is SCF.

Supply Chain Finance From Commercial Banks

The value of financing from commercial banks has increased by nearly 50 percent over the past five years and is largely concentrated in short-term lending. SCF is one component of the interviewed banks' working capital product portfolios, although it only constitutes about five percent of outstanding total financing. As of October 2021, total outstanding SCF from Ugandan banks was about 842.7 billion shillings ($238.2 million).[8] Given that the market for SCF solutions is currently estimated at 7.5 trillion Ugandan shillings ($2.1 billion), the current supply of SCF only covers about 11 percent of the total market in Uganda.

Ugandan banks report offering all primary SCF products, except forfaiting. However, further analysis suggests that some banks do offer forfaiting per the Global Supply Chain Finance Forum definition, but they refer to it as receivables discounting. While the commercial outlook varies by SCF product, banks seem to prioritize expanding loan-based products overall, perhaps due to greater familiarity with the structure of those products.

Table 1: Commercial Outlook for the Primary Supply Chain Finance Products

PRODUCT	COMMERCIAL OUTLOOK
Receivables Purchase Products	
Receivables Discounting	More than two-thirds of banks offer receivables discounting (commonly referred to as invoice discounting) products. Receivables discounting products are typically disbursed in two tranches. The first includes between 70-90 percent of the value of the invoice and the second tranche includes the remainder less any fees.
Forfaiting	No banks claim to offer a forfaiting product. A few banks will finance letters of credit for exports, which is a form of forfaiting. Banks that offer forfaiting products, financing payment instruments outside of letters of credit, could unlock a largely untapped market. There are potential early movers in this space, with at least one interviewed bank reporting that it is in the process of developing a forfaiting product.
Factoring	Some Ugandan banks offer factoring products and face increasing competition from emerging factoring companies. However, factoring does not seem to be a priority for banks, possibly due to concerns about the lack of recourse should a borrower default. The consequent risk in assuming responsibility for collections and the tax burden associated with factoring transactions were also cited.
Payables Finance/ Reverse Factoring	Banks with limited branch networks prioritize payables finance products as they can scale via their corporate client networks, as opposed to redirecting outreach to MSMEs. As payables finance typically does not involve recourse the lack of strong enforcement mechanisms in the event of default should not be a significant deterrent.
Loan-Based Products	
Loan/ Advance Against Receivables	Many banks offer loans or advances against receivables. The introduction of the Security Interest in Movable Property Registration System in 2019 may accelerate the roll out of loans/advances against receivables as banks can register invoices to reduce the risk of fraud. The government may need to revisit the cumbersome registration processes and pricing structure to maximize the benefits and encourage banks to register rights to receivables when offering a loan or advance against receivables.
Distributor Finance	About one-third of banks offer distributor finance and several others would prioritize it if expanding their SCF product offering. Given that 11 percent of Ugandan MSMEs (about 110,000 formal enterprises) are in the retail sector, expanding into distributor finance may unlock a sizeable market.

> Approximately 80% of commercial banks and a handful of non-bank financial institutions offer SCF solutions. Commercial banks are the largest providers of SCF solutions.

Figure 5: Supply Chain Finance Landscape in Uganda

Tier 1
Banks

Tier 2
Credit companies

Tier 3
Microfinance-deposit taking institutions (MDIs)

Tier 4
Microfinance institutions (MFIs)

Unregulated Entities[9]

The total supply of outstanding financing from Tier 1, 2, and 3 financial institutions reached UGX 18.4 trillion (USD 5.2 billion) on July 31, 2021.

While most lending – especially to SMEs, is short-term, the total value of outstanding SCF products is only estimated to reach UGX 842.7 Billion (USD 238.2 million).

8 *The total supply of SCF is based on the ratio of the value of 12 banks' outstanding SCF portfolio to their outstanding financing portfolio (4.9%). The ratio is then multiplied by the total value of financing outstanding from all commercial banks per Bank of Uganda data.*

9 *By definition, all financial institutions that do not meet the criteria for Tier 1, Tier 2, and Tier 3 should be considered Tier 4 financial institutions regulated by the UMRA. However, interviewees from two organizations claimed that they fall outside the regulatory framework, perhaps due to the fact that they target different markets than most microfinance institutions*

Loan/ Advance Against Inventory	Many Ugandan banks offer loans or advances against inventory. Since 2020, inventory can be registered on the Security Interest in Movable Property Registration System, thereby reducing bank risk when offering the product. As with loans or advances against receivables, the government will need to streamline processes related to this system and revisit pricing to drive uptake at scale.
Pre-Shipment Finance	Most Ugandan banks either offer pre-shipment financing or prioritize it if integrating new SCF products in the future. As a loan-based product, it is somewhat familiar to staff and clients.

Most interviewed banks seek to use SCF to capture greater market share for working capital financing, particularly within the manufacturing, agriculture, and oil and gas sectors. While many banks prioritized scaling SCF in the oil and gas sector, many also underscored that they do not invest in businesses generating negative environmental externalities. SCF could be a lever to promote environmental best practices in the oil and gas sector if banks were to practice sustainable SCF.[10] This involves embedding select environmental, social, and governance (ESG) principles into payables finance products and requiring that financed suppliers meet basic criteria. ESG criteria and processes may need to be adapted to align with banks and enterprises levels of sophistication.

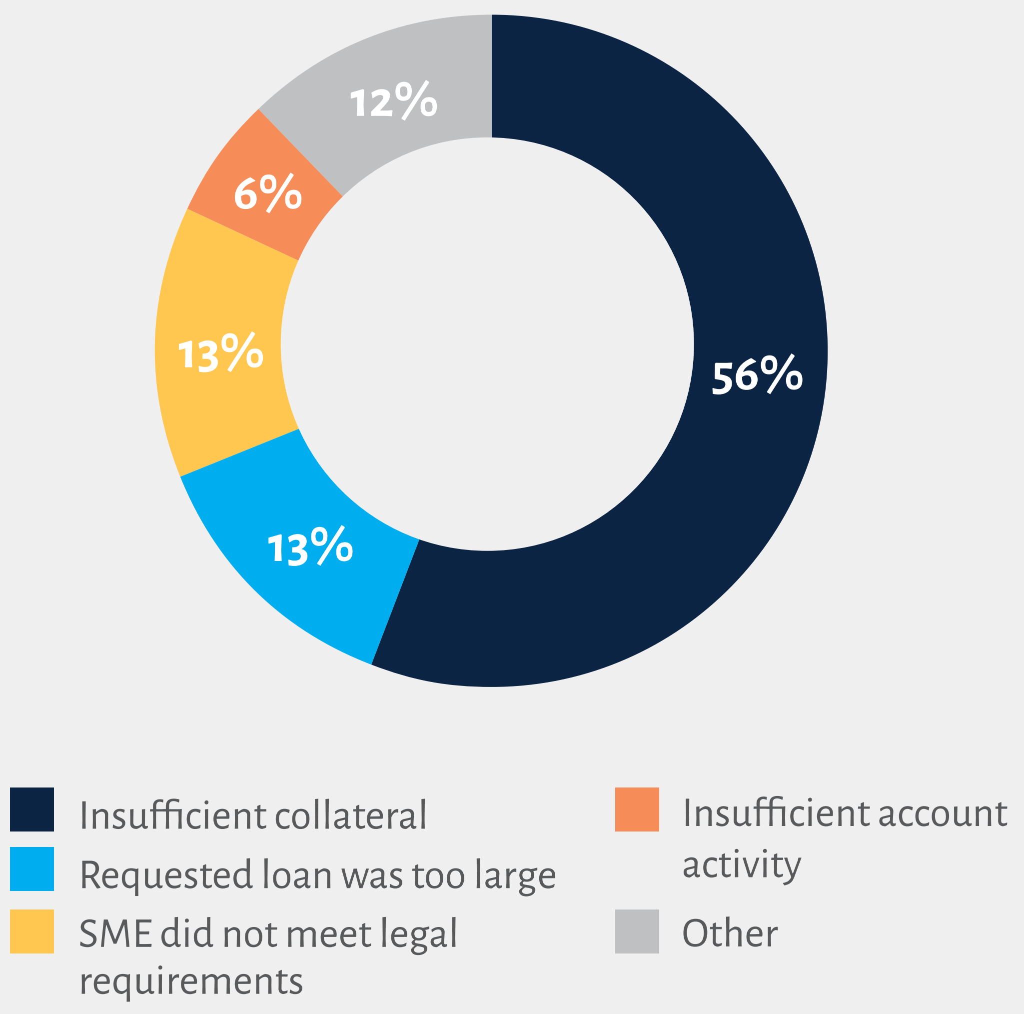
Many also view it as a tool to provide affordable financing to small and medium businesses, in line with bank and government priorities. Interviewed banks report rejecting up to 40 percent of loan applications from small and medium enterprises, often due to insufficient collateral, outsized loan requests, and weak compliance with legal requirements. SCF could address many of these barriers, allowing banks to better serve the MSME segment overall.

By leveraging SCF to better serve anchor firms and MSMEs, banks expect to derive numerous interrelated benefits. By enabling banks to attract new clients and increase wallet share from existing clients, introducing or expanding SCF products will increase revenue and improve the bottom line. In parallel, SCF can enable banks to manage risk when serving MSMEs, a segment widely perceived as risky but desirable given the size of the market and the government's emphasis on closing the MSME financing gap. By attracting new clients, particularly via anchor-led SCF products, many banks anticipate mobilizing additional deposits by cross-selling deposit accounts. In turn, this will expand the bank's capital base, enabling it to expand lending activities to further drive revenue growth.

Despite understanding the opportunities associated with larger SCF portfolios, interviewed banks cite a multitude of barriers to scale. Some are internal, such as limited staff capacity to cost-effectively structure and roll out SCF products; the high levels of perceived risk associated with financing MSMEs, even via SCF, which reduces appetite for serving the segment, and inadequate funding to meet the demand for the high volume of transactions associated with SCF. Interviewed banks also identified external barriers to scaling, such as limited market awareness of SCF and the benefits associated with it, high levels of informality, and a lack of formal business records among MSMEs. Overcoming many of these barriers will be a prerequisite for expanding the supply of SCF.

"SCF could be a lever to promote environmental best practices in the oil and gas sector if banks were to practice sustainable SCF.[10] This involves embedding select environmental, social, and governance (ESG) principles into payables finance products and requiring that financed suppliers meet basic criteria."

Figure 6: Top Reasons Why Banks Reject SME Loan Applications



10 Bancilhon, Charlotte, Christopher Karge, and Tara Norton. 2019. "Win-Win-Win: The Sustainable Supply Chain Finance Opportunity." Business for Social Responsibility. https://www.bsr.org/en/our-insights/report-view/win-win-win-the-sustainable-supply-chain-finance-opportunity

Supply Chain Finance From Non-Bank Financial Institutions

As banks strive to overcome these barriers to scale, they must also compete with a growing number of non-bank financial institutions (NBFIs), like FACTS and Patasente, offering SCF – although the total value of SCF provided by NBFIs remains low. In addition to regulated NBFIs offering SCF (e.g. select credit companies and deposit-taking microfinance institutions) a growing number of unregulated entities are moving into this space. These new entrants, such as factoring companies and fintechs, should be classified as microfinance institutions per the Bank of Uganda and Uganda Microfinance Regulatory Authority categorization. However, regulation is focused on microlending and is not tailored to the factoring company and fintech target segments. As such, new entrants report operating under ambiguous regulatory guidelines despite their potential to disrupt the SCF industry.

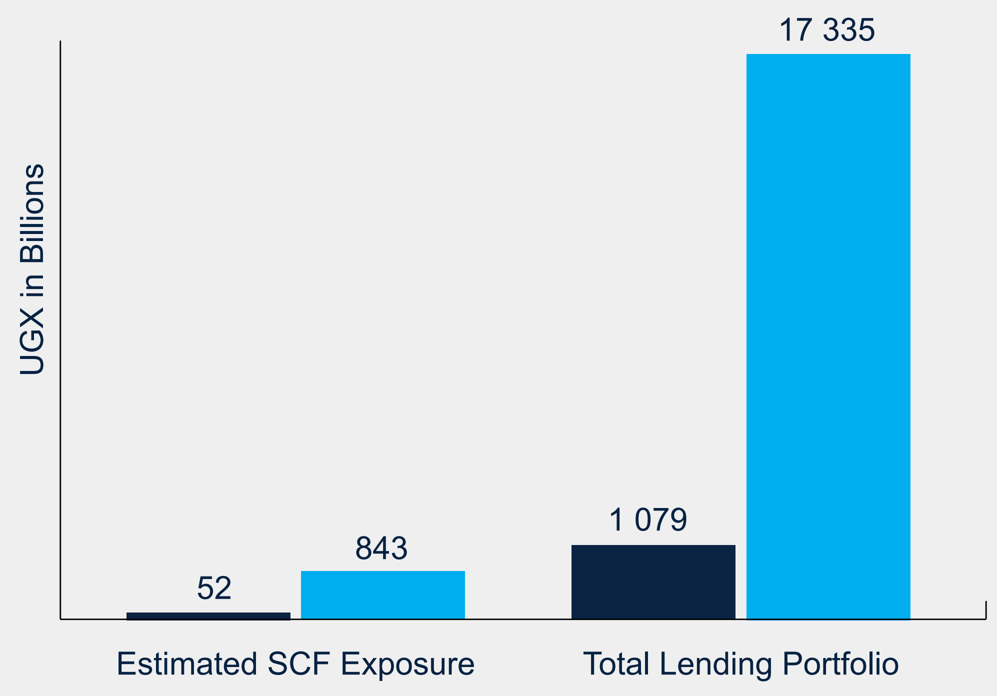
Both regulated and unregulated NBFIs offer a variety of SCF products; some specialize in one or two product types, whereas others offer a broad array. At the time of this research, NBFIs do not offer forfaiting, distributor finance, nor loans/advances against inventory. Early movers launching these products may attract numerous micro enterprises or small and medium businesses that prefer engaging with NBFIs to meet their financing needs.

NBFIs eager to grow their SCF portfolio report numerous challenges, many of which overlap with those reported by interviewed banks. These include limited access to funding, low-levels of market awareness, and high-levels of informality in business operations among existing and potential clients. Additionally, NBFIs confront several unique challenges namely, low levels of digitization and automation within their own systems, perceived regulatory ambiguity around new entrants, including factoring companies and fintechs, which increases operational risk and, a preference for banks among potential clients unfamiliar with NBFIs.

Despite these challenges, the volume of SCF disbursed by NBFIs is poised to grow. New entrants, including digitally enabled factoring companies and fintechs, are developing innovative solutions that address many of the barriers impeding legacy SCF portfolio growth. These NBFIs bring strong value propositions by integrating digital technology to streamline operations and by providing contract and invoice templates to streamline and manage risk. The government's regulatory sandbox can play an important role in the introduction of new entrants by alleviating operational risk stemming from the lack of clear regulation.

> New entrants report operating under ambiguous regulatory guidelines despite their potential to disrupt the SCF industry.

Figure 7: Outstanding Credit and Estimated Supply Chain Finance Portfolio



NBFIs Regulated by Bank of Uganda (BoU)

Commercial banks

05

Enabling Environment for Supply Chain Finance

Financial institutions seeking to scale their SCF portfolio have benefited from numerous government initiatives to enhance the enabling environment.

- **Launching the Movable Asset Registry**
  The government introduced the Security Interest in Movable Property Registration System in 2019. It allows the registration of rights to receivables, thereby decreasing risk for financial institutions when offering SCF. It should be noted that this registry requires a serial number, which can pose a challenge when registering inventory with a high turnover. [11]

- **Promoting Local Content**
  Entities receiving public funding must include a certain percentage of local inputs or labor, unless goods/services of the required quality are unavailable in Uganda. Firms interested in pursuing government contracts may use SCF to strengthen their relationships with domestic suppliers.[12]

- **Strengthening the Digital Rails**
  The government recognizes the opportunity for digital to drive economic growth. While digital transactions are not a prerequisite for SCF, they can facilitate uptake among MSMEs and anchor firms and enable financial institutions to scale SCF offerings. As such, government authorization of electronic signatures in the Electronic Signature Act (2011), and the more recent pilot of a gateway streamlining electronic know-your-customers processes, could jumpstart the industry.[13, 14]

- **Providing Funding for MSME Financing**
  The government holds a 90 percent equity stake in the Microfinance Support Centre, an apex organization providing wholesale funding to financial intermediaries and lending to SMEs. Its wholesale portfolio is about 60.0 billion shillings ($17.0 million). Increasing access to funding may facilitate the rollout and scaling of SCF products.[15]

Despite these improvements, the enabling environment remains suboptimal for SCF development. Almost universally, financial institutions underscore how enforcement mechanisms, and enforcement of rights to receivables and/or inventory, are only in the event of default. Banks and NBFIs almost universally prefer to settle out-of-court. This increases risk and reduces the growth of SCF as banks and NBFIs often will not consider it a secured transaction.

While weak enforcement mechanisms may deter banks from providing various financing to segments perceived as risky, additional barriers are specific to SCF. For example, many interviewed financial institutions report that prudential requirements (including capital adequacy requirements) for SCF are unclear, thereby increasing operational risks if offering SCF. The lack of clear regulation is particularly acute with regards to forfaiting and factoring. Challenges resulting from unclear regulations are further compounded by taxes levied on factoring transactions. Unlike other SCF products, factoring is not considered a secured transaction. Rather, it is seen to be the outright sale of a receivable. As a result, it incurs an 18 percent value-added tax, while secured transactions are exempt.[16] The value-added tax drives up the cost of factoring and may slow the growth of this product, especially given the price sensitivity demonstrated by interviewed MSMEs.

11 *Mukumbya Musoke Advocates. 2020. "An Overview of the Security interest in Movable Property Act." http://mukumbyamusoke.com/4017-2/*
12 *Odu, Mercy. 2020. "Salient Points from the Ugandan National Local Content Act." https://www.bowmanslaw.com/insights/government-contracting-and-public-sector-procurement/salient-points-from-the-ugandan-national-local-content-act/*
13 *National Information Technology Authory. 2011. "The Electronic Signatures Act, 2011." https://www.nita.go.ug/sites/default/files/publications/Electronic%20Signatures%20Act%202011%20%28Act%20No.%207%20of%202011%29.pdf*
14 *Bank of Uganda. 2020. "Electronic Know-Your-Customer." https://www.bou.or.ug/bou/bouwebsite/RelatedPages/Publications/article-v2/Launch-of-BoU-NIRA-e-KYC-project/*
15 *World Bank. 2019. "Uganda Technical Report: Toward Scaled-Up and Sustainable Agriculture Finance and Insurance in Uganda."*
16 *Cristel Advocates. 2019. "Accounts Receivable Financing in Uganda." Cristal Thought Leadership Series.*

Growth may be further curtailed by deficiencies in Uganda's legal framework governing SCF, although the existing structures do not preclude the deployment of SCF products. Specifically, the Security Interest in Movable Property Act provides for the outright assignment of receivables, offers rules for perfection, and governs registration on Security Interest in Movable Property Registration System.

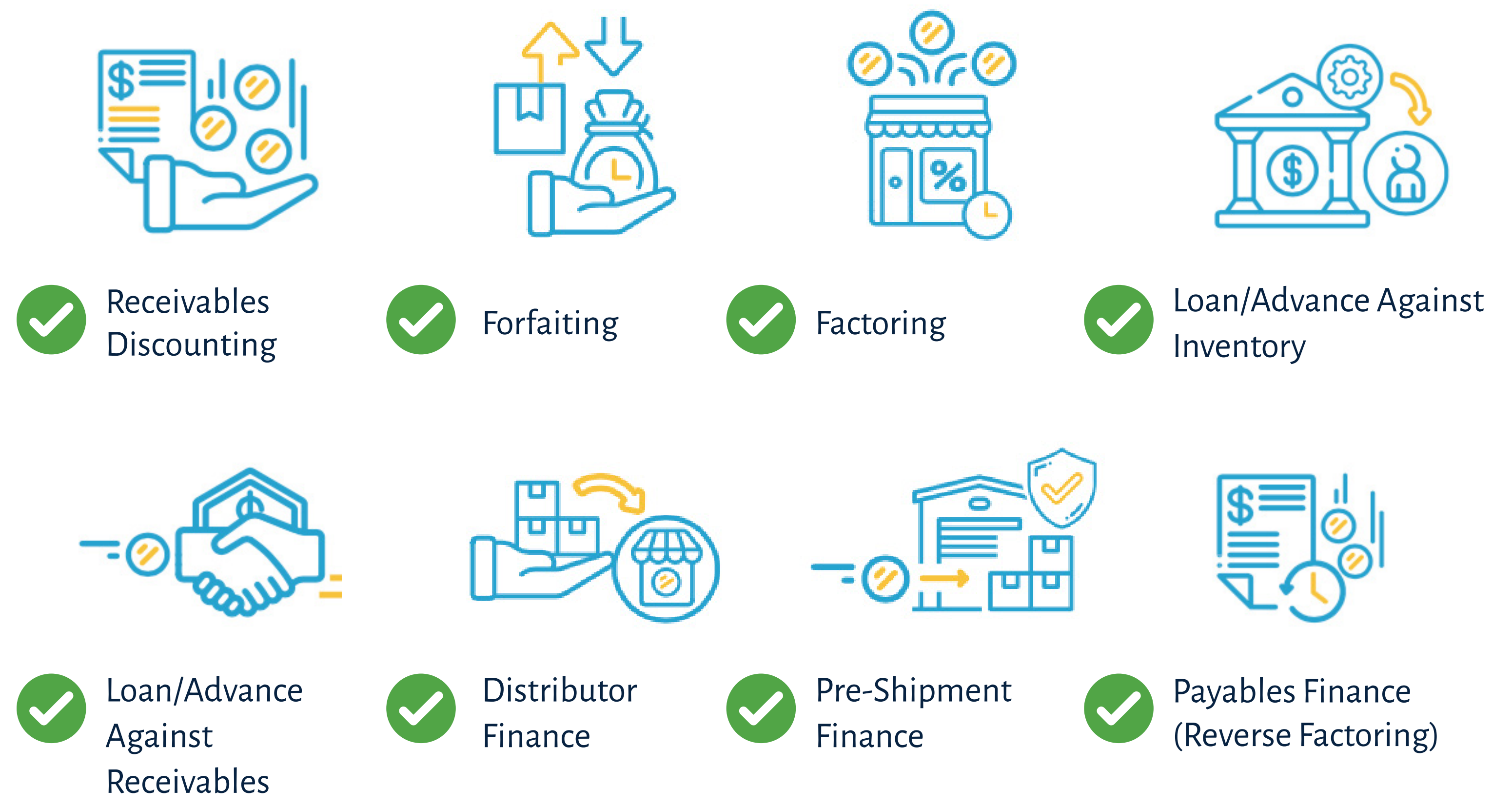
However, the Act does not override the effect of anti-assignment clauses under the common law, which allows buyers to restrict use of receivables as collateral when leveraging SCF. Financial institutions, therefore, must mitigate the risk that receivables assigned to them will be subject to anti-assignment clauses, thereby increasing the cost of the transaction.

Notably, all products backed by receivables are affected by anti-assignment clauses. Moreover, inventory products are affected by the requirement that collateral must be identified by serial number, increasing risk if a registration is challenged on the grounds of lack of proper identification.

Despite these legal hurdles that may impede the development of SCF overall, all eight SCF products are viable in Uganda.

Figure 8: Supply Chain Finance Product Heatmap[17]

Viability of SCF Products in Uganda Vis-à-Vis the Legal Framework



Key:
Green = Supporting Legal Framework
Yellow = Somewhat Supportive Legal Framework Despite Some Defects
Red = Major Obstacles in the Legal Framework

> Despite legal hurdles, all eight SCF products are viable in Uganda.

17 *Adapted from IFC's legal analysis for SCF in Uganda*

06

Recommendations

To scale SCF, demand will need to be generated, supply enhanced, and the enabling environment for SCF will need to be strengthened. Diverse ecosystem actors must work in tandem to overcome interrelated challenges that continue to limit growth of the industry.

As a first step to unlocking the 21.1 trillion Ugandan shillings ($6.0 billion) market, ecosystem actors must stimulate demand for SCF products by building market awareness and enhancing enterprise readiness for SCF to enable access to products.

Table 2: Recommendations to Generate Demand for Supply Chain Finance

FINANCIAL SERVICES INDUSTRY

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. While MSMEs report that they became aware of SCF through their relationship managers, the lack of comprehensive information and appropriate follow-up has slowed uptake.	Short-term
Increasing Market Awareness	Financial institutions should partner with the government and key industry associations (e.g., the Uganda Manufacturers Association and the Uganda Healthcare Federation) to disseminate information about SCF to their members in sectors with high potential to generate demand for SCF.	Short-term
Enhancing Enterprise Readiness for SCF	Financial institutions should support anchor firms to formalize their supply chains and receive invoices and make payments digitally by partnering with relevant technology providers to offer bundles with discounts and promotions.	Short-term

GOVERNMENT AND PUBLIC ACTORS

CATEGORY	RECOMMENDATION	TIMELINE
Increasing Market Awareness	The government and NBFIs should undertake a strategic communications campaign to increase awareness of NBFIs offering SCF products. While nearly half of MSMEs are aware of SCF, most learned about it from their banks. Expanding awareness of options in the market will promote competition and foster the development of a diverse ecosystem.	Medium-term
Increasing Market Awareness	The government should set an example for other anchor firms in the market by partnering with financial institutions to offer payables financing to its suppliers, who often struggle with protracted payment terms and overdue payments.	Medium-term
Enhancing Enterprise Readiness for SCF	The government should partner with sector-specific associations or work via Uganda Investment Authority's clusters to build bookkeeping capacity in MSMEs and promote the use of formal and written payables and receivables for all transactions to promote the use of SCF. Training should be structured to allow for peer-to-peer learning and business education.	Long-term

Generating demand for SCF will also require that the supply of SCF is enhanced to ensure availability of tailored products aligning with enterprises' financing needs. Ecosystem actors must invest resources to improve product design, risk management, and pricing, in addition to expanding financial institutions' access to funding to ensure that the supply can sustainably meet surging demand.

Table 3: Recommendations to Enhance the Provision of Supply Chain Finance

FINANCIAL SERVICES INDUSTRY

CATEGORY	RECOMMENDATION	TIMELINE
Enhancing Product Design	Financial institutions should upskill staff to ensure that they have an adequate understanding of SCF and can design SCF products responsive to customer needs without incurring undue risk. Development finance institutions can provide technical assistance to facilitate this process.	Short-term
Enhancing Product Design	Financial institutions should explore introducing SCF products like spot factoring that enable clients to receive financing for receivables on an ad hoc basis. This can reduce turnaround time. Development finance institutions can provide advisory services for the development of these products.	Medium-term
Enhancing Product Design	Financial institutions should explore a segmentation framework beyond enterprise size and annual turnover to incorporate additional parameters such as integration into supply chains of anchor firms; financial institutions should develop products/services and credit rating and risk management methodologies appropriate to the financing needs based on alternative approaches to MSMEs segmentation.	Long-term
Improving Risk Management	Financial institutions should build capacity for inventory valuation to facilitate the roll out of inventory-based SCF products (e.g., loans/advances against inventory). This will increase bank confidence that SCF is, indeed, a type of secured lending.	Short-term
Improving Risk Management	Insurance providers should explore the use of credit insurance for SCF, develop relevant products, and sell them to financial intermediaries offering SCF to de-risk SCF portfolios. Development finance institutions can provide technical assistance to facilitate the development of relevant insurance products.	Long-term
Reducing Pricing	Financial institutions should support anchor firms to formalize their supply chains and receive invoices and make payments digitally by partnering with relevant technology providers to offer bundles with discounts and promotions.	Short-term
Reducing Pricing	Financial institutions should develop payables finance products that enable them to leverage anchor firms' credit scores to reduce risk-based pricing attached to SCF products and drive uptake. Interviewed MSMEs cite cost of funds as one of the largest barriers to accessing bank financing.	Medium-term

GOVERNMENT AND PUBLIC ACTORS

CATEGORY	RECOMMENDATION	TIMELINE
Enhancing Product Design	Development finance institutions, government, industry associations or other organizations should foster a deeper understanding in the banking sector of the business models, key ratios, and cash cycles in manufacturing, transport, and services sectors given the concentration of demand in these sectors and provide technical assistance to integrate these insights into the design of new SCF products.	Short-term
Enhancing Product Design	The Government of Uganda should leverage the newly launched regulatory sandbox to incubate, accelerate, and finance new domestic SCF fintechs in Uganda. New entrants will build upon the success of earlier fintechs and create a more vibrant and competitive SCF ecosystem.	Long-term
Improving Risk Management	Government or development finance institutions could provide guarantees or risk participation for SCF portfolios of financial institutions to facilitate scale and reduce capital requirements.	Medium-term
Expanding Access to Funding	Development finance institutions or government should finance NBFIs to ensure that they have the capital required to fund and scale high-volume product lines like SCF.	Medium-term
Expanding Access to Funding	Government and development finance institutions should facilitate further investment in Microfinance Support Centre to enable it to provide a larger quantum of financing to microfinance institutions to expand financing activities, including SCF.	Medium-term

Scaling SCF will require further strengthening the enabling environment. Clarifying regulation and promoting use of financial sector infrastructure and technology reduces costs and risks related to SCF for both enterprises and financial intermediaries.

Implementing these recommendations may unlock an estimated SCF market valued at 21.1 trillion Ugandan shillings ($6.0 billion) and position financial institutions to more sustainably serve the MSME segment. In turn, this will meaningfully expand access to finance for MSMEs, thereby catalyzing widespread economic growth in Uganda.

Table 4: Recommendations to Strengthen the Enabling Environment for Supply Chain Finance

GOVERNMENT AND PUBLIC ACTORS

CATEGORY	RECOMMENDATION	TIMELINE
Clarifying Regulation	The government should convene a working group, including financial institutions, the Uganda Bankers Association, and international advisors, that seeks to clarify ambiguity around capital adequacy requirements and other prudential regulations pertaining to SCF products. This is particularly salient with regards to factoring and forfaiting, which are two of the least available SCF products in Uganda.	Short-term
Promoting Use of Financial Sector Infrastructure	The government should revisit the Security Interest in Movable Property Registration System's pricing structure to maximize the benefits attached to it and encourage banks to register rights to receivables when offering a loan or advance.	Short-term
Promoting Use of Financial Sector Infrastructure	The government should strengthen the legal system to ensure enforcement of rights over assets to provide comfort to banks and NBFIs that SCF is a secured transaction. Banks and NBFIs can provision accordingly. International advisors could guide this process.	Long-term
Promoting Use of Technology	The government should incentivize enterprises to leverage the Electronic Fiscal Receipting and Invoicing Solution to promote the digitization of invoices to lay the groundwork for expanding use of SCF. Incentives may include tax rebates to promote uptake and encourage formalization.	Medium-term
Revising Tax Policy	The government should consider reclassifying factoring as a secured transaction or exempting it from value-added tax. The largest barrier to uptake of financial products and services among anchor firms and MSMEs is cost, and the 18 percent value-added tax makes an entire SCF product category excessively expensive.	Medium-term
Revising Tax Policy	As only 33 percent of Ugandan MSMEs have tax cards, the government should incentivize MSMEs to obtain tax cards by simplifying the tax regime. In turn, this will increase uptake and usage of Uganda Revenue Authority's e-invoicing platform, which will create the business records and documentation requisite for 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 Ugandan SCF ecosystem. The research team conducted all components of the field research and analysis between June and December 2021.

The field research consisted of five principal components:

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

- **Key informant interviews with financial intermediaries:** The research team also conducted 13 key informant interviews with financial intermediaries, including nine commercial banks and four NBFIs, 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 also incorporates findings from 10 key informant interviews with anchor firms in five sectors: agriculture, manufacturing, construction, wholesale and retail, and pharmaceuticals. 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 also conducted two key informant interviews with Ugandan 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 Uganda, the state of MSME access to finance in Uganda, and policies and regulations governing the financial sector, among other topics.

Acknowledgements

This research study was supported by the Government of Japan and the UK Foreign, Commonwealth & Development Office (FCDO). IFC commissioned Palladium to conduct the research and to author this report. At Palladium, the work was led by Christine Loftus alongside Minnie Lanting, Shane Mulligan, and Omar Fahmy. The authors are grateful to peer reviewers Lauren Rawlings and Dave Chalila for their valuable insights and inputs to the development of the report. The interviews with financial institutions and anchor firms in Uganda were conducted by Smart Regional Consultants, and IPSOS conducted the in-depth interviews with MSMEs. On the IFC side, the study was managed by Sten te Vogt and Aksinya Sorokina, supported by Mohsin Aftab, Isis N. Isunza, and Sinja Buri. The team would like to thank colleagues Dan Kasirye, Anita Mwandha, and Catherine Mirembe Male Muhumuza for their input and support for this project. The report was produced by Anna Koblanck, Lisa Johnston, and Elena Franchi at IFC.

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 Uganda. The market sizing methodology draws on macro-economic data from the Uganda Bureau of Statistics, as well as firm-level data from 467 firms to estimate the total market size for SCF in Uganda.

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 COGS, sales, and inventory in the market.** Total COGS and sales in sectors conducive to SCF in Uganda 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 forecasted through 2020 based on Uganda 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.[18] 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 MSME contribution to GDP in Uganda. As MSMEs contribute 75 percent of GDP, it is estimated that 75 percent of COGS and sales in each sector will be generated by MSMEs. The remaining 25 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 sales 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 amongst 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 Uganda and in-depth interview participants clear reticence to engage with banks. It is discounted by the ratio of the percentage of large firms in Uganda that have a loan or a line of credit from a bank (24.7 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 42 percent. As such, the value of discountable COGS, sales, and inventory generated by corporates is multiplied by 42 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 repeated to determine financeable COGS, sales, and inventory among MSMEs in each sector. Rather than applying the ratio of large firms in Uganda that have a loan or a line of credit from a bank compared with the average percentage of corporates in 29 high-income countries, it applies the ratio of the percentage MSMEs

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 Uganda will be less than global benchmarks (71 percent for supplier finance and inventory finance and 60 percent for buyer finance) found in *IFC Supply Chain Finance Knowledge Guide* due to low levels of financial inclusion in Uganda and many in-depth interview respondents' reticence to engage with banks. As such, the global benchmarks *drawn from 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 Uganda.

18 *Corporates and MSMEs are classified based on annual revenue using the IFC definition.*

with a loan or line of credit in Uganda (8.9 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 19 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 DPO, DSO, and DIO.** Given the lack of firm-level financial data available in Uganda, the model relies on a database with anonymized financial data from 630 firms to calculate DPO.

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

   2. All firms that cannot be categorized, are engaged 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 data set 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 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 Uganda. 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
IFC	International Finance Corporation
MSME	Micro, Small, and Medium Enterprise
NBFI	Non-Bank Financial Institution
SCF	Supply Chain Finance
SME	Small and Medium Enterprise
UGX	Uganda Shilling
USD	United States Dollar

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.

www.ifc.org

Contacts

IFC Uganda
Dan Kasirye
Principal Country Officer
dkasirye@ifc.org

IFC Financial Institutions Group
Aksinya Sorokina
Operations Officer
asorokina1@ifc.org

IFC Applied Research & Learning
Soren Heitmann
Program Lead
sheitmann@ifc.org

IFC International Finance Corporation WORLD BANK GROUP
Creating Markets, Creating Opportunities