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SUPPLY CHAIN FINANCE BY DEVELOPMENT BANKS AND PUBLIC ENTITIES

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Creating Markets, Creating Opportunities



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OBJECTIVES & TARGET AUDIENCE

The objectives of the guidebook are to demonstrate the importance of SCF with regard to the goals of the development banks and other public entities, to discuss the interests of stakeholders and main participants, to provide descriptions of various approaches for SCF initiatives and how they pursue the private-sector involvement, to explain the features of relevant products and how the establishment of adequate enabling frameworks can support the SCF market, and to provide step-by-step guidance on the development and implementation process for an SCF initiative.

SCF projects require detailed analysis and a tailored design, and the proposed solutions may vary if markets and countries are at different stages of development.

Various SCF initiatives have been established and operated by development banks and other public entities. Experience shows that no one strategy applies universally and that the choice of measures depends on country- and enterprise-specific circumstances. The guidebook thus provides a range of frameworks, concepts, and case examples that together aim to help development banks and other public entities make the appropriate choices for their situation.

This guidebook deals with development banks on a national and multinational level. Similarly, some of the discussed goals and roles can also apply to central banks, government agencies, or other public entities.

The target audience for the guidebook are practitioners of development banks, central banks, and other public institutions or agencies who are interested in developing or enhancing SCF solutions. Government officials or representatives from regulators and private-sector FIs may also benefit from this guidebook.

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ACRONYMS

ABL	asset-based lending
ADB	Asian Development Bank
Afreximbank	African Export-Import Bank
AI	artificial intelligence
AML	anti-money-laundering
API	application programming interface
BICE	Banco de Inversion y Comercio Exterior (Bank for Investment and Foreign Trade)
COGS	cost of goods sold
CRC	Credit Reference Center
DLT	distributed ledger technology
DPO	days payables outstanding
DSO	days sales outstanding
EBRD	European Bank for Reconstruction and Development
ERP	enterprise resource planning
FCI	Factors Chain International
FI	financial institution
GeM	Government e-Marketplace (India)
GSCFF	Global Supply Chain Finance Forum
GTM	go-to-market
HKMA	Hong Kong Monetary Authority
ICC	International Chamber of Commerce
IFC	International Finance Corporation
IoT	internet of things
ITFA	International Trade and Forfaiting Association

KYC	know your customer
ML	machine learning
MSME	micro, small, and medium enterprise
NAFIN	Nacional Financiera (Mexico)
PBOC	People's Bank of China
PFI	participating financial institution
RBI	Reserve Bank of India
RFP	request for proposal
RFSP	Zhongzheng Receivables Financing Service Platform
SaaS	software as a service
SCF	supply chain finance
SME	Small and Medium-sized Enterprises
TFP	Trade Facilitation Program
TReDS	Trade Receivables Discounting System
UNCITRAL	United Nations Commission on International Trade Law
WBG	World Bank Group

All dollar amounts are US dollars unless otherwise indicated.

GUIDEBOOK CHAPTERS



01
Overview of Development Banks' Role in Promoting Supply Chain Finance



02
Overview of Supply-Chain Finance



03
Supply Chain Finance Market Players and Trends



04
Business Models and Approaches for Development Banks

Although the guidebook is arranged in seven separate chapters, there are of course a number of “crosscutting” thematic areas. The chapters encompass the following topics:

Chapter 1: Overview of Development Banks' Role in Promoting SCF

This chapter elaborates on the types of situations in which the intervention of a development bank or other public entity is accurate and at what level. Further, the chapter provides the overall context for understanding objectives and goals, target groups and sectors, underlying business models and main product types that exert significant influence on which SCF initiative approach can be applied later. Particular focus is given to the importance and benefits of establishing SCF initiatives as a way to fulfill their role.

Chapter 2: Overview of Supply Chain Finance

This chapter explains the basics of SCF. It gives an overview of the scope of SCF, basic descriptions of most frequently used product categories, and in which context they are applied.

Chapter 3: Supply Chain Finance Market Players and Trends

In this chapter, the authors provide an overview of the SCF market players and the influence of the newest technology trends on the SCF industry and how the trends support and change the way various players in the SCF market work with each other. The chapter further emphasizes how the enabling framework—for example, secured transactions/ABL reforms, standards for e-invoicing and e-identity, or digital payments infrastructure—can support the adoption of SCF with the creation of a suitable enabling legal and regulatory framework.

Chapter 4: Supply Chain Finance Business Models & Approaches for Development Banks

Development banks and other public entities can pick from multiple approaches for launching or supporting SCF initiatives. This chapter aims to provide basic guidance around the main determinants for finding suitable approaches and to categorize these approaches in light of the boundaries of the underlying business models of an institution while referring to example cases in practice.



05

Example Cases from Different Countries



06

Guidelines for Development & Implementation of a Supply Chain Finance Proposition



07

Conclusions & Key Takeaways

Chapter 5: Example Cases from Different Countries

Development banks and other public entities like central banks, monetary authorities, or export financing agencies around the globe have adopted the SCF proposition as a valuable tool for supporting their development goals. Several of the known initiatives and activities in Asia, Latin America, Africa, Europe, and the Middle East and North Africa are showcased in this guidebook and listed below. Some have been around for many years; others are still in their beginning or early proof-of-concept stages.

- **Nacional Financiera (NAFIN)**, Mexico: Cadenas Productivas
- **Banco de Inversion y Comercio Exterior (BICE)**, Argentina: e-Factoring
- **Asian Development Bank (ADB)**, all Asia: Supply Chain Finance Program
- **Reserve Bank of India (RBI)**, India: Trade Receivables Discounting System
- **Credit Reference Center of the People's Bank of China (PBOC-CRC)**, China: Receivables Finances Service Platform
- **African Export-Import Bank (Afreximbank)**, all Africa: Factoring promotion and plans for an SCF initiative
- **European Bank for Reconstruction and Development (EBRD)**, Central and Eastern European countries, Middle East and North Africa: Trade Facilitation Program
- **Hong Kong Monetary Authority (HKMA)**: eTradeConnect
- **International Finance Corporation (IFC)**, worldwide: SCF-Related Advisory, Financing and Investment

Chapter 6: Guidelines for the Development & Implementation of a Supply Chain Finance Proposition

This chapter provides insight and descriptions of the main aspects to consider when a development bank or other public entity endeavors to start an SCF initiative. The chapter offers a structured guidance, describing the main building blocks for strategy elaboration, design of the product and processes, decision making and implementation of the technology platform, and, finally, the go-to-market.

Chapter 7: Conclusions & Key Takeaways

The last chapter summarizes the major takeaways and opens the room for a constructive future discussion about the roles that development banks and other public entities can play in the provision and evolution of SCF within their markets and beyond.



The emergence of fintech and new technologies in the area of financial services fuels the optimism that new solutions are being created to close the finance gap

INTRODUCTION

For many small and medium enterprises (SMEs), access to financing is a challenge. The World Bank Group estimates the finance gap among formal micro, small, and medium enterprises (MSMEs) in developing economies to be 18 percent of GDP. In addition, there's potential demand for financing among informal MSMEs, reaching 11 percent of GDP in these countries. The MSME finance gap as a percentage of GDP varies considerably across regions, ranging from around 19 percent in Southeast Asia to 43 percent in Sub-Saharan Africa¹. This finance gap is of particular concern because SMEs are a leading driver of trade, economic development, and employment.

In principle, all businesses need financing either for investment or as working capital for daily operations. Working capital is employed to purchase the input materials for production, to finance inventory, and to bridge the time until customers pay their invoices. Hence the terms of trade, the duration of production cycles, and collection methods determine which party in a trade relationship bears the burden of having to finance the working capital, which is bound within the value chain. Various analyses indicate that multiple trillions of dollars are trapped in global value chains—either in inventory, during production, in transit, or in receivables—which could be partly unlocked when applying the appropriate instruments².

Access to suitable instruments to manage working capital requirements, the particular focus of supply-chain finance (SCF), is therefore a key element of tackling the finance gap among SMEs. SCF is defined as the use of financing and risk-mitigation practices and techniques to optimize the management of the working capital and liquidity invested in supply-chain processes and transactions³.

Globalization as well as digitalization are influencing how the parties in a supply chain work with each other. The emergence of fintech and new technologies in the area of financial services fuels the optimism that new solutions are being created to close the finance gap, especially for SMEs. Modern SCF solutions—thanks to the way they are structured—are perceived to be among those solutions that aim to overcome traditional lending limitations. Development banks, central banks, and other public institutions around the world, in accordance with their mandates and depending on the circumstances of their specific markets, are actively exploring SCF solutions as a viable way to facilitate more access to credit to SMEs. As this guidebook explains, public-sector institutions can contribute to the development of SCF in their markets, consistent with their mandates to support economic development and lay foundations for the broader private financial sector to provide SME finance through this product.

In a recent study on SCF, the World Trade Organization (WTO) emphasized the power of innovative SCF solutions to help bridge the finance gap for SMEs. This endorsement builds on increasing interest in this form of financing in recent years for the following reasons⁴:

- SCF facilitates access to new territories without taking on country risk.
- SCF enables SMEs previously considered “unbankable” for traditional trade-finance products to access credit.
- SCF expands the existing range of products for customers that fit into banks’ strategy of “focusing on core customers.”

While SCF is popularized via thought leadership, advocacy, and industry-level efforts, the level of adoption varies among geographies. Some of the main reasons and shortcomings responsible for lower uptake of SCF in some countries may be summarized in the following types of market gaps:

Legal and regulatory framework:

- Lack of necessary legal framework and infrastructure to ensure the enforcement of creditors’ rights in cases of conflicting claims
- Inability of the legal framework to facilitate use of assets as collateral⁵

Knowledge and capacity:

- SCF solutions are broadly unknown to both the banking sector and its clients
- Lack of adequate skills among banks about the implementation of SCF programs

- Lack of understanding SCF’s programmatic approach to serve/connect various parties of all sizes (small, mid-size, and large)

Technological infrastructure:

- Low technological capacity within the banks to provide themselves and manage SCF
- Inability to cover the costs of technology development or external SCF technology providers and to reach the necessary scale

Risk perception and funding:

- Lower appetite to venture into a new product category such as SCF, which may be misperceived as being a risky undertaking
- Constraints in liquidity for funding sizeable SCF programs
- Constraints on financial institutions’ (FIs) product offerings due to banking regulations

To close the market gaps successfully and help SCF unfold its full potential in underserved markets, these points need and can be addressed. First, a robust enabling framework is required, which funders (banks and non-banks) can rely on to be incentivized to adopt SCF in their product portfolios. Establishing an enabling framework for financial infrastructure has a positive impact on the evolution of SCF. It requires—if not already in place—adequate reforms led by regulators, legislators, and central banks, making public institutions a relevant actor to catalyze such reforms.

Multinational and national development banks and other public institutions can play an active role in mobilizing public and private-sector resources to support the creation of a sound SCF ecosystem.

A legal and regulatory environment by way of secured transactions and asset-based lending (ABL) reforms, where, for example, movable assets can be used effectively as collateral and, at the same time, provide effective credit protection, is a critical step toward responsible and inclusive access to finance⁶. The establishment of transparent credit-reporting standards, the existence of efficient insolvency rules, and the effectiveness of enforcement mechanisms are key to ensuring a predictable regime. Further, in light of ongoing digitalization of whole value chains, the definition of rules and standards for e-invoicing, the provision of secure digital payments solutions and infrastructure, the possibility for e-identification and authentication of users, and the legal acceptance of e-signatures become more and more important for the creation of a modern SCF offer.

The private sector can leverage this infrastructure to build innovative SCF propositions to help them overcome the obstacles they generally face in their traditional lending offers—for instance, the cost of providing bank services to SMEs, conditions regarding creditworthiness or collateral requirements, lack of formalization of businesses, and identification and documentation.

However, it is certainly not enough to only overcome these obstacles; a successful launch of new products and services also requires building trust in FIs, bridging the distance and enabling accessibility, and improving awareness and financial literacy. These demand-side factors probably are not issues to be solved by a single institution, but in collaboration with several market participants⁷.

Indeed, multinational and national development banks and other public institutions can play an active role in mobilizing public and private-sector resources to support the creation of a sound SCF ecosystem. Intervention and functions of development banks become even more imperative in light of limited access to finance to the SME segment and especially in times of crisis. National development banks, for instance, are particularly suited for supporting and enhancing local SME financing, because, due to their development mandate, they often have a strong knowledge of the local private sector, solid partnerships with local commercial banks, and a good understanding of local barriers to investment⁸. Multilateral development agencies such as the World Bank Group/International Finance Corporation, Asian Development Bank, and European Bank for Reconstruction and Development are strong enablers while supporting the SCF ecosystem and providing second-tier financing.



Several public institutions worldwide have already adopted SCF within their scope of activities, as examples in this guidebook showcase. However, their role and adopted approaches vary remarkably. With their SCF initiatives, they either support SMEs directly or extend and complement the capacity of commercial banks to provide financing to SMEs, contributing to their growth by developing and providing risk-mitigation mechanisms and technology platforms. Others focus on the existence of an enabling legal and regulatory framework, adequate operational aspects, and a suitable institutional infrastructure as factors that are key to the successful development of these programs.





Development banks may be positioned to support innovative financial instruments to efficiently address market failures related to access to finance.

Chapter 1

Overview of Development Banks' Role in Promoting Supply Chain Finance

Development finance institutions can play an active role by fostering initiatives, such as SCF, that can for instance, drive local economic growth, increase financial inclusion, and support the closing of market gaps. The main characteristics and specialties of development banks with regard to their goals, policy mandates, business models, target clients, products and services, and pricing and funding structures, are essential determinants for the approach that a development bank can take in promoting the development of an SCF initiative.

Recent studies show that there are over 550 development banks around the world⁹, the vast majority of which, around 520, are national development banks located in 185 countries¹⁰. In addition to national development banks, there are several multinational development banks, such as the Asian Development Bank (ADB), EBRD, and, at a global level, the World Bank Group. Many national and multinational development banks have taken different approaches in promoting SCF initiatives, as the examples provided in Chapter 5 show.

Development banks are highly diverse in terms of their size, financial performance, development objectives, business models, funding arrangements, and governance practices. They operate in multiple economic sectors and market niches (for example, agriculture, infrastructure, international trade, housing, tourism, energy), and their ability to reach customers in sectors that private FIs do not serve sufficiently makes them a relevant actor in the global development agenda.

Development banks may be positioned to support innovative financial instruments to efficiently address market failures related to access to finance. They can fill certain market gaps caused by the inadequate supply by private FIs. As outlined in the introduction, the undersupply of SCF offerings in certain markets is related to gaps in the enabling framework, awareness and knowledge about SCF, technological infrastructure, and risk perception and funding.

Development banks can fill certain market gaps caused by the inadequate supply by private FIs.

Where the goal is a market-oriented economy, public institutions should intervene only when their activity is additional to and supportive of private-sector activity, such as when private-sector players are unable to develop the necessary environment and capabilities on their own. Given the market gaps identified, public entities can consider the following four different focus areas to support the development of SCF. They can be applied individually or in parallel, based on the circumstances and market assessment of the particular country/region.

1. Fostering policy reforms or laws for the establishment

of a suitable and solid legal and regulatory environment that will form the basis for the contractual agreements and operational conditions of SCF programs, with the goal of enabling and incentivizing the private sector to provide SCF financing

2. Supporting the SCF ecosystem

by creating awareness and building up the necessary knowledge and capabilities among the players and orchestrating SCF initiatives with various stakeholders, such as banks, non-bank financial institutions, corporations, SMEs, fintech institutions, and other relevant players

3. Promoting private and publicsector investment in SCF with de-risking instruments

(for instance, in the form of cofinancing, refinancing, or subsidized guarantees/insurance instruments) that induce the private sector to participate in SCF initiatives

4. Providing the technological SCF infrastructure

either by financing or by investing directly in infrastructure to support SCF, or by setting up the required technical infrastructure for the private sector to participate or operate

Figure 1.1: Focus Areas Addressed in SCF Initiatives by Development/Central Banks



Within the above context, national development banks and central banks can be catalysts in launching SCF initiatives for their countries, working with legislators and regulators to develop robust and reliable frameworks, providing risk-sharing support to commercial banks or providing SCF-enabling infrastructure, as some of the examples described in Chapter 5 show. Multilateral development banks can be well suited to play strong advocacy and advisory roles, supporting national development banks by sharing knowledge for the launch of SCF initiatives when this approach is necessary. Both types of development banks can provide financing and risk sharing in order to support local commercial banks' participation in the SCF market.

Several development banks and central banks across the globe have already adopted SCF within their scope of activities. Their roles and approaches vary, as does the depth of their interventions.

1.1 Main Goals and Functions of Development Banks

In general, development banks serve to advance productive development policies. The goals of such policies are multifold and may be centered—without being exhaustive—around the following themes:

- Closing market gaps
- Access to finance for MSMEs
- Financial inclusion
- Financial literacy
- Fighting the negative effects of economic crisis
- Gender equality
- Socioeconomic progress
- Infrastructure development and digitalization of economies
- Environmental improvement
- Sustainable development

In 2015, a new set of global goals for sustainable development to be achieved by 2030 emerged as a result of international conferences on sustainable development,

financing for development, and climate change held by Member States of the United Nations. These 17 new goals place great emphasis on a development model where the public and private sectors have complementary roles to support sustainable growth and improve lives. The established goals reach economic, social, and environmental dimensions. Many development banks and other government institutions have adopted these sustainable development goals¹¹.

Correspondingly, not only do development banks aim to finance projects that the private sector is unwilling or unable to finance, but they also help to create new market niches, develop innovative schemes to attract and channel private-sector resources to large infrastructure projects, build capacity in public and private-sector institutions, conceive and structure new investment projects, and facilitate the execution of public-private partnerships¹².

1.2 Policy Mandates

On the basis of their mandates, development banks can be divided into the following two groups:

- Institutions with a **narrow, specific mandate** that explicitly refers to the sector(s) or type(s) of customers or activities that a development bank is expected to support
- Institutions with **broad mandates** formulated in general terms without reference to any particular sector, activity, or customer (for example, a mandate to promote social and economic development)

While some institutions with narrow mandates specifically target SMEs, most development banks with broad mandates also target SMEs, which, as will be explained in the next chapter, are the main beneficiaries from SCF products. Hence, regardless of the policy mandate, the SME focus is somehow inherent in many development banks.

1.3 Business Models

Lending is the core business activity for most development banks. It can be done in the following ways:

- **Second-tier:** Lending to other financial intermediaries that borrow from development banks and then on-lend funds to end clients
- **First-tier:** Lending directly to end borrowers
- **Combined:** A combination of second-tier and first-tier lending models

Development banks with a first-tier lending model deal directly with end clients and assume the inherent credit risk fully. This model requires the development bank to have its own operational structure (for example, in the form of branches) to reach its target group. Having this structure can result in higher operating costs but could also lead to lower interest rates offered to end customers, as the funding is not channeled through other FIs.

Operating costs tend to be lower at development banks with a second-tier lending model because they provide financing to private FIs that then select and assess loan applications of end customers, partially absorbing the credit risk. Development banks under this model can reach more end customers and expand their geographic reach without the need to expand their own structure, which impacts operating costs. This model also fosters the growth of private financial intermediaries by encouraging them to reach out to sectors and clients they would not have serviced otherwise, making them a crucial instrument for channeling development bank resources.

Both business models can support SCF initiatives in development banks with successful results.

1.4 Target Clients

The type of clients targeted by development banks depends much on their policy mandate (narrow or broad) and their business model (first-tier, second-tier, or combined). However, the main target clients of all types of development banks are to be found in underfinanced segments.

Within the full spectrum of development banks' clients, there are different financing needs between clients in the private and public sectors. Within the private sector, they primarily target SMEs and large private corporations, and finance private financial intermediaries that borrow funds to on-lend to end borrowers or use guarantees that development banks issue to mitigate credit risk in their lending. Development banks targeting public sector customers aim to ensure economically efficient and operationally effective support for the government's social and economic programs.

MSMEs are an important type of client for the vast majority of development banks, regardless of size or mandate, primarily because lack of access to finance for MSMEs remains one of the key challenges in the financial sector, especially in low- and middle-income countries.

1.5 Products and Services

Development banks offer a wide range of lending and financial products and services to their target clients. The most popular lending products among national development banks¹³ are the following:

- Long-term loans
- Loans for working capital
- Bridge or short-term loans
- Syndicated loans

Development banks are also dedicated specifically to trade finance, which in many countries is critical to promoting export and import development, and are core players in infrastructure finance/investments.

Although not among the top three types of loans, many development banks offer loans related to new product launches or start-up activities, signaling strong support for innovation and entrepreneurship. This is even more prevalent in developing countries.

Further, development banks engage in the following financial products and services, beyond lending:

- Loan guarantees
- Risk participations and mitigation measures
- Private equity and venture capital
- Deposit accounts
- Services such as debt collection, microinsurance, brokerage for real estate and other assets

Finally, many development banks supplement the list of financial products and services with an active portfolio of nonfinancial activities, such as the following:

- Consulting and training for private-sector firms and public institutions
- Other types of advisory and technical assistance
- Networking support and business matching

1.6 Funding Structure and Pricing

The funding structures of such banks are diverse and can take different forms¹⁴, such as the following:

- Deposit taking from the public
- Resources from FIs, including multilateral organizations (example: the World Bank Group)
- Debt issuance in national and/or international capital markets
- Equity issuance
- Institutional savings
- Government transfers and donor credit lines

The exact funding mix is important in determining their ability to pursue their socioeconomic goals; it greatly influences the way in which their resources are mobilized—that is, the kinds of projects they fund and the interest rates they charge on their loans¹⁵.

A frequent issue for development banks is setting an adequate price for their financial products and services¹⁶. Institutions can fall into two main categories regarding pricing: institutions that offer only loans priced at market interest rates, and institutions that offer both market-based and subsidized loan products.

Institutions that are not compensated for the cost of providing lending at subsidized interest rates will ultimately face losses and failure. Therefore, it is critical that subsidized lending does not compromise their financial soundness.

It is in terms of pricing where the role of development banks is also relevant, since they can provide suitable financing conditions for promoting SCF initiatives. Often, they do not have a profit objective but pursue financial-sustainability goals. They can provide funding, risk sharing (and loan guarantees) to commercial banks and other non-bank financial intermediaries that join their SCF initiatives at attractive (below-market) interest rates to promote better prices and greater access to finance for SMEs.

1.7 The Role of SCF in Supporting the Development Banks' Goals

As will be explained in detail in the following chapters, providing liquidity and working capital is the core focus of SCF solutions, making them an effective tool for development banks to channel financing to SMEs.

In many countries, especially developing, SMEs consider access to finance as a very significant obstacle to business growth. Many of them are unbanked and rely on working-capital financing from sources other than banks. This is partly due to the fact that the credit risk of such businesses is typically difficult to assess, and their working-capital needs are frequently unpredictable due to volatile or delayed payment by their clients. As long as their clients do not settle their bills, the working capital is bound within the value chain and cannot be reused—for example, for the purchase of raw materials or paying wages.

A company needs the right amount of working capital in the form of current assets—that is, cash and cash

equivalents, receivables, inventory—to function optimally. With too much working capital, some current assets would be better allocated elsewhere; with too little working capital, a company may not be able to meet its day-to-day cash requirements. Many SMEs face a challenge in how to convert their accounts receivables into cash or how to obtain financing for the buildup of their inventory and purchase orders. In addition, many suppliers struggle with the uncertainty as to when they will be paid by their customers and the request for longer payment terms and delays. This puts a tremendous strain on these smaller companies and their ability to manage operations. Given these financial and operational factors, SME suppliers are eager to obtain lower-cost and predictable incoming payments and/or financing.

Like traditional forms of commercial lending, SCF solutions provide SMEs with working-capital financing (*see definitions of the different product schemes in Chapter 2*), while having a risk profile more favorable than traditional SME financing. One of the key benefits of SCF product structures is the possibility of having risk transfers, either from SMEs to the large buyers or to a credit insurance. The FI may also benefit from the diversification effect of a portfolio of debtors, instead of relying on just the single credit risk of the SME. All this enables the FI to bring down its cost of funding, which in the end makes this type of financing affordable for the targeted SME.

While many commercial banks and also development banks have been offering SCF products for some time, SCF as a structured industry gains even more pace with globalization, new technology, and the challenges caused by economic turmoil. The SCF industry has proven its ability to support SMEs' financing need and the positive effects of stabilizing supply chains, which itself is a valuable achievement for the health of an economic system. While SCF is already widely applied and used with great volumes in developed economies, adoption rates, especially in developing markets, are still low. To address this gap, development banks and other public institutions may take a leading and enabling role in promoting SCF, especially for underserved segments, such as SMEs. Depending on their business model, they can take on this

role in different ways and apply different approaches to achieve it, as will be described in the following chapters.

Therefore, development banks and other government institutions can leverage SCF solutions as an important vehicle to channel financing to key sectors, such as trade, and to key segments, such as SMEs, as they perform a mandate given by the state. Depending on the SCF approach they choose to apply, they can also support and complement the role that commercial banks play in financing SMEs.

Development banks, especially in emerging markets, have considerable potential to be the precursors for SCF initiatives in their countries following their mandates and depending on the circumstances in their markets. They are in unique positions as government agencies and public institutions to achieve scale and innovation and collaborate with private commercial FIs. Importantly, they can kick-start the dialogue with regulators and policy makers so the development of enabling frameworks becomes more effective. They can advise and support commercial banks in the development of new products not being offered in the market, or by establishing multifunder platforms, they can engage other less prominent lenders in SCF. Development banks and central banks can indeed be the central stakeholder in SCF initiatives, facilitating and promoting the SCF ecosystem more efficiently in their countries.





The overall life cycle of an SCF transaction is defined by mapping the physical value chain and its multiple institutional participants

Chapter 2

Overview of Supply Chain Finance

The concept of SCF has undoubtedly developed in the last years. Both financiers and technology providers have created a broad variety of solutions along the whole supply chain. Given the multitude of different schemes and terminology, this chapter aims to provide an overview of the scope of SCF, basic definitions, and descriptions of most frequently used product categories and when they are applied.

The content will refer to the *Standard Definitions for Techniques of Supply Chain Finance*¹⁷, which was issued in 2016 as a collaborative product of the Global Supply Chain Finance Forum (GSCFF) to bring light to the terminology and support the creation of a consistent and common understanding about SCF. The publication defines SCF as follows¹⁸:

"Supply Chain Finance is defined as the use of financing and risk mitigation practices and techniques to optimize the management of the working capital and liquidity invested in supply chain processes and transactions. SCF is typically applied to open account trade and is triggered by supply chain events. Visibility of underlying trade flows by the finance provider(s) is a necessary component of such financing arrangements which can be enabled by a technology platform."

2.1 Scope and Participants of SCF

The overall life cycle of an SCF transaction is defined by mapping the physical value chain and its multiple institutional participants. Usually, a supply chain comprises of multilayer structure with many stakeholders and interlinkages, which can be further complicated by globalized business models and cross-border transactions.

SCF tools enable a win-win situation among participants by solving conflicts of interest and removing hurdles for the provision of financing

2.1.1 Direct Participants in SCF

Direct parties to SCF transactions consist of the **buyers** and **suppliers** and distributors that trade and collaborate with each other along the supply chain. As the situation may require, these parties work with **finance providers** to raise finance using various SCF techniques and other forms of finance¹⁹, with the aim to reduce capital costs by means of integrated relationships of partners in the supply chains.

The motivations of the buyer, supplier, and distributor for participating in SCF programs vary depending on their individual (financial) situation, their

relative position in the whole value chain, and the nature of the relationships of the participants. Often there is imparity of size and strength along the value chain. SCF tools help set the framework for a win-win situation among the involved parties by solving conflicts of interest and removing hurdles for the provision of financing.

Even if participants expect the SCF in the first place to provide financial benefits, the set of goals and motivation encompass nonfinancial aspects, as figure 2.1 illustrates by showing the Goals for participating in an Approved-Payables Finance program (see section 2.3.3 for the product description.)

Figure 2.1: Financial and Nonfinancial Goals for Participating in an Approved-Payables Finance Program²⁰



Finance providers in SCF programs can be commercial banks, development banks, non-banks, and, recently, also investors or even the buyers themselves, which will be further described in chapter 3.1. Their motivation depends mainly on their individual strategy and mandate.

When going deeper into the value chain, suppliers of the suppliers can be found on one side, and distributors and their clients can be found on the other, and they could have business-to-business (B2B) or business-to-consumer (B2C) relationships among them.

Also, the relativity of positioning needs to be noted. A mid-chain supplier could be an anchor with respect to suppliers farther upstream, while a distributor in a multilevel system could be an anchor relative to its supplier(s) and the next level of distributors downstream.

Leveraging the largest anchor companies (buyers) and their supplier base in some geographies is likely the key to starting the development of an SCF market. Based on this, development banks need to understand foremost the needs of large anchors when initiating SCF programs and

how they could help establishing them with their banking partners or directly.

The illustration presented in figure 2.2 still helps explain the connections within supply chains with multiple tiers. Nonetheless, in recent years, with regards to new SCF product propositions—partly propelled by technology—a certain shift from a very much anchor-centric perspective to a supply-chain network perspective can be noted.

Having said this, it is also clear that no one instrument can cover all the trade and financial needs of all the different parties along the end-to-end flow of business. The SCF portfolio therefore encompasses a broad range of techniques that can be applied according to the specific situation.

2.1.2 Stakeholders in SCF Ecosystem

The SCF ecosystem consists of a diverse set of players. In the first place, there are the direct parties to the underlying trade and the related financing transactions: buyers, suppliers, distributors, and finance providers.

Figure 2.2: Illustration of Example Supply Chain²¹

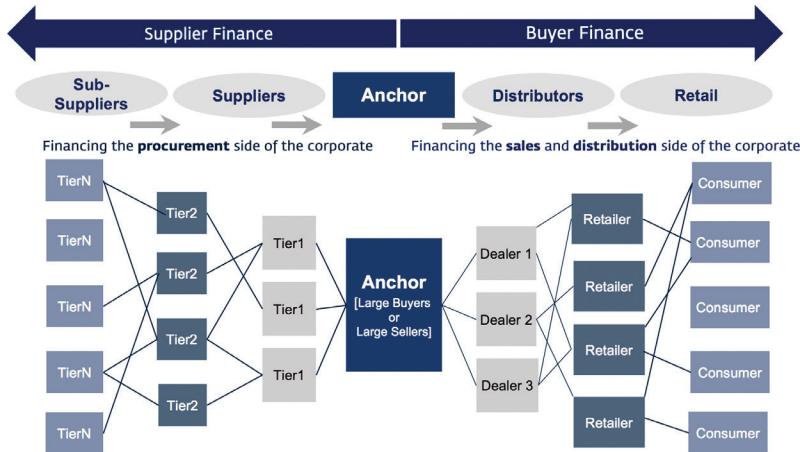


Figure 2.3: Illustration of SCF Ecosystem²²

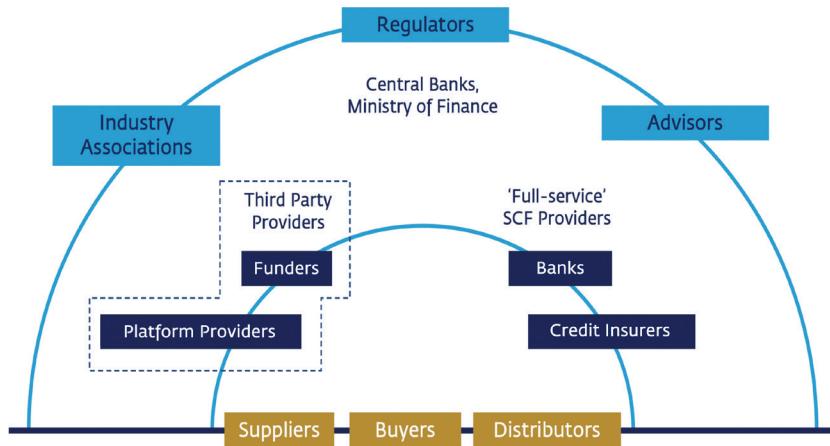


Table 2.1: Stakeholders in the SCF Ecosystem Supporting the Provision of the SCF Product

Partners	Description/Role
Credit insurance companies	Insurance companies allow SCF providers, including fintech institutions, to transfer credit risk and outsource credit processes. Examples of such players are Euler Hermes, Coface, and Atradius. They also have a great pool of data on economic developments and payment behavior. Buyers, suppliers, and banks can leverage their research and prognosis for payment terms and payment delays to support decisions on whom to trade with and under which conditions. Recently, credit insurance providers started to be involved deeper in developing new SCF financing models in cooperation with banks and fintech institutions in the distributed ledger technology (DLT) space (example, AIG).
Technology providers	Software vendors specialized in SCF solutions enable the buildup of SCF platforms. e-Invoicing solution providers supplement the SCF application. Tech companies may also do the programming of DLT-based solutions and complement SCF with artificial intelligence (AI) and applications related to the internet of things (IoT).
Third party Platforms and fintech institutions	Trade-facilitation platforms are B2B trade networks that can be connected with SCF programs in order to reuse already-existing data on trade relationships and transactions and for directly giving access to the SCF services through these platforms. Some fintech institutions are increasingly looking to transition from processing services to higher-margin products like financing. Over time, fintech institutions have expanded their product offering across the value chain. Like the B2B platforms they started working upstream, offering sourcing services, contracting, procurement, and invoicing, and subsequently expanded into SCF.*
Outsourcing-Service Providers	Using outsourced services such as call centers reduces relationship-management cost, as they are efficient and cost-effective ways to serve clients (for example, for supplier onboarding and registration services, data providers).
Transport and logistics providers	Both increasingly play a role in providing data and supporting financing structures with their services or even by acting as the funding party themselves.

*IFC, Supply Chain Finance Knowledge Guide.

Finally, further relevant stakeholders in the SCF ecosystem deal with the enabling framework, such as policy and lawmakers (law), regulators (ministry of finance, central banks, tax authorities), and supporting legal practitioners, as well as accounting firms and auditors.

Legislators are essential when it comes to establishing underlying laws—for example, secured transactions or factoring laws and insolvency regimes—as well as adapting the laws to provide for e-invoicing and the acceptance of electronic signatures. Regulators play an important role in issuing regulations and implementing the appropriate operational frameworks—for example, to institute movable collateral registries, promoting SCF standards and guidelines.

Further, a number of national and international industry associations—for example, Factors Chain International (FCI), the International Trade and Forfaiting Association (ITFA), and the International Chamber of Commerce (ICC)—play a significant role in facilitating the growth of SCF markets by establishing standards, providing advisory services, conducting surveys, publishing market statistic, and establishing educational tools for SCF. They promote SCF initiatives by organizing conferences and joint sessions with key stakeholders, including FIs, corporations, and governments. For example, ICC conducts a yearly summit on SCF to share best practices and insights across institutions, allowing them to enhance their SCF programs based on learnings shared at the summit²³. In addition, ITFA issues valuable guidelines example draft contracts and is commenting on law initiatives on behalf of its members.

2.1.3 Linking Physical and Financial Supply Chains

As stated in the definition for SCF above, various stages along a supply-chain cycle are triggered by several events along the physical and financial value chains. Accordingly, it is common to distinguish the SCF product scope by these stages—that is, pre-shipment, in-transit, and post-

shipment financing. Further, depending on who is the initiating party, there is a categorization into buyer-led and supplier-led SCF solutions.

The supply-chain cycle is called the “purchase-to-pay” (P2P) process when looked at from the buyer’s perspective and the “order-to-cash” (O2C) process when seen from the supplier’s point of view. Figure 2.4 aims to show the stages in the P2P and O2C cycle of companies with all the activities of either a buyer or a supplier who transact in the physical supply chain with each other. At the time of fulfillment of specific stages, FIs can hook in with a certain type of finance offers (pre-shipment, inventory, or post-shipment finance solutions), payment, or other service offers.

It is vital to understand the physical flows and processes within and between the trade partners to identify the right anchor points for the respective SCF product category. This anchor points are in practice the data related to a trigger event — for example, the remittance of a purchase order, the provision of shipping documents, the issuance of an invoice, or the acceptance of an invoice. The evolution and application of new technologies enable the tracking and control of the trigger events, and support automatization and the creation of new SCF products.

2.2 Product Categories

Figure 2.5 shows a selection of SCF products in three main categories²⁴. They may have either an accounts-receivable-centric or accounts-payable-centric approach based on invoices, or they are grouped under “Other SCF” that possess mainly a loan or advance character.

The main differentiator is that an invoice must have been issued for all the products of the invoice-based categories — implying also that they occur within the post-shipment phase. In the case of receivables discounting, forfaiting, factoring, and payables finance, there is usually a transfer of rights in this receivable happening.

Figure 2.4: Service Model for SCF²⁵

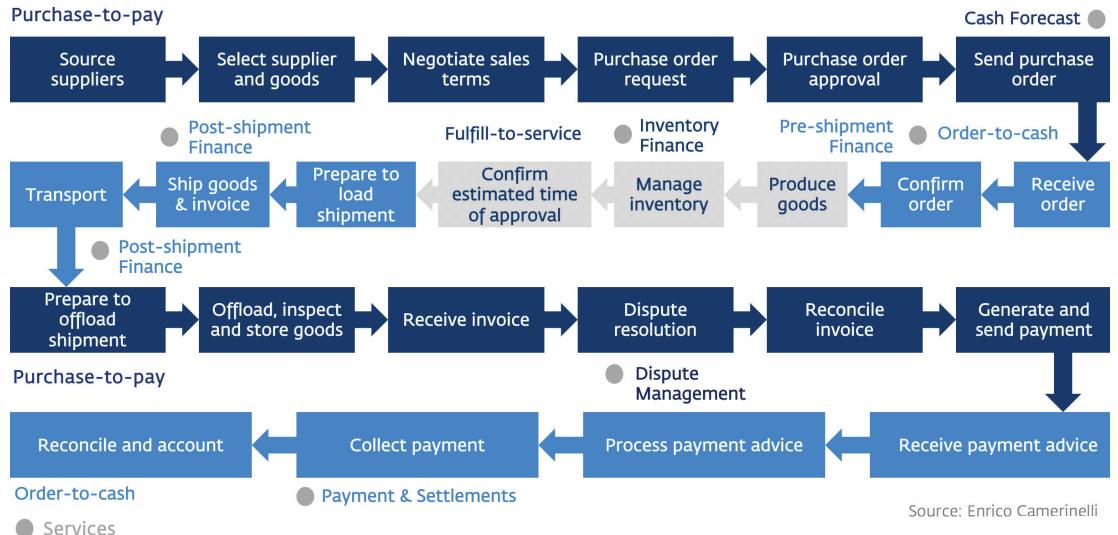
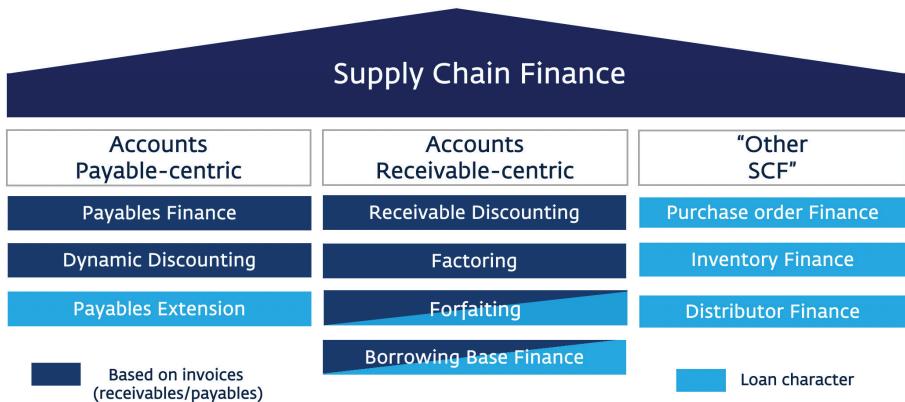


Figure 2.5: SCF Product Categories²⁶



Source: MHCF 2020, based on Standard Definitions for Techniques of Supply Chain Finance (2016), with amendments

The transactions of all sorts of pre-shipment finance (for example, purchase-order finance), inventory finance, distributor finance, and loans/advances against receivables (also called borrowing base finance) usually have a loan character.

2.3 Short Overview of Selected SCF Product Types

From the product portfolio displayed in figure 2.5, this section focuses on the description of five selected SCF product schemes²⁷.

- Receivables discounting
- Factoring
- Payables finance (reverse factoring)
- Distributor finance
- Purchase-order finance

These are, on the one hand, the well tried and tested products. On the other hand, they are considered to have a positive effect on increasing SME financing. At the same time, their use is still underdeveloped in emerging markets for different reasons—although the use cases are very well recognized in those markets. Hence, they present good potential to support the goals of a development bank.

It must be noted that the following descriptions highlight only the main distinctive features of the various products and the context in which they are applied. In practice, the solutions may have variations depending on who is offering them and in which legal and regulatory environment the SCF provider is operating.

2.3.1 RECEIVABLES DISCOUNTING

Definition

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.

Main Features

Receivables or invoice discounting falls under the receivables purchase category and may be offered with or without recourse to the seller, and financing is provided for 100 percent of the invoice nominal amount or withholding a security margin for possible dilution or credit deterioration, resulting in a financing amount of, for example, 90 percent of the invoice nominal. Given the flexible nature of the product scheme, the bank and supplier may agree on the use of the product on a one-off, seasonal, or continuous basis.

The supplier and the finance provider execute a receivables purchase agreement, in which, for example, the supplier, via the assignment of rights to the receivables, transfers all the rights and benefits of the receivables to the finance provider (structured as a “true sale”). It can be disclosed or undisclosed to the buyer. If the transaction is disclosed, the collection may be undertaken by the seller or the finance provider. In order to prevent the commingling of funds, designated collection accounts can be used. Although the buyer is not a party to the agreement, sometimes it may be asked to validate the existence of the receivables and/or indicate approval or acceptance of payment. In addition, depending on the local jurisdiction, the buyer may need to acknowledge the sale of the receivables.

As a means of risk mitigation, finance providers may share credit risk with a third party—for example, trade credit insurance or risk participation by other financial intermediaries/institutions—to limit single exposure.



Basic operational flow (simplified example structure):

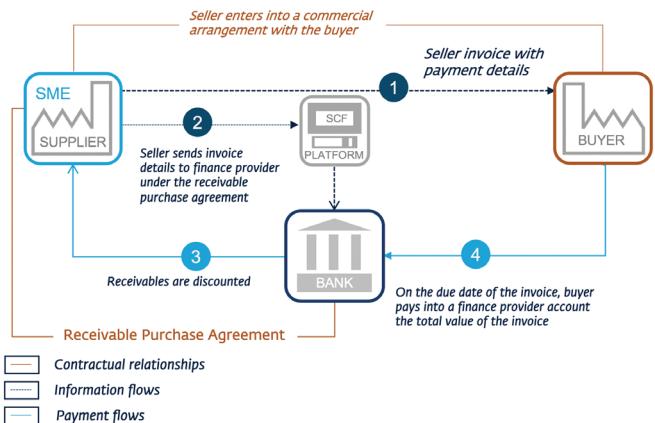
- The supplier sends the invoice to the buyer.
- The supplier also sends invoice details to the financing provider and requests financing under the receivables purchase agreement.
- The financing provider advances the funds to the supplier, applying the agreed advance rate (100 percent of invoice or minus a security margin) and deducting the calculated discount.
- Usually, the financing provider manages the collection from the debtors, but collection by the supplier as an agent for the bank is also possible.
- If applicable, after successful collection, the financing provider submits the security margin withheld.

Benefits:

Table 2.2: Benefits of Receivables Discounting

Finance Provider(s)	Supplier	Buyer
<ul style="list-style-type: none"> Differentiated and flexible product setup for SME clients. Credit exposure with a lower risk-profile due to the supply chain-related nature of the financed transaction. Possible risk transfer to credit insurance. 	<ul style="list-style-type: none"> Receive early payment and improve liquidity, cash-conversion cycle, and key performance indicators (KPIs). Access to working-capital finance and reduction of late-payment and default risks (especially in case of non-recourse). Growth of business on open-account terms, as receivables can be discounted immediately after invoice issuance. Balance-sheet improvement, as receivables can be disregarded from the balance sheet after the discounting transaction (in case of non-recourse and true sale nature). Potential cost reduction if collection services from the financing provider is used. Confidential nature in case of undisclosed version of the product. 	<ul style="list-style-type: none"> Higher likelihood of contracts with suppliers on open-account basis. Increase of order volume from suppliers due to their improved access to working capital. Improved stability in the supply chain.

Figure 2.6: Receivables Discounting Flow Chart



2.3.2 FACTORING

Definition

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, typically, the finance provider becomes responsible for managing the debtor portfolio and collecting the payment of the underlying receivables.

Main Features

Factoring is based on an agreement between the supplier and a finance provider (the factor). It finances the supplier's working capital on an ongoing basis while helping manage debtor credit risk. Factoring provides finance via early payment of receivables.

The buyers—in factoring called the “debtors”—are not a party to the factoring agreement and become aware of its usage only in the case of a disclosed factoring or when the local legal regime requires for a notification of the assignment/purchase of the receivables or even an acknowledgment by them. Credit insurance is also frequently used to mitigate debtor risks. In practice, factoring comes in a lot of different variations and features that can be flexibly combined. Various modalities can apply depending on the legal environment, market standards, and risk appetite (see figure 2.7 for an overview of frequently used features.) Frequently, the factor will also take care of debtor management and collection of payments.

Figure 2.7: Features of Factoring Solutions²⁸

Scope of service	Full Factoring vs. Inhouse Factoring
Region	Domestic vs. Cross border
Risk	Recourse vs. Non-Recourse/with or without insurance cover
Transparency	Confidential vs. Disclosed Factoring (with Debtor Notification)
International Factoring	Export factoring & Import factoring (two-factor system)
Debtors	Whole ledger Factoring vs. Spot factoring (selective)
Detail of information	Single invoice information vs. sum of receivables position
Collection	Bank collects due amounts from buyer vs. supplier collects as agent for the bank

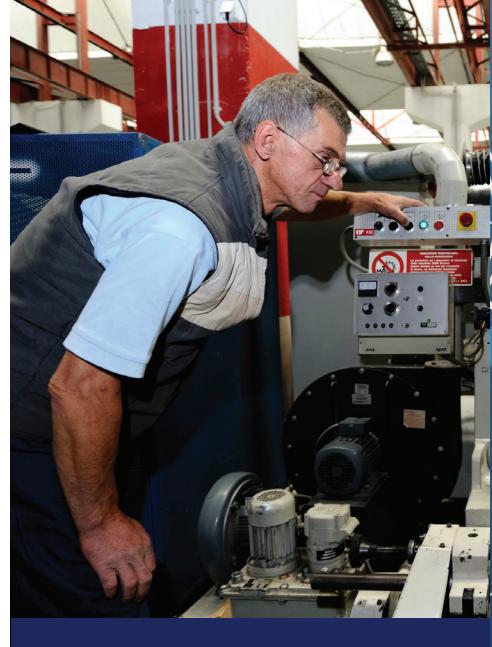
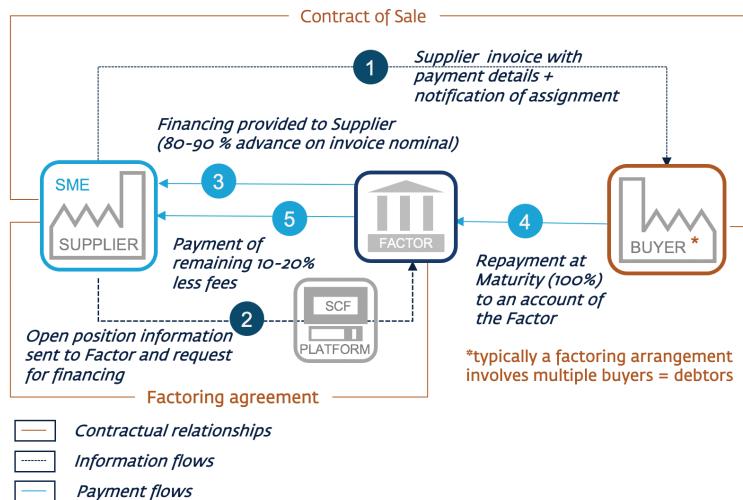
*Typically various modalities/features are combined:
e.g. Domestic + non-recourse + disclosed + inhouse + whole ledger

Source: MH Corporate Finance 2019

Basic Operational Flow

- The factor reviews the debtor portfolio and determines eligible debtor (“corporate”) risk.
- The supplier sends the invoice to the buyer (carrying a notification of assignment in the case of a disclosed factoring).
- The supplier sends a list of open-accounts receivables to the factor and requests financing under the factoring agreement.
- The factor advances funds to the supplier, applying the agreed advance rate (typically 80–90 percent).
- The factor manages the collection from the debtors (as displayed in figure 2.8). Alternatively, collection by the supplier as an agent of the bank is also common. Depending on the arrangement, the bank also provides ledger management, oversees the collection and dunning process, and takes the debtor risk.
- After successful collection, the factor submits to the supplier the remaining amount (10–20 percent), less the factoring fees.

Figure 2.8: Factoring Flow Chart



Benefits:

Table 2.3: Benefits of Factoring

Finance Provider(s)/Factor	Supplier	Buyer
<ul style="list-style-type: none"> Differentiated product offer with flexible setup for SME and large corporate clients. Provide financing to SMEs, while diversifying the risk over a debtor portfolio. Possible risk transfer to credit insurance. 	<ul style="list-style-type: none"> Receive early payment and improve liquidity, cash-conversion cycle, and KPIs. Access to working-capital finance and reduction of late-payment and default risks (especially in case of non-recourse). Growth of business on open-account terms. Balance-sheet improvement (in case of non-recourse and true sale). Reduced cost with the use of debtor management and collection services. 	<ul style="list-style-type: none"> Higher likelihood of contracts with suppliers on open-account basis. Increase of order volume from suppliers due to their improved access to working capital.

2.3.3 PAYABLES FINANCE

Definition

Payables finance* is provided through a buyer-led program within which sellers (suppliers) in the buyer's supply chain are able to 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 continues to be due by the buyer until its due date.

*Payables finance is the SCF concept for which very often also the terms approved-payables finance, reverse factoring, confirming, buyer-led supply chain finance, supplier finance, or just supply chain finance are used synonymously.

Main Features

A main characteristic is that payables finance programs are set up based on the initiative of a large anchor buyer with one or more finance providers. Payables finance gives working capital to SMEs while taking corporate credit risk. It is highly scalable, low risk, and provides an on-demand financing solution to SMEs.

The finance provider usually concludes a payment-service agreement with the buyer containing as a key feature also an unconditional payment undertaking issued by the buyer to pay the approved invoices at the due date. On the supplier side, it very much depends on the jurisdiction which legal instruments can be applied. For example, purchase of receivables, assignment of receivables, and subrogation or redemption of receivables are frequently used in practice.

Typically, the finance provider grants the early payment without recourse to the supplier against the assignment of the rights (or transfer of title) on the assets being financed (that is, the receivables). The early-payment amount is usually calculated upon 100 percent of the invoice nominal less a discount.

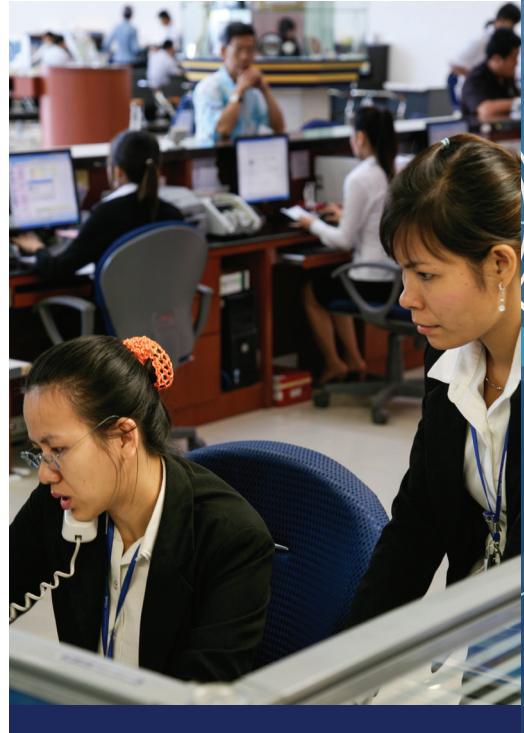
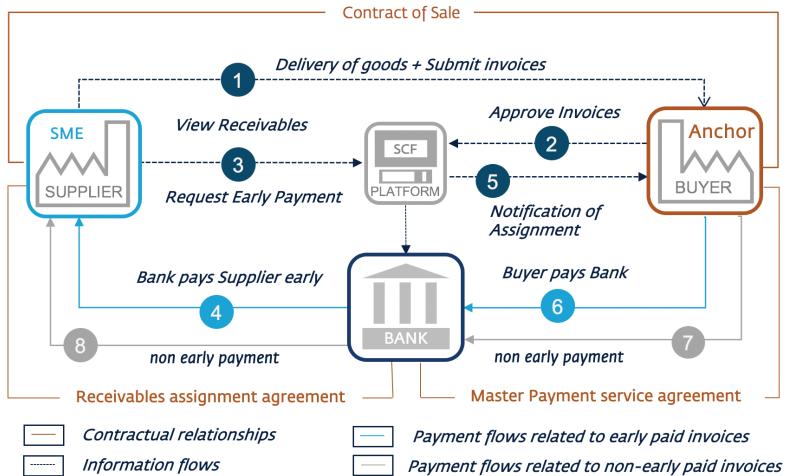
Although the product could be provided in principle on a manual or semi-manual basis, a state-of-the-art payables finance solution is typically supported by an IT platform to allow for the automatic upload/transfer of the approved invoice data by the anchor buyer and the management of the early-payment request by the supplier. The platform also enables straight-through initiation of payment flows as well as the limit management and booking of the transactions at the bank level.

After being invited by the anchor buyer to join, the suppliers may decide if and how to make use of the program. Most solutions allow suppliers to ask for early payments individually or via an automatic mode. They can, of course, also wait to be paid at the maturity date of the invoice.

Operational Flow

- The corporate (anchor) buyer identifies invoices for which it gives an unconditional, irrevocable commitment to pay.
- The supplier has the option to assign/sell the receivable(s) without recourse to the bank; the supplier receives an early, discounted payment of the invoices.
- On due date of the assigned/sold invoices (or at another agreed maturity date), the buyer settles the full amount with the bank.
- Invoices that were not paid early will be paid to the supplier at the due date.

Figure 2.9: Approved-Payables Flow Chart



Benefits:

Table 2.4: Benefits of Approved-Payables Finance

Finance Provider(s)	Buyer	Supplier
<ul style="list-style-type: none"> Differentiated product for large corporate relationship managers. Provide financing to SMEs while taking low corporate credit risk. High-quality, transaction-based, short-term finance for the benefit of both trade parties. Gain new SME clients that trade with the buyer but aren't current bank clients. 	<ul style="list-style-type: none"> Potential improvement in trade relationship with suppliers, as this arrangement helps them meet their financing needs. Improve stability in the supply chain and increase trade volumes with suppliers. Savings generated can be shared via either payment-term extensions or reduced cost of goods sold (COGS) or improved cash-conversion cycle and KPIs. Reduced cost for managing payments, as solution is automated. 	<ul style="list-style-type: none"> Receive early payment and improve liquidity, cash-conversion cycle, and KPIs. Access to working-capital finance regardless of own risk profile—at much lower cost based on buyer's credit rating, improved cash-flow forecasting, and flexibility, including the option not to finance and hold the receivables until maturity. Visibility and certainty on payments through automated system, increase velocity of trade.

2.3.4 DISTRIBUTOR FINANCE

Definition

Distributor finance is a loan for a distributor of a large manufacturer to cover the holding of goods for resale and to bridge the liquidity gap until the receipt of funds from receivables following the sale of goods to a retailer or end customer.

Main Features

Usually, the whole distributor finance structure is set up based on established trading relationships between the supplier and distributor. Distributor finance helps a large corporate (anchor) supplier (for example, a large manufacturer) to sell more inventory, while it finances the distributor's working-capital needs until the distributor gets a liquidity inflow from its sales. The bank provides financing directly to the distributor by facilitating the payment of the invoices issued by the anchor supplier. The financing conditions are stipulated in a facility letter. The bank may need to extend the original payment term for repayment by the buyer (distributor) until receipt of payment from resale.

Distributor finance is often used in combination with a master distributor finance agreement, in which the anchor supplier provides for certain risk-mitigating clauses (for example, stop-supply or buy-back agreements) and/or credit insurance as risk protection.

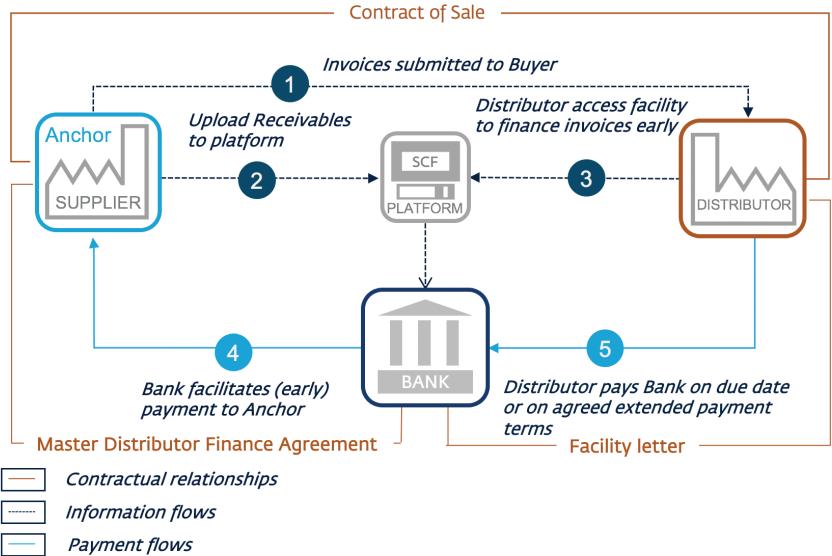
As a variation, the distributor finance may be structured in combination with a receivables purchase facility provided from the bank to the large manufacturer, motivating the manufacturer to provide longer payment terms to the distributor but still getting paid early when selling the receivables to the finance provider.

Basic Operational Flow

- The anchor supplier sends the goods and the invoice to the distributor (buyer) and uploads the receivable data to the IT platform.
- The distributor may draw the financing facility.
- The bank facilitates the payment of the invoice either on the agreed due date or based on the master distributor finance agreement even before due date (early payment).
- At the agreed due date, the distributor repays 100 percent of the invoice nominal plus interest to the bank.



Figure 2.10: Distributor Finance Flow Chart



Benefits:

Table 2.5: Benefits of Distributor Finance

Finance Provider(s)	Anchor Supplier	Distributor (Buyer)
<ul style="list-style-type: none"> Differentiated product for large corporations and SMEs Provide financing to SME distributors backed by a qualified relationship with an anchor buyer. Potential for cross-sell of other bank products for the SME client. Various possibilities for risk control and mitigation. 	<ul style="list-style-type: none"> Help finance distributors without the need to offer longer payment terms. Improve relationship with the distributor and stability in the supply chain. Increase trade volumes with distributors Payment security due to direct disbursement of the funds for the purchase of goods. 	<ul style="list-style-type: none"> Receive finance to bridge the gap between payment to suppliers and cash inflow from sales (repayment at prolonged terms). Increase of business volume with suppliers and buyers. Obtain working capital at much lower cost due to provisions in the agreement between the finance provider and the anchor supplier.

2.3.5 PURCHASE-ORDER FINANCE/ PRE-SHIPMENT FINANCE

Definition

Pre-shipment or purchase-order 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 semifinished 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 ingredient in motivating the finance, as is the ability of the seller to perform under the contract with the buyer.

Main Features

Pre-shipment finance can be provided in any number of structural variations. Typically, financing is provided based on a specific purchase order, but it can also be provided against a demand forecast or underlying commercial contract between a buyer and a supplier. The bank will provide a certain percentage of the purchase-order volume as financing, which can be increased in stages as production/performance level of fulfilling the purchase order increases. This implies the need for reporting and monitoring of the purchase-order fulfillment. Hence, the parties may agree on inspection rights to the finance provider for the period of manufacturing or conversion. Further, the previous trading history between the seller and the buyer will be screened as an indicator of the ability of the seller to perform under the contract of sale and for the creditworthiness of the buyer to make payment after shipment.

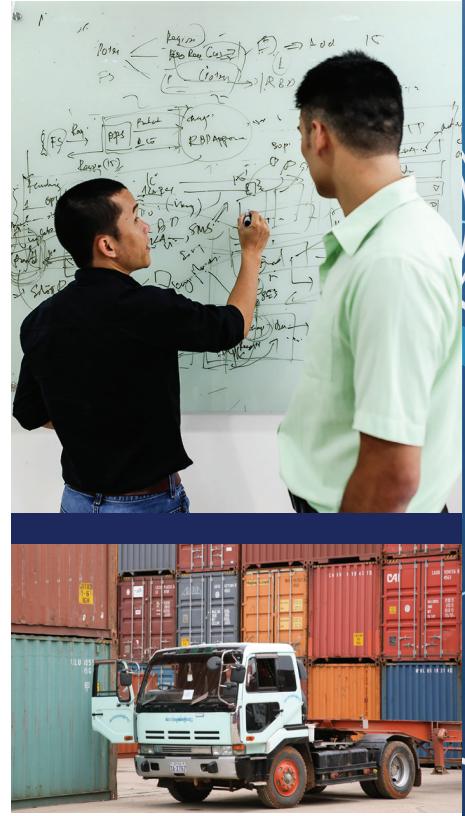
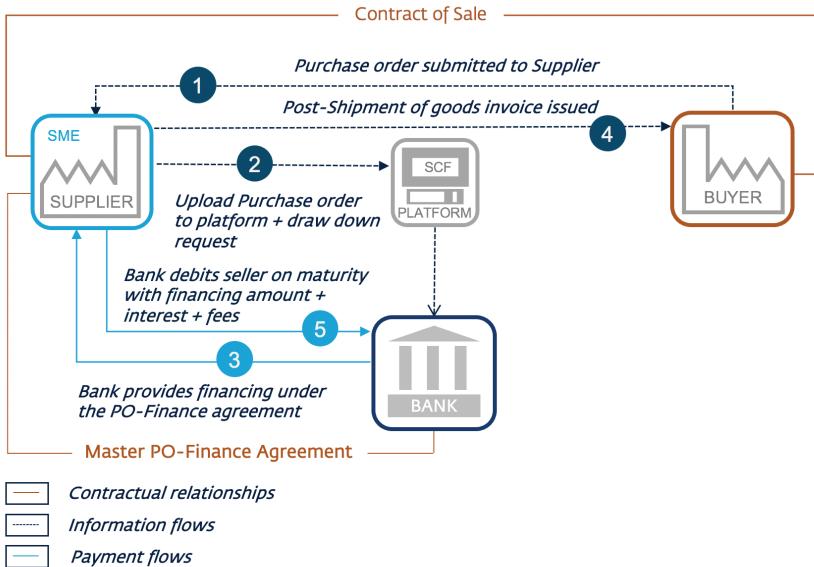
The repayment of the financing is coupled to the payment by the ultimate off-taker of the goods. Some structures foresee the repayment from the buyer with the proceeds of a documentary credit or standby letter of credit issued on behalf of the buyer in favor of the supplier. The finance provider may require a security interest in the receivables following shipment. Upon shipment—when the invoice is issued on an open-account basis—the financing can be easily switched over to a receivables-based financing like the ones described above.

Pre-shipment finance can be set up as a revolving program, covering a series of transactions used for smaller sellers or on a transaction-by-transaction basis in the case of larger sellers.

Basic Operational Flow (simple structure example)

- The buyer submits the purchase order to the supplier.
- The supplier uploads the purchase order to the platform and requests the funding based on the master purchase-order finance agreement.
- The bank sends the financing amount to the supplier, who uses it to purchase the raw materials or goods to fulfill the payment order.
- After production and shipment of the goods, the supplier sends the invoice to the buyer.
- The buyer pays the supplier according to the agreed payment terms.
- The proceeds of such payment are used to repay the purchase-order financing to the bank. (They can also be routed directly from the buyer to a designated account of the bank.)

Figure 2.11: Purchase-Order Finance Flow Chart



Benefits:

Table 2.6: Benefits of Purchase-Order Finance

Finance Provider(s)	Supplier	Buyer
<ul style="list-style-type: none"> Differentiated product for SMEs. Provide financing to SMEs backed by a qualified purchase order from an anchor buyer. Greater risk control and reassurance for the financing based on an existing trading relationship and various possibilities for risk control and mitigation. Potential for cross-sell of other bank products for the SME client. 	<ul style="list-style-type: none"> Receive working-capital financing for the purchase of goods/raw material necessary for the fulfillment of purchase orders from a buyer. Increase business volumes with buyers due to ability to take larger/additional orders. Improve relationship with own suppliers and stability in the supply chain. Possibility to combine with receivables purchase product to cover the purchase-order facility. 	<ul style="list-style-type: none"> Increase of business volume with suppliers. Improve relationship with suppliers and stability in the supply chain.

2.4 SCF Products and Managing Risk

As stated in the definition of SCF above, the SCF products also shall provide certain risk mitigation for the parties. In simple terms, for the suppliers this is related mainly to the risks of payment delays or default, and for the buyers, to performance risk and reliability of the sourcing. During the trade cycle, these risks move in different directions. When the purchase order is placed, performance risk is still high, but it becomes zero after successful delivery of goods at their designated destination. Depending on the agreed payment terms (for example, prepayment, at delivery, or on an open-account basis), the payment risk increases along the trade cycle.

SCF products are structured in a way that, for both the buyer and the supplier, the risk can be reduced and transferred to a third party—in most cases, the finance provider—that then has to deal with it, but credit insurance is also often involved. Therefore, it is very important that the structure and operational handling of an SCF product is based on sound risk assessment, risk prevention/mitigation, risk monitoring, risk distribution, and pricing.

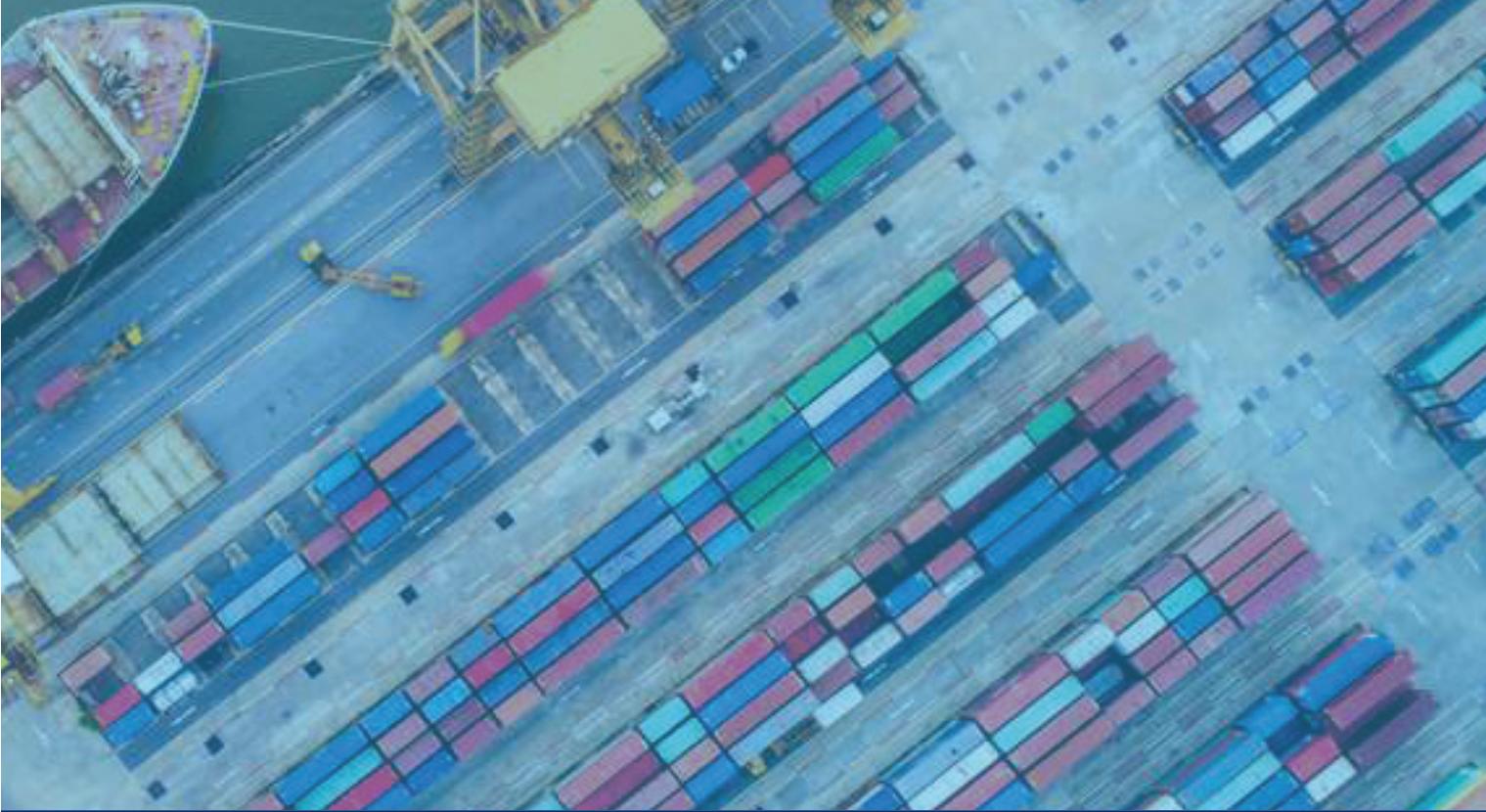
The ability to underwrite financing depends largely on the type of information the finance provider receives about relationships between trading parties and their obligations²⁹. Hence, a deep understanding of the purchase-to-pay and order-to-cash cycle within the supply chains is imperative for identifying the specific risks involved.

The main risks areas that providers of SCF usually must consider when developing, structuring, and running their product are commercial, legal, operational, fraud, currency, country, and political risks (*for a more detailed listing of risk types within these risk areas, please refer to Chapter 6.*)

It must be noted that the applicability of certain risk types as well as the respective level of risk and possible mitigation measures vary among the different products. For instance, with receivables-based products, the finance provider does not have to deal with performance risk as in the case of purchase-order finance. Approved-payables finance usually comes with a lower level of payment risk than a receivables discounting product.

In order to monitor the quality of SCF-product programs, an early warning system can be developed, capturing the signs of increased risks on the portfolio, anchor, and spoke level as well as mitigation measures³⁰.

Development banks and central banks, within the scope of their specific mandate, can support the SCF provider's ability to mitigate risks—not only by assuming the risk themselves as a guarantor for commercial banks' SCF business but also by addressing specific risk categories already at their source. They can use their expertise and influence to advocate for the establishment of an adequate legal, regulatory, and secure transaction environment, provide a secure payment-solutions infrastructure, promote a high level of automation, run a collateral registry or know-your-customer (KYC) repository, to name just a few of the options.





This chapter identifies characteristics and approaches of SCF market players, discusses technology trends influencing how SCF products are provided, and explains how secured transactions/ABL reforms may support SCF initiatives.

Chapter 3

Supply Chain Finance Players and Trends

Plenty of SCF players offer a variety of SCF products within diverse business models. However, market penetration in terms of the number and type of SCF players, as well as product availability and usage, differs among countries. While in most developed countries, the concepts are widespread and have already been in use for a long time, some emerging markets are just starting the adoption.

Emerging markets could benefit exponentially from the availability of such products, especially for enhancing access to finance to underserved segments, such as SMEs. One of the main reasons for lower availability and uptake in some markets is the lack of the necessary legal and institutional infrastructure to ensure the creation and enforcement of creditors' rights. In addition, in many emerging economies, SCF solutions are broadly unknown both to the banking sector and to the clients for which they are built.

The following section points out different characteristics of SCF market players and their approaches, discusses some of the major technology trends that are influencing how SCF products are provided, and explains how secured transactions/ABL reforms may support SCF initiatives.

3.1 SCF Market Players

The players who provide SCF products and related services are multifold. Simply speaking, SCF players active in the market assume the following main functions:

- **Funding providers:** Traditionally, the banks (commercial and development banks) and non-banks, but, recently, also investors
- **Risk takers:** Commercial banks, development banks, credit insurance
- **Transaction-infrastructure providers:** Providers of SCF multi-funder platforms, SCF marketplaces, and dynamic discounting platforms

SCF pioneers were often forced to develop their own technology solutions. Newer entrants have better choices to procure technology from vendors specialized in the SCF scope of products.

Of course, players may assume more than one of these functions at the same time.

3.1.1 Banks and Non-Banks

Local legal and regulatory environment often determine which entities are allowed to offer a specific product based, for example, on a license or under fulfillment of certain criteria. Whether an SCF activity is considered a bank service, and therefore put under strong regulatory control, or whether it remains totally unregulated may differ notably between countries. The result is a market structure where both banks and non-bank SCF providers share the space, potentially even under unequal competitive rules.

From a product perspective, many non-bank providers are active in the market with specialized offerings focused on one or a few SCF products—for example, independent factoring companies. On the other end of the spectrum, commercial banks usually offer the full spectrum of SCF products along with their client's value chain, often embedded within their overall transaction banking or global trade finance services. In between are players who also serve their clients with a selection of related services in addition to SCF products.

In all categories, there are players acting on a purely domestic or regional level and others who derive a good portion of their business covering cross-border transactions and using international collaboration. Only a few players, including, for example, HSBC, Citibank,

and Standard Chartered, are operating on a global level, providing their SCF products across several continents.

Due to their long-term history with SCF, and because a lot of the development has been done in the banks, this group still holds the biggest share of the market.

The pioneer players in the SCF market were often forced to start and develop their own SCF technology solutions. Newer entrants have a much better choice now to procure the technology from vendors specialized in the SCF scope of products (factoring, payables finance, receivables finance, ABL, and so on) and to link it to their other core systems.

3.1.2 SCF Multi-Funder Platform Providers

Especially during and after the economic and financial crises of 2008—when banking regulation got tighter, imposing strict capital requirements on banks, and banks cut financing lines or completely withdrew from financing some market segments—fintech institutions took their chance to catch up in market share in the SCF space, setting up new concepts funded by multiple funders or corporate buyers and backed by their own IT platforms. They have been able to address the market challenges in a positive way. For example, in payables finance, data shows fintech institutions lag banks in terms of SCF market share only slightly: 34 percent of corporates used a bank SCF solution, while 29 percent used a fintech solution³¹.

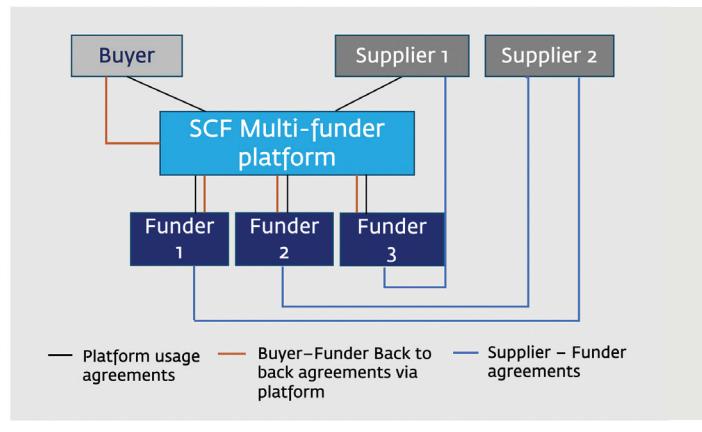
Many corporate clients that do not want to rely on a single bank-led solution for securing their financing prefer to contract with such platforms for their SCF programs, in essence inviting multiple funders to take a portion of the volume to be financed. If one funder steps out, the platform and the client have the opportunity to substitute it with another.

The legal and operational models for such SCF multi-funder platforms vary. In simple terms, the following two main concepts can be observed in the market (see also figure 3.1 for diagrams of simplified example structures).

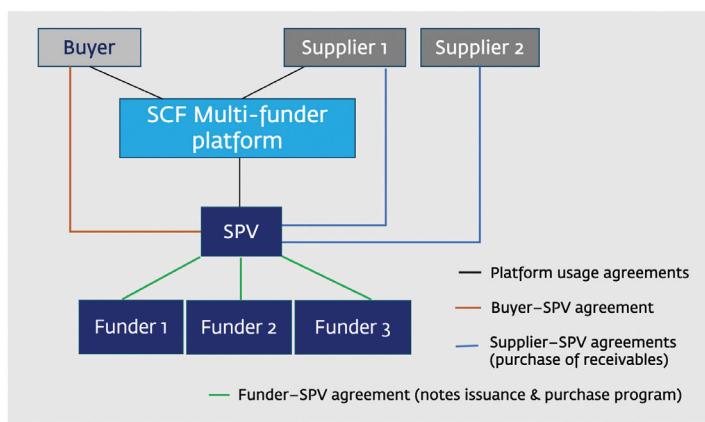
- SCF multi-funder platforms where the funding partners still maintain a direct or back-to-back contractual relationship with parties (buyers and/or suppliers) and control the flow of funds. In this case, the fintech institution is a transaction-infrastructure provider.
- Concepts where the SCF platform provider is the single contractual partner for both the buyer and/or the supplier and they also handle the cashflows with them. The relationship with the funders is often structured via a special-purpose vehicle (SPV) issuing notes to the funders and repaying them. The notes can be linked to different classes of underlying debtors, quality of invoices or other variables matching the investment criteria of funders.



Figure 3.1: Simplified Structural Diagrams for Multi-Funder Platforms³²



- Multi-funder platform only handles information flows (invoice upload, financing requests, notifications, reports, etc.)
- The Platform provider concludes a back to back agreement with Buyers and Funders (materially like a direct relationship)
- Payments are executed by the funders, buyers and suppliers



- Multi-funder platform only handles information flows (invoice upload, financing requests, notifications, reports, etc.)
- SPV purchases receivables and issues notes to the funders, notes repayments based on the buyers payment on due date of invoices
- Payments are executed by the SPV, funders, buyers

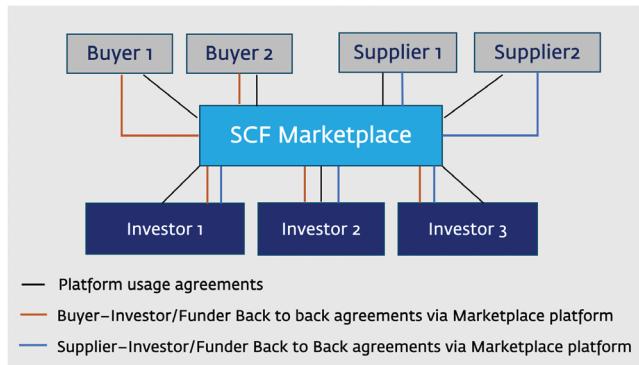
Source: MH Corporate Finance 2020

3.1.3 SCF Marketplace Platform Providers

Similar to the SCF multi-funder platforms, the SCF marketplaces also aim to provide the digital infrastructure where parties seeking financing and parties providing financing can meet. More and more, the parties providing financing are non-bank investors who regard SCF as an effective asset class due to its short-term and self-liquidating nature. By this, a multi-to-multi relationship is facilitated that differs from the above multi-funder platforms mainly through dynamic pricing mechanisms (*see also figure 3.2 for a simplified structure diagram*).

As the name indicates, these types of platforms enable transactions in the form of an offer and bidding process. Both single invoices or entire receivables portfolios can be traded either directly between the seller and the buyer of the asset (that is, the funder or investor) or via an auction—just like on a stock exchange—to ensure the best price. Not all the solution models involve the buyers as participants, but some require the validation or even the acceptance of uploaded invoices. Funding is often provided not only by banks but also by institutional investors (for example, investment funds) and even private individuals. Funders/investors can place their investment criteria on the platform—for example, debtor risk profiles and minimum or maximum invoice amounts—and receive offers meeting such criteria. Examples of these SCF marketplaces are Edebex, headquartered in Belgium; Advanon, servicing Switzerland and Germany; the Slovenian fintech Borza Terjatev; and LiqEase, targeting the Asia and Pacific region.

Figure 3.2: Simplified Structure Diagram of an SCF Marketplace³³



- SCF Marketplace handles all information flows (invoice upload, financing requests or offers, bidding/auction process, transaction confirmations, reports, etc.) and sometimes also the payment transactions
- The Marketplace platform provider usually concludes back to back agreements with Buyers/Suppliers and Investor/Funders

3.1.4 Dynamic Discounting Platform Providers

In recent years, mainly in the developed markets, another model has emerged: dynamic discounting. This is basically a self-funded SCF program that allows a corporate buyer to invest excess liquidity in its own supply chain via the SCF platform by paying their suppliers earlier than the agreed due date of the invoice against a discount. With this, the buyer is able to reduce its cost of goods sold (COGS). The buyer and supplier use the platform to agree to the conditions for an early payment by the buyer and to initiate the transactions. Providers of this type of platform include Taulia, CRX Markets, and C2FO.

3.2 Operating Technology Tools Supporting SCF

Several technologies support SCF operation and are already well proved in principle and operating at scale. Despite their positive impact on an efficient provision of SCF solutions, they are not adopted everywhere at the same level, often due to a lack of common standards and proper legal basis and regulation. This causes a situation in which providers and users either still prefer or are forced to apply traditional methods, or need to run their operations based on both new and traditional modes in parallel, which is not cost efficient.

- **e-Invoicing** is one of the innovations that can be leveraged by SCF providers. A number of countries that apply a pre-audit approach with regard to tax compliance have already introduced mandatory e-invoicing (for example, Italy, Chile, Mexico, India, and so on). This is especially true for business-to-government suppliers (B2G) and for business-to-business invoices with tax-authority clearance. The models allow registered and authorized companies to issue an invoice via certified e-invoice-issuing platforms. As the proof of reception and acceptance is also electronically processed, the digital invoice data can also be used for the purpose of SCF—for example, when a supplier requests an advanced payment or offers its receivables for assignment. E-invoicing can include various technologies with which an invoice is submitted electronically to a customer for payment. The e-invoice represents a structured set of data that is sent as an EDI (Electronic Data Interchange) message and can even be built on earlier process steps, such as purchase orders, order confirmations, and delivery notifications. In the case of lower integration requirements, the focus is only on processing the invoice³⁴.

- **Application programming interfaces (APIs)** can be used in the SCF space, for example, to interface a client's enterprise resource planning (ERP) system with a web-based portal for the automatic exchange of data and to support functional processes. It supports straight-through processing and reconciliation. APIs enable a very smooth onboarding, as integration requires only minimal changes to existing infrastructure and systems³⁵. In light of a collaborative approach between FIs and fintech institutions, leveraging APIs allows easy integration of third-party offerings into the FI's own platforms. Hence, APIs are changing the way in which the industry can work together and interact—to the benefit of clients³⁶.
- **Cloud computing** is an important technology trend that is growing in acceptance. It enables fintech institutions and SCF platform providers to offer their solutions in the form of **software as a service (SaaS)**. These applications help financing providers as well as clients to overcome a hurdle for starting an SCF initiative when cost and capabilities are an issue. With SaaS-powered SCF solutions, providers can focus on the product offer without any expenses for hardware, for software licenses, or for long-lasting, expensive integration projects. SaaS applications can lower the entry barriers into SCF. The general acceptance of cloud computing would be a paramount achievement. This will make breaking up data silos an order of magnitude more feasible and also propel the deployment of more platforms based on distributed ledger technology (DLT).

3.3 New Technology Trends and Market Practices

Various emerging technologies—namely, artificial intelligence (AI) and machine learning (ML), internet of things (IoT), distributed-ledger technology (DLT), and other technology trends (for example, SaaS and

e-invoicing)—are the basis for a number of initiatives from providers offering the so-called fintech, regtech, and insuretech solutions. These technologies and their combinations influence the evolution and creation of new product propositions in trade and SCF and have the potential to disrupt the incumbent's business models and/or enable new forms of collaboration. With their applications, providers aim to reach out to underserved market segments, ease administrative burden, improve risk management, and support compliance with regulatory requirements. The maturity level of these new technologies varies considerably, some being already adopted, others still in proof-of-concept status. This chapter will neither describe nor judge the different technologies but list a few examples of (potential) use cases in the context of SCF.

Artificial Intelligence and Machine Learning

- **Credit scoring:** AI-based credit scoring is used for very small businesses with no or opaque credit histories by using other data available in multiple sources. With this, the client base for SCF product offerings can be broadened, as the eligibility is analyzed and validated using a different set of criteria.
- **Know your customer (KYC)/anti-money-laundering (AML):** AI and ML are used to support the KYC process and flag risks relating to AML, even after the necessary KYC checks have been completed successfully³⁷. This markedly reduces the administrative burden of KYC and AML checks to be complied with when servicing clients with SCF products.
- **Fraud detection and prevention:** AI and ML can also be useful for anticipating fraud, suspicious transactions, default, and the risk of cyber attacks, potentially resulting in better risk management for all types of SCF offerings³⁸. (For example, Advanon, the Swiss receivables finance marketplace, is applying ML for default prediction.)³⁹

- **Data analytics:** AI and ML can leverage all user and machine generated data on web-based SCF portals. Based on this, data can be extracted, refined, and channeled in three types of analytics: prescriptive analytics (recommendations for decisions and actions), predictive analytics (prediction of future outcomes, such as investor demand, debtor defaults, or dilutions), and descriptive analytics (for reports and dashboards based on transactional data)⁴⁰. (For example, the SCF platform providers CRX in Germany and Taulia in the United States have implemented such analytics in their offerings.)

Distributed Ledger Technology

- **Smart contracts:** DLT enables smart contracts, which are set up as computer code and are self-executing when the predefined requirements are met. With this, either financing or final payment can be released automatically, without requiring a physical person to take any action. The use of smart contracts can be leveraged further by using IoT⁴¹. Smart contracts are well suited to capture certain operational contract clauses expressed in straightforward conditional logic but will struggle to express non-operational elements and those involving judgment or discretion. They may also fundamentally alter or render unnecessary some common contractual elements. Where process frictions and operational, fraud, or legal risk contribute significantly to the cost of financial services, and where trust is a barrier to uptake of financial services, smart contracts can drive incremental gains in financial inclusion. Despite the number of beneficial impacts that smart contracts hold as a promise, local lawmakers and legal authorities will need to determine whether smart contracts are legally binding. Smart contracts can reflect the foundational pillars of contract formation but may not comply with jurisdiction- and transaction-specific contract requirements⁴².

- **Fraud protection:** By its nature, DLT creates immutable information, which can help to reduce fraud, a concern raised frequently by risk managers in the context of receivables-based SCF. DLT-enabled (real-time) visibility in shipments can reduce the risk of fraud and double-financing⁴³.
- **Tokenization:** DLT tokenization paves the way to deep-tier SCF solutions.
- **SCF consortia and digitalization of trade:** A number of banking and industry consortia based on DLT have been formed with the goal of providing modern, transparent supply-chain networks. By replacing cumbersome, paper-heavy, manual procedures attached to traditional trade finance instruments with digital instruments, DLT technology not only would reduce complexity and use of paper but also aims to support transparency and trust among trade partners, especially in cross-border transactions (for example, we.trade, Marco Polo, Komgo, Voltron, and Tradelens).
- **Transparency and authenticity:** Further, a bank funding a transaction could reduce funding risk by validating the origin and authenticity of the service due to visibility of the original contract, the sales order, and the delivery status—all provided by a secure blockchain.



Numerous SCF-related initiatives have emerged over the past few years using DLT technology, for example the following⁴⁴:

Halotrade: A blockchain-enabled fintech startup focused on the delivery of sustainable SCF. It creates a system where all of the actions that occur on the supply chain are trackable and transparent. For banks, the Halotrade system creates value by providing a means of de-risking trade finance through access to trustworthy data on sustainability credentials.

Skuchain: An inventory control and finance (ICF) program that uses a blockchain system to enhance buyers' visibility into their inventory and control and to provide better financing to suppliers by allowing them to get financing at the buyer's cost of capital.

Hyperchain: A Chinese enterprise-level blockchain platform operating in the SCF space that offers blockchain solutions, blockchain open-cloud platform, and smart contracting tools but is heavily oriented toward supply-chain digitalization. One application of Hyperchain deployed by China UnionPay and China Everbright Bank is a trusted electronic credential system.

Linklogis: An SCF service provider based in China.

LiqEase: An SCF solution that enables both suppliers and their buyer counterparts to manage their supply chains more effectively, also based in China.

InBlock: Launched by LiquidX in November 2018, InBlock provides an enterprise blockchain solution for supply chain, treasury and working capital.

OneConnect: Developer of an SCF solution called One Enterprise Chain.

Most of these DLT-based initiatives are still in an early phase of their development, and only a few have already gone beyond a mere proof-of-concept stage. The future will show which initiatives will reach full-scale production and uptake in the market.

Internet of Things

- IoT devices facilitate the tracking of goods during the logistic and transport phases as well as inventory. This enables more transparency for buyers and financiers into whether the purchased goods have been shipped, where they are in transit, and their condition. Therefore, IoT-provided data can further support well-informed decision making regarding the release of financing. It can be especially useful for providing SCF products for the early stages within the value chain, especially purchase-order financing, in-transit financing, and inventory finance.

Competition versus Collaboration

As the SCF market matures, a growing number of fintech providers are entering the space and causing disruption as they introduce new service offerings that target organizations of all sizes and tiers⁴⁵. Incumbent players, especially banks, do not want to lose more ground to fintech institutions. Instead of being threatened, they have understood that partnerships provide an effective path for expanding the size and scope of their own networks.

Many FIs across the globe adopted a collaborative approach and embrace the synergies brought by the use of the solutions developed by their new partners. They work with fintech institutions on a contractual basis for a specific offer, enter joint ventures, or even hold an equity stake.

Although banks will undoubtedly remain essential players in the SCF industry, there is no denying that the innovation brought about by fintech institutions is resulting in industry shifts as new financing options, service offerings, and functionalities replace legacy products⁴⁶.



3.4 Enabling Framework Supporting SCF

In order to allow for the effective setup of SCF initiatives, appropriate enabling frameworks are required or are at least desirable components. An enabling framework touches secured transactions/ABL reforms, bank regulation, legal enforcement systems, standards for e-invoicing and e-identity, and digital payments infrastructure for supporting the adoption of SCF. Market participants need legal and regulatory guidance and security, especially before introducing the above-mentioned technologies. Table 3.1 quickly summarizes those components.

3.4.1 Secured Transaction and ABL Reforms

In the developing world, movable assets such as equipment, inventory, and receivables represent about 78 percent of the capital stock of an enterprise, while immovable assets represent only 22 percent. However, FIs overwhelmingly prefer immovable assets as collateral. This preference is also reflected in the regulatory frameworks prescribing capital requirements for regulated FIs⁴⁷.

Although credit is available in all economies to some extent, in many of them, securing collateral against movable assets is difficult or impossible because it either

Table 3.1: Components of the Enabling Framework Supporting SCF

Component	Requirement	Description
Legal reforms	Desirable	Legal reforms based on international best practices and SCF project experiences—for example, with regard to specific factoring laws and commercial code. Reverse factoring is less dependent on legal reforms than ABL and traditional factoring, requiring instead a comprehensive contractual framework. Further, a legal basis for e-signatures is desirable. It is not a must for onboarding the parties to an SCF platform but could make it more efficient and secure. (<i>See also section 6.3.1.</i>)
Enforcement system	Required	Legal framework must allow creditors (banks, factoring companies, fintech institutions, and other platform operators) to directly collect and apply proceeds from intangible assets (for example, accounts receivables) to the outstanding without court intervention. Specific laws ruling the maximum payment terms in contracts need enforcement. (<i>See also section 6.3.1.</i>)
STL and collateral registry	Desirable	Collateral registries are desirable for most SCF products. Reverse factoring does not require a collateral registry when the payor of an account receivable approves the invoice and gives a payment undertaking. (<i>See also section 3.4.1.</i>)
Bank regulation	Required	Recognition that SCF products based on the purchase/assignment of receivables get different treatment than traditional lending products based on the provision of a line of credit. The credit risk profile of a factoring or reverse-factoring transaction is based on the creditworthiness of the account debtor (buyer). LGD should be lower than with traditional loan products. Factoring uses credit insurance, which should be eligible for risk transfer. (<i>See section 3.4.2.</i>)
e-Invoicing	Desirable	Electronic invoicing increases efficiency for SCF based on receivables, as it can leverage on invoice data that is already available in a digital format. (<i>See also section 3.2.</i>)

is costly and/or does not offer effective protection against credit risk, resulting in conflicting claims that must be resolved in protracted court proceedings and hamper the development of modern credit products for the economic activities of the 21st century⁴⁸.

Establishing a legal and regulatory environment where movable assets can be used effectively as collateral and, at the same time, provide effective credit protection is a critical step toward responsible and inclusive access to finance. In addition to the legal and regulatory aspects, a conducive environment requires a deeper market reform⁴⁹.

Overall, legal and regulatory reforms promote responsible and inclusive access to credit by increasing the level of credit, increasing the number of recipients of credit and decreasing the cost of credit⁵⁰.

Figure 3.3: Asset-Based Lending Matrix⁵¹

FINANCIAL INFRASTRUCTURE			Consumer Financing		Financial Leasing		Equipment Financing		
TITLE TRANSACTION LAWS	COLLATERAL REGISTRY	Potential Credit Products	Floor Plan Financing		Merchant Financing		Factoring		
	ENFORCEMENT SYSTEM		Reverse Factoring		Accounts Receivable Financing		ABL-Secured Lines of Credit		
	BANKING REGULATION		Warehouse Receipt Financing		Securities Lending		Others		
	SECONDARY MARKET		Motor Vehicles	Equipment		Raw Materials		Inventory	
	FINTECH & TRADING PLATFORMS		Accounts Receivable	Negotiable Instruments		Cash		Bank Deposits	
POTENTIAL BORROWERS			Warehouse Receipts	Bills of Lading		Letters of Credit		Securities	
			Credit Card Receipts	E-Payments		Fintech & Digital Assets		Other	
			Consumers		Informal Enterprises		Micro-Businesses		
			SMEs		Corporates		Women-Owned Business		

Effective Secured Transactions System and SCF

As shown in the ABL matrix in figure 3.3, a number of financing options can benefit from the establishment of efficient and effective secured transactions system, including also the following handful of product propositions in the area of SCF:

- Receivables discounting (accounts receivables finance)
- Factoring
- Reverse factoring
- Inventory finance (floor-plan finance)
- Borrowing base finance (ABL-secured line of credit)

While the secured transactions framework is not imperative to offer some SCF products, it has become critical for viability and scale in some cases, and it is certainly beneficial to have a modern secured transactions law in place—for example, a full-fledged law on secured transactions based on the United Nations Commission on International Trade Law's (UNCITRAL) Model Law⁵². For instance, modern principles of secured transactions law (such as the creation of rights over future assets and the ability of secured creditors to describe collateral as a class) become condition precedent for products such as pre-shipment finance. With respect to receivables, laws should help protect propriety interests of creditors and their priority in case of conflicting claims (for example, over a pool of receivables). Secured transactions laws can also help with enforcement (both judicial and extrajudicial) in case of a debtor's default.

There is an important distinction between SCF products that rely on intangible assets (for example, reverse factoring, which revolves around receivables in a "closed" environment and anchor-shifted risks) and those that rely on a combination of both tangible and intangible assets (for example, pre-shipment finance). In the latter case, secured transactions law and registry becomes more critical.

Similarly, a collateral registry including movable assets is highly desirable. Some countries have installed collateral registries where rights in movable assets can be registered to establish priority. A collateral registry will provide publicity and notice of previously existing security interests or assignments of accounts receivable, which may affect the rights of the parties acquiring them. Further, prior to the onboarding and/or financing of an SME, the registry enables searches for any existing third-party rights in the assets subject to the envisaged transaction. And in cases of double-financing, it is important to know which assignment prevails—the one that was formalized the earliest between the assignor and the assignee, or the one that was notified the earliest to the debtor—helping resolve cases of conflicting claims in the asset.

Both regulators and central banks can play an important role in secured transactions/ABL reforms, which in essence deal with the following:

- **Credit infrastructure development:** There are economies with no secured transactions laws or laws that are outdated, with no clear rules on how security interests in movable assets are created and publicized and with difficulties enforcing existing security rights in or out of court. Here the reforms focus is on the development of new secured transactions laws, the establishment of a collateral registry, and capacity building for relevant institutions.
- **Credit market development:** The focus here is on introducing financial regulation that accounts for the credit-risk-mitigation features of reforms and the positive effect on LGD figures under ABL. The reform shall determine eligibility of movables as collateral, develop methodologies for valuation of eligible collateral, provide market segmentation for the development of credit products, leverage fintech, and develop electronic platforms for the introduction of ABL.

Secured Transactions and Prudential Regulations

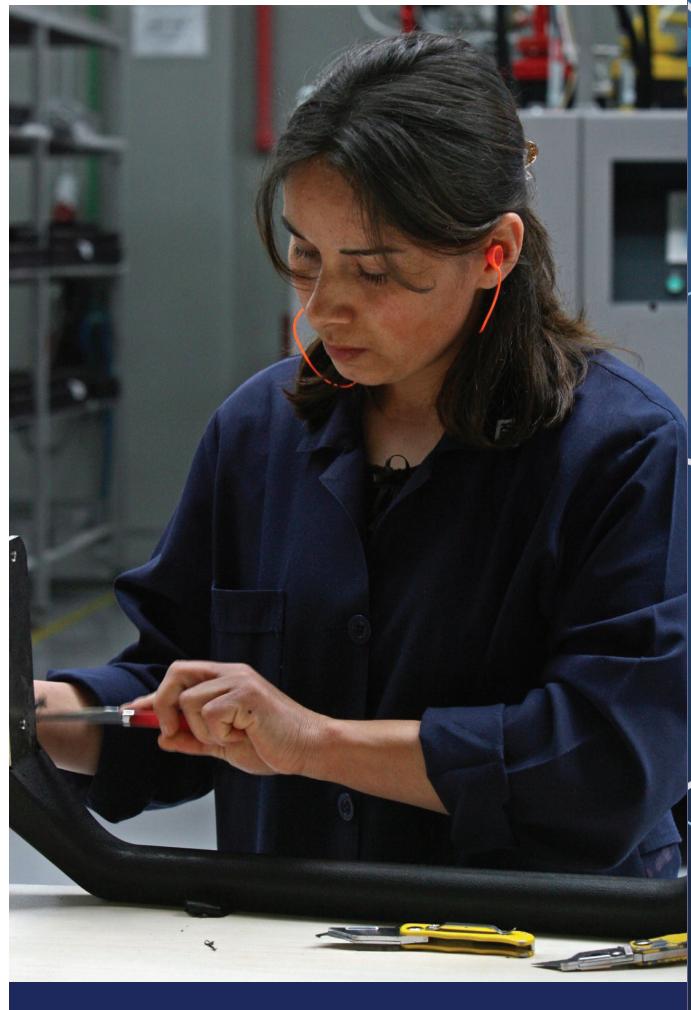
Coordination between secured transactions law and prudential regulation is key to supporting the establishment of a sound and inclusive credit ecosystem.

Prudential regulation should be understood as a tool to promote confidence in the financial system by addressing the treatment of risks associated with lending activities, including secured lending. The following two components of prudential regulatory regimes are key:

- **Capital requirements**, which perform a preventive function by strengthening the loss-absorption capacity of regulated FIs with regard to unexpected losses. In particular, capital requirements aim to ensure that banks have adequate levels of "capital" to absorb losses without impairing deposits and to maintain sufficient liquidity to meet their short-term obligations. Capital requirements are established in the Basel Capital Accords, defined by the Basel Committee on Banking Supervision.
- **Loan-loss provisioning requirements**, which are defined and applied in coordination with both capital requirements and accounting standards, are concerned with establishing a prudential backstop, in addition to accounting allowances, to absorb expected losses associated with any given credit facility or portfolio. Loan-loss provisioning requirements are established at the domestic level, and, though there are general trends and guidelines, there is no uniform approach. Coordination between capital requirements and loan-loss provisioning is key to curbing nonperforming exposures.

Without coordination with the secured transactions reform, a prudential regulatory environment might not gauge the risk-mitigation abilities offered by a reformed secured transactions framework and thus not recognize potential loss reduction due to securing movable collateral. This could discourage banks from developing and launching ABL credit products, particularly those targeting small borrowers.

A comprehensive prudential regulatory strategy tailored to domestic needs can help to unlock the full potential of secured transactions law reforms and promote lending to MSMEs through movable asset-based financing and SCF where applicable.





Any public-sector initiative should be designed to complement and support private-sector activity.

Chapter 4

Supply Chain Finance Business Models and Approaches for Development Banks

There are different approaches and roles that a development bank or other public entity can take to support SCF. Any public-sector initiative should be designed to complement and support private-sector activity. Therefore, such programs should begin by identifying the specific barriers to market-led SCF at the sector and institution level.

For example, if the enabling frameworks discussed in section 3.4 are not in place, the development bank may support the necessary legal and regulatory reforms. Where the risk perceptions of private lenders remain high, the development bank might provide de-risking instruments such as guarantees. If liquidity is lacking, then direct or indirect financing may be appropriate. In some cases, the technical infrastructure may be beyond the capacity of local banks or fintech institutions, and there may be a role for a development bank to catalyze creation of a technology platform to channel private-sector funding into SCF solutions.

If an approach consists of providing finance or risk-mitigation instruments, one of the main factors to look at is the underlying business model of the development bank—that is, a first- or second-tier model or a combination of both. (See section 1.3.) This helps in determining whether the development bank should provide financing directly to the main beneficiaries (SMEs) of the SCF program, or if it will do so through private financial intermediaries (for example, via refinancing or guarantee models).

In addition to the business model, the decision in favor of or against a specific approach is certainly also influenced by many other factors—for example, the available budget, operating capabilities, and so on. Furthermore, there are other ways to influence the development and establishment of SCF in certain markets taking advocacy and/or advisory approaches.

There is no one-size-fits-all approach; there are several ways to tackle similar problems while respecting different environments

There is no one-size-fits-all approach; there are several ways to tackle similar problems while respecting different environments. As a basic guidance, table 4.1 summarizes some of the key determinants and areas of assessments for finding a suitable approach for an SCF initiative.

The following sections describe different approaches for SCF initiatives of development banks and other public entities and analyze some of their main benefits and points to consider

during their implementation and operation. These can be considered for making balanced decisions regarding the adoption of a certain approach. In general, the approaches and models differ remarkably in terms of financial investment and risk taking as well as with regard to the reach of SME (see figure 4.1.). In practice, variations and/or hybrid versions of these approaches also appear, or development banks make use of various models in parallel—which also applies to some of the example cases mentioned in the following sections.

Table 4.1: Determinants for Finding a Suitable Approach for an SCF Initiative

Determinants	Assessment Area
Compatibility of different approaches	<ul style="list-style-type: none"> ▪ Strategy, goals, policies ▪ Basic business model ▪ Exclusions from scope of activity
Market needs and focus areas	<ul style="list-style-type: none"> ▪ Demand and supply-side analysis ▪ Market sizing ▪ Challenges, needs, and expectations toward SCF by envisaged target groups (buyers, suppliers, distributors, and FIs) ▪ Type of market gaps and deficiencies
Enabling framework assessment	<ul style="list-style-type: none"> ▪ Legislation for SCF ▪ STL and prudential regulation ▪ Legal enforcement system ▪ E-invoicing, e-signature
Envisaged scope of the initiative	<ul style="list-style-type: none"> ▪ Geography ▪ Target group ▪ Type of SCF products ▪ Technology approach
Other stakeholders	<ul style="list-style-type: none"> ▪ Interests and potential contributions (e.g., regulator, ministry of finance, credit insurance, investors)
Resources, capabilities, and capacities	<ul style="list-style-type: none"> ▪ Human resources, IT, and SCF experts ▪ Investment appetite
Envisaged level of control and influence	<ul style="list-style-type: none"> ▪ Direct versus indirect outreach to target clients ▪ SCF operations ▪ Outcome of the SCF initiative
Other	<ul style="list-style-type: none"> ▪ Timeframe ▪ Budget

With the aforementioned context, the approaches can be categorized in simple terms as follows:

- **Service-oriented approaches:** Enabling framework provider, SCF advocacy/advisory, syndication agent.
- **Financing and risk-sharing approaches:** Where the development banks provide their balance sheet. This refers to the sole-funder, co-funder, refinancing, and risk-sharing approaches.
- **Technological infrastructure approaches:** SCF infrastructure provider or DLT consortium participant.

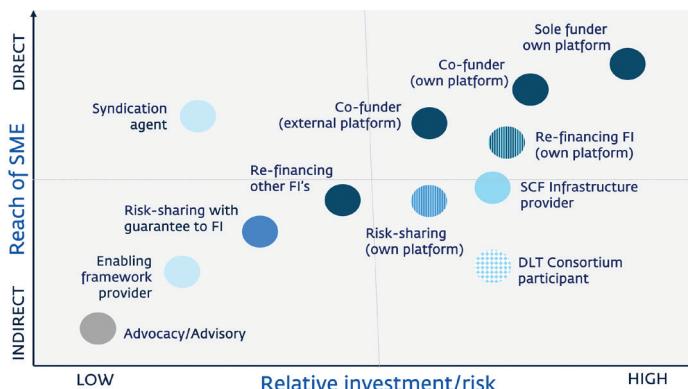
4.1 Enabling Framework Approach

The enabling framework essentially covers the "rules of the game" that are laid out to achieve a successful SCF program for all parties. In this approach, the development bank or other public entity deals with the establishment of a suitable and solid legislative and regulatory environment that will form the basis for the contractual agreements and operational conditions of SCF programs.

One of the goals of an enabling framework is to provide an environment that will allow secure and legally binding transactions, which in some cases means working with regulators and lawmakers to set the legal basis for the SCF instruments (factoring laws, deal-perfection rules, the enforceability of rights, collateral registries, and so on). Thus, a regulatory environment should be developed in order for legal instruments to be effective in the long run.

Developing modern enabling frameworks that aim to remove barriers to financial services and to enable the development of innovative SCF products fosters SMEs' productivity. In this context, development banks and public institutions can also promote the establishment of a legal and regulatory environment where movable

Figure 4.1: Relative Positioning of the SCF Approaches Regarding Investment/Risk and Direct Reach of SME⁵³



Source: MH Corporate Finance, Eva Degenhart/Patricia Martinez, 2020

assets can be used effectively as collateral and, at the same time, provide effective credit protection, which is a critical step toward responsible and inclusive access to finance. Through this legal and regulatory environment that is conducive to secured transactions, MSMEs can use their assets (for example, receivables) as collateral to gain access to capital⁵⁴.

The legal and regulatory frameworks for the secured transactions laws are later accompanied by electronic collateral registries for filing collateral and performing searches for third-party interests in the collateral. A development bank or a public entity (for example, Emirates Development Bank in the United Arab Emirates) can also operate the collateral registry.

There are also other ways of creating enabling frameworks for the successful operation of SCF programs. This can be done by establishing clear rules under which an SCF multi-funder program (or marketplace) can be set up, the issuance of the licenses for the providers, and controlling whether the activities of the providers comply with established rules (for example, the Trade Receivables Discounting System Initiative of RBI).

Quite important in this approach is promoting the development of legal reforms for establishing the legal and regulatory environment for SCF products by engaging government officials, legislators, relevant regional organizations, and regulators—for example, Afreximbank's Factoring Model Law, already adopted in Egypt and also being pursued by countries in the Organization for the Harmonization of Business Law in Africa (OHADA).

Also, public entities are in a leading position for fostering the development of e-invoicing strategies, including their use as electronic movable assets and collateral. Electronic invoicing increases efficiency for SCF based on receivables, as it can leverage invoice data. Development banks and other entities under this approach help to promote the development of credit infrastructure aspects of the electronic invoice, including regulatory requirements and information needed to permit its use for assignment, financing, discounting, and collateral.

In addition, central and development banks could play an essential role in establishing favorable conditions regarding KYC compliance processes by promoting central KYC registries or hubs to which a customer would be required to provide information only once, instead of an infinite number of times, as required today. Having a one bankwide agreed source of information can allow FIs to simplify the customer onboarding process for SCF programs. (For example, MANSA is a repository platform that provides a single source of primary data required for conducting customer due diligence on African entities. It was launched in 2016 by Afreximbank, in partnership with the African Development Bank, African central banks, and other international and national strategic partners.)⁵⁵

Table 4.2: Enabling Framework Approach: Benefits and Considerations

Benefits
Establishing an appropriate environment for the financing of SME via SCF and ABL
Relatively low investment required
Creation of a secure and transparent transaction environment for SCF players and users
Establishing good market practice by creating rules for and controlling SCF program operation
Considerations
Involvement of relevant stakeholders for legislation and regulation
Setting of eligibility criteria for participants
Technology investment (for example, in the case of a registry or e-invoicing platform)
Organization of monitoring the compliance
Operational cost (e.g., in the case of a registry)

4.2 SCF Advocacy and Advisory Approach

Development and central banks can also take a role as pure SCF advocates and/or advisors in order to further support the transfer of innovative trade finance solutions and know-how to their countries of operations. Furthermore, they can provide a framework of cooperation in which borrowers and suppliers of finance are represented.

This role can also be performed by working with government agencies and regulators to establish an appropriate regulatory and legal environment for an SCF program to be developed, either by the development bank itself or by commercial financial intermediaries.

Development banks under this approach offer their SCF advisory services to governments, legislators, and regulators, central banks, private and public FIs, and businesses. Their activities range from knowledge transfer to the fully hands-on setup of specific SCF programs, all aiming to pave the road for growth in SME financing.

This approach can involve the following many functions:

- Organization of and participation in SCF conferences
- Cooperation with industry associations –for example, FCI and ITFA
- Offering training courses and knowledge to target groups
- Supporting and facilitating the elaboration of model laws
- Advocacy for implementation of secured transactions laws
- Issuing guidelines for the use of SCF products
- Offering advisory services for the structuring of SCF initiatives and products as well as technology and vendor selection
- Facilitating encounters of the right partners (for example, FIs and IT vendors)

Examples of development or public institutions performing this role are IFC within the World Bank Group worldwide, Afreximbank in Africa, ADB in Asia, and EBRD in Europe and the Middle East and North Africa.

Table 4.3: SCF Advocacy and Advisory Approach: Benefits and Considerations

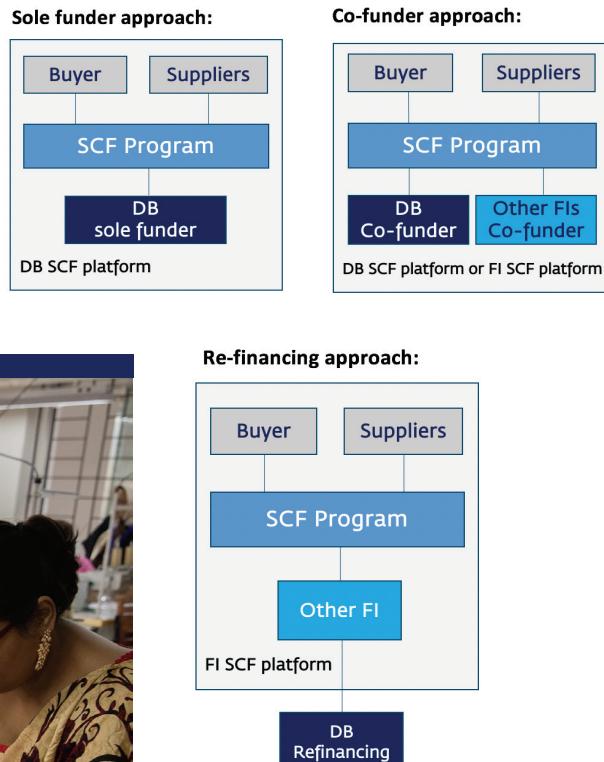
Benefits
Creating awareness of SCF products
Educating local banks about financing alternatives for SMEs can boost finance
Providing technical assistance to FIs for building their internal SCF capacities
Engaging private and public-sector SCF stakeholders can lead to expanded financial inclusion for MSMEs
Considerations
Level of engagement depends on political and economic factors
Advisory has to be tailored to each case
Build up a network of relevant stakeholders and partners
Build up internal knowledge capacity/hire experts



4.3 SCF Financing Approaches

As the name implies, these approaches are about providing funding by the development bank for SCF programs, whereby the development banks may assume variable roles resulting in a direct or indirect funding participation. Figure 4.2 illustrates structural differences between these approaches.

Figure 4.2: SCF Financing Approaches (First Tier and Second Tier)⁵⁶



4.3.1 Sole-Funder Approach

This role may be useful initially to create a demonstration effect of the SCF initiative. Development banks can choose to be the sole and direct funders and to launch their SCF programs on their own technology platforms, showcasing benefits to future participants and growing the program with corporations and beneficiaries, so they can attract other funder participation at a later stage.

This role is especially suitable for development banks with a first-tier business model, as they can increase financing to SMEs with a favorable risk position and at the same time create brand value. Furthermore, it can be adequate in markets or economies where (local) commercial banks have little (or no) interest in financing SMEs.

Nevertheless, this role has challenges related to having the operational capabilities to run the SCF program as well as providing financing directly to SMEs. It also implies that the development bank establishes its own SCF technology infrastructure.

Table 4.4: Sole-Funder Approach:

Benefits
Total income from the use of the program
Full control of the financing conditions
Develop a new market that reaches SMEs directly
Boosting SME financing
Creating a demonstration effect
Considerations
Technology investment
Setting eligibility criteria and performing credit processes: capital requirements
Sales and onboarding staff structure (including KYC processes)
Operational costs
Establishment of legal framework and contracts for all participants

4.3.2 Co-Funder Approach

A co-financing role refers to facilitating financing together and in parallel with other FIs. A multi-funder SCF model could allow the development bank to support a broader range of clients while fostering the development of private markets.

Co-financing is suitable for development banks with a first-tier business model and could be a strategically planned next step after the launch of a sole-funder initiative. This approach can be run either on a development bank's own SCF technology infrastructure or by strengthening the SCF platform of another FI. Co-funding can be applied for the development bank's own SCF programs or the programs of other institutions, leveraging their financial resources.

A co-financing role in a multi-funder model can help development banks running their own platforms to diversify financing sources in high-volume programs, or to target financing directly to some clients while bringing in alternative sources of funding to their program. In a multi-funder approach, a development bank can target the following parties for financing:

- Participants that other funders would be reluctant to serve (for example, riskier corporations)
- As a strategic role to provide financing to public-sector entities and thus to related SMEs
- Targeting specific economic sectors (for example, financing agriculture SMEs' suppliers)

In addition, by co-funding other FIs' SCF programs, development banks mobilize public-sector resources to shoulder some of the risks from the private sector.

4.3.3 Refinancing Approach

In markets where private FIs are reluctant to provide SCF because of funding constraints and perceived risk/cost issues, a development bank can consider a refinancing approach in order to motivate private-sector FIs.

**Table 4.5: Co-Funder Approach:
Benefits and Considerations**

Benefits
Income for development bank: interest income plus platform usage fee (in case it is a platform owned by a development bank)
Volume of the SCF program can be increased
Funding and risk distribution: distribution of high-volume programs to multiple funders/own funding can be reduced
Competition between funders encourages the offer of better financial conditions to SMEs
Considerations
Setting eligibility criteria and performing credit processes: capital requirements
Setting eligibility criteria for co-funders (in case it is a development bank program)
Contracts must be arranged with the participating funders and the counterparts (in case of a development bank platform)
Additional reporting to the funders must be set up (in case of a development bank platform)
Operational costs and technology investment (in case of a development bank platform)

This approach is suitable for development banks with a second-tier or combined business model. Providing low-cost second-tier financing could allow FIs to use a development bank's credit lines as a source of their funding and to on-lend to beneficiaries of SCF initiatives, in which case the FI earns the spread between what the SME beneficiaries pay and their funding rates. Such credit lines are often connected with specific criteria regarding eligible products, financed businesses, and client risk. FIs may use funds on a revolving basis from a development bank's preapproved SCF program. Refinancing can be structured in various ways regarding the legal instrument and practical execution (for example, as rediscounting at an invoice level or via a revolving line of credit to the FI).

This indirect financing role can be provided by a development bank on its own SCF technology infrastructure (for example, NAFIN's SCF program) or by leveraging the SCF platform of another FI, enabling it to grow its SCF programs (for example, ADB's SCF program). The decision on whose SCF platform to use depends in most cases on whether the FI receiving the refinancing has established a technology infrastructure on its own and whether it was in the lead of originating the SCF deal. It should be noted that in practice, public entities can take one or more approaches in parallel, as the examples provided in the next chapter show.

Table 4.6: Refinancing Approach: Benefits and Considerations

Benefits
Income for development bank: interest income for providing funds
Volume of the SCF program can be increased
Risk is lower for development back since its clients are the FIs
Competition between funders is encouraged to offer better financial conditions to SMEs
Development bank may rely on KYC process conducted by the FI
Development bank can leverage the SCF programs and technology platforms of other FIs
Considerations
Contracts must be arranged with the participating funders and the counterparts
Eligibility criteria for FIs and their SCF programs
Limit setup for funders needed
Additional reporting from the FIs must be set up
Additional steps in the operational flow for funding
Requests and confirmation might delay final payout to the SME

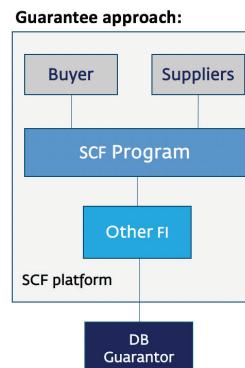
4.4 SCF Risk-Sharing Approach

In those market situations where private-sector FIs abstain from financing certain segments due to risk considerations, risk-sharing mechanisms can come into play to catalyze the market. Development finance providers use a number of techniques to distribute or share risk or to distribute assets to other finance providers or investors. One of these techniques is by means of unfunded risk participations or guarantees taking a previously established percentage of the risk per transaction.

The provision of such risk-sharing capacity has the objective of inducing the private sector to offer SCF products. This approach is also suitable for development banks with a second-tier business model. Establishing SCF guarantee programs that can combine a traditional SCF program with a development bank's guarantee can provide the incentive for banks to underwrite weaker credits. This is particularly needed in the current economic environment, when all credits are being adversely affected. Providing guarantees also gives commercial banks capital relief, as they can lower their credit reserves.

The guarantees can be provided on both an own SCF technology infrastructure or by leveraging the SCF platform of another FI. Development banks using this approach—in parallel with other approaches—include the ADB in Asia, NAFIN in Mexico, and Afreximbank in Africa (providing guarantees and refinancing to commercial banks).

Figure 4.3: SCF Guarantee Approach⁵⁷



**Table 4.7: SCF Guarantee Approach:
Benefits and Considerations**

Benefits
Income for development bank: fee income for providing guarantees
Volume of the SCF program can be increased
Risk is lower for development bank since their clients are the FIs
FIs can offer cheaper funding conditions due to capital relief
Development bank may rely on KYC process conducted by the FI
Development bank can leverage the SCF programs and technology platforms of other FIs
Considerations
Contracts must be arranged with the participating funders and the counterparts
Eligibility criteria for both SCF programs and FIs
Limit setup for FIs
Additional reporting to the funders must be set up
Additional steps in the operational flow: conduct risk assessment based on the information provided by FIs
Risk monitoring for guarantees needed

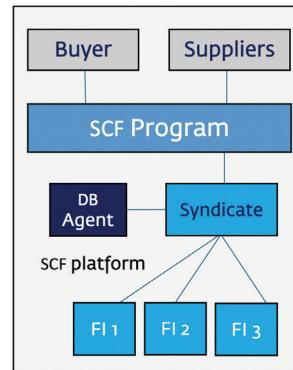
4.5 SCF Syndication Approach

Where an SCF program setup requires a very large volume of funding, which is beyond the capacity of one single FI, both funding and risk for such high-volume deals can be distributed among a group of participating financiers orchestrated in a syndicate. According to the Standard Definitions for Techniques of Supply Chain Finance, syndication is “the process of selling legal or economic interests in loans or other payment obligations to an investor or group of investors by the original arranger of such financing. Syndication may be built into the arrangement of the financing or take place subsequently, but usually promptly, thereafter.

The investors may all be parties to a single agreement including the borrower or may be parties to a separate agreement not involving the borrower. The arranger of the financing is usually agent for the investors.”⁵⁸

Figure 4.4: Syndication Approach⁵⁹

Syndication approach:



In a syndication model, the funding can be provided by a group of FIs or investors and structured, arranged, and administered by the development bank. Thus, a development bank can remain the lender of record for the entire loan, and the commercial banks derive benefit from the development bank's preferred creditor status.

**Table 4.8: SCF Syndication Approach:
Benefits and Considerations**

Benefits
Income for development bank by arrangement and/or syndication agency fee
Volume of the SCF program can be increased
Risk distribution: distribution of high-volume programs to multiple funders
Considerations
Additional contracts must be arranged with the participating funders and the counterparts
Additional reporting to the funders must be set up
Operational processes for funding requests and payment flows

4.6 SCF Infrastructure Provider Approach

This approach considers providing or enabling the technological infrastructure necessary for the successful operation of SCF programs for market participants—namely, FIs. Development banks and other public entities can either directly or indirectly play an important role by providing the digital infrastructure where parties seeking financing and parties providing financing can meet.

Different factors can influence a public institution's decision to provide or enable SCF infrastructure, and it should be considered when a thorough market assessment reveals that the circumstances of the particular country/region are suited to providing it.

The technical infrastructure for SCF can be enabled or provided by development banks in a number of ways, including (but not limited to) the following:

- Develop and run the technological infrastructure as a multi-funder platform and operate it indefinitely (for example, NAFIN) with the goal of ultimately catalyzing a market that will have competitors
- Develop and run the technological infrastructure as a marketplace platform and operate it indefinitely for the private sector to transact on it (for example, the PBOC-CRC)
- Develop and operate the infrastructure for a period before transitioning it to private operator(s)
- Catalyze private development of infrastructure—for example, by providing the regulatory guidelines, legal framework, and licenses for private platform operators and establishing connectivity to government procurement systems, e-invoicing platforms, and collateral registries (for example, TReDS initiative by RBI)
- Orchestrate and run the technological infrastructure in close collaboration with several private-sector stakeholders (for example, HKMA)

Especially when the market participants lack both the financial and the technological capacity as well as the knowledge to provide themselves such investment and services, the role of the public institution within this approach can go even beyond the role of a pure platform provider.

Providing a technological infrastructure requires considering not only the initial development or contracting of the platform but also the ongoing tasks related to the operation of the platform. It should also include the collaboration agreements that must be developed to bring on board other FIs and generate adequate incentives to motivate their participation.

It needs to be noted that SCF platform infrastructure can be established to cater to just one type of SCF product or a portfolio of SCF products and, most importantly, that the models of interaction and legal relationships between the participants can vary. These different schemes and how they are used in practice by SCF players are explained in detail in chapters 2 and 3. This section focuses on a high-level description of the approach, rather than elaborating on all the potential combinations of products or business models an SCF platform infrastructure enables.

Without doubt, technology is key for any successful SCF program, and the nature of the platforms is quite diverse. Public institutions considering the launch of an SCF platform under this approach typically have the following basic options: developing an internal IT infrastructure, contracting an existing SCF solution offered by specialized IT vendors (make-or-buy decision), or partnering with third party for the operation of the platform.

However, developing a platform from scratch can be very complex, so the time it takes from development to launch should be considered, and development invariably requires substantial financial investment. (For example, NAFIN in Mexico launched an SCF initiative in 2001 by developing an in-house platform, mainly because when

they started, there were almost no viable IT vendor options.) IT-related analyses and definitions for choosing the appropriate technology will be described further in chapter 6.4.

In the context of this SCF infrastructure provider approach, it is clear that it has to come with a sound framework for running the SCF technology platform, capturing the legal relationships and certain policies.

- **Policies:** These are the principles, rules, and guidelines for participants to reach the SCF program's goals. They include, for example, the eligibility criteria, operational framework, customer communication channels, onboarding and set-up processes, and so on.
- **Legal framework:** A legal framework is required for every platform, regardless of who provides the infrastructure, and there are multiple legal relationships to be distinguished. The framework includes the legal agreements for using the platform and between the parties who use the platform. The objective is to provide a legal basis that allows secure and legally binding transactions. The level of involvement of the platform provider varies very much when it comes to the contracting between the participating users (buyers, suppliers, FIs). Some development banks running SCF platforms have decided even to handle all the legal structuring for the participants—that is, drafting contracts, preparing contracts for the parties, collecting documents, preparing and coordinating the signing of the documents, and so forth.
- **Financing conditions:** Establishing guidelines for funders' participation to encourage that the program fosters competition and that SMEs get the best pricing conditions (for example, setting maximum rates).

The SCF infrastructure provider approach has challenges with regard to the operational capabilities to manage the SCF programs; hence, the approach requires adequate and sufficient staff to perform all related processes. When taking this approach, the development bank must be prepared to provide (some or all) of the following services:

- Onboarding process and perhaps marketing and sales processes as well
- Cover client acquisition
- Product support and client analysis
- IT support
- Processing legal contracts
- Depending on the financing role, performing a credit process, risk monitoring, reporting, and other administrative tasks described in following chapters.

NAFIN's SCF program in Mexico is a good example of a development bank applying an SCF infrastructure provider approach and of a development bank's role in providing all the infrastructure-related services, such as client acquisition, legal contracts drafting, operation, supplier's onboarding, and so on. This institution applied various financing approaches in parallel, as will be described in the following chapter.



Table 4.9: SCF Infrastructure Provider Approach: Benefits and Considerations

Benefits
Develop new market with infrastructure that was not there before
Boosting SME financing
Availability for multiple funders brings higher financing volumes and market reach
Access to platform for all participants ensures transparency and quick handling
High level of control of the SCF initiative
Promote credit culture from a national/regional level
Fee income for platform usage and the service provision
Considerations
Technology providing investment
Sales and/or onboarding staff structure
Establishing legal framework and contracts for all participants
Operational costs (ideally to be covered by the fees paid by participants for the usage of the SCF platform)

4.7 DLT Consortium Approach

DLT, colloquially termed “blockchain,” is making the bold promise to help bring the trade industry into the digital age. The ability of blockchain and DLT to establish trust between participants in a decentralized network without the need for a third party has drawn increased attention to it as an enabling technology.

Several supply-chain initiatives have been launched over the past few years that leverage DLT to enhance the transparency of the supply chain and ease access to financing, with a particular focus on MSMEs. Some take the form of multiplayer consortia and networks⁶⁰.

The fundamental aim of these consortia and networks is to facilitate digital trade finance and working-capital finance solutions via distributed trade finance platforms. This includes receivables finance, payables finance, and other solutions. The consortium approach aims to build trust among trade participants, improve efficiency, reduce risks, and facilitate trade counterparties to obtain financing.

Many more players enter the scene in a DLT consortium approach than when using a traditional enabling technology. Therefore, it is necessary to define their functions and the rules for an efficient system operation. It's more about orchestrating stakeholders and achieving a network effect so that the initiative works well and reaches high adoption.

Government entities and development banks could either take a leading role in a consortium development or participate as technology partner or as one financing provider. Examples of such initiatives include the following:

- In September 2018, HKMA launched eTradeConnect, an Asia-Pacific consortium originally initiated by seven banks. (This initiative will be described in section 5.6.) In October 2018, the network subsequently signed a memorandum



of understanding with the European consortium we.trade, which operates on the same underlying technology. While eTradeConnect focuses primarily on the Asia-Pacific region, this partnership aims to help open a broader trade corridor between Asia and Europe⁶¹.

- In addition, since 2017 the Monetary Authority of Singapore and HKMA have been jointly developing the Global Trade Connectivity Network, a cross-border infrastructure based on DLT technology, to digitize trade and trade finance between the two cities and potentially expand in the region and globally. The goal of the project is to build an information highway using DLT between the two platforms, which will make cross-border trade and financing cheaper, safer, and more efficient⁶².
- In September 2018, the People's Bank of China unveiled the Bay Area Trade Finance Blockchain Platform, a DLT-based platform for cross-border transactions. The platform incorporates 28 banks and has announced plans to link with eTradeConnect⁶³.

DLT-based trade finance platforms can improve the transparency, security, efficiency, and accuracy of the trade finance process and promote innovations.

Table 4.10: DLT Consortium Approach: Benefits and Considerations

Benefits
Innovative solution for building networks of participants
The cost of conducting business is largely reduced
With a higher trust level, the overall business environment is improved
Considerations
Technology investment (consortia set-up and maintenance costs)
Build up a network of relevant partners
Setting participation agreements and rules
Solving legal framework and interoperability issues





State-owned bank interventions are applied mainly in collaboration with the private sector in order to foster and boost financial development.

Chapter 5

Example Cases from Different Countries

To provide practical insights, the guidebook contains examples of initiatives by development banks and other government institutions in the area of SCF across the globe. The descriptions below are based mainly on desktop research. In some cases, feedback was provided by proponents of such initiatives. Besides a brief description of SCF activities, the following sections provide background information, each institution's objectives for engaging in SCF, key aspects of the chosen approach, and the main functionalities of the programs.

These examples show that state-owned bank interventions are applied mainly in collaboration with the private sector in order to foster and boost financial development. This view is illustrated by several experiences in Latin America, Asia, Africa, the Middle East and North Africa, and Eastern Europe. Some have been around and running successfully for many years; others are still in their beginning or even early proof-of-concept stages:

- **Nacional Financiera (NAFIN)**, Mexico: Cadenas Productivas
- **Banco de Inversión y Comercio Exterior (BICE)**, Argentina: e-Factoring
- **Asian Development Bank (ADB)**, all Asia: Supply Chain Finance Program
- **Reserve Bank of India (RBI)**, India: Trade Receivables Discounting System
- **Credit Reference Center of the People's Bank of China (PBOC-CRC)**: Receivables Finances Service Platform
- **African Export-Import Bank (Afreximbank)**, all Africa: Factoring promotion and plans for an SCF initiative
- **European Bank for Reconstruction and Development (EBRD)**, Central & Eastern Europe, Middle East and North Africa: Trade Facilitation Program
- **Hong Kong Monetary Authority (HKMA)**: eTradeConnect
- **International Finance Corporation (IFC)**, worldwide: SCF-Related Advisory, Financing and Investment

The experiences described may be the result of a specific environment that favored government intervention but may also be related to certain characteristics of the development-oriented FIs that implemented them. They undoubtedly provide valuable insight; however, these experiences cannot just be replicated in other countries. Each public institution intending to engage in an SCF initiative will have to pick its own approach and adjust to local circumstances.

Each public institution intending to engage in an SCF initiative will have to pick its own approach and adjust to local circumstance

5.1 MEXICO: SCF Program of Nacional Financiera

About Nacional Financiera

Nacional Financiera (NAFIN) was established in Mexico in 1934 as a national development bank to contribute to the economic development of the country by boosting innovation and improving productivity and competitiveness. Its core activities include facilitating the access of SMEs to financial services, supporting strategic and sustainable projects, fostering the formation of financial markets, and acting as financial agent and trustee of the Government of Mexico in both national and international markets⁶⁴.

NAFIN provides commercial financing and credit guarantees. Since the mid-1990s, it has moved away from direct lending, becoming mostly a second-tier FI. NAFIN is currently the second-largest public development bank in Mexico in terms of assets.

Background and Objectives of the SCF Program

MSMEs play a significant role in Mexico's economy, accounting for over 72 percent of total employment and 52 percent of GDP according to the 2018 Economic Census. Access to finance for these firms is limited and, if available, provided at high rates because of firms' lack of adequate collaterals and poor credit history information.

During the 1990s, NAFIN increasingly focused its activities on providing financing

and guarantees to SMEs. Since 2000, the institution has focused on promoting the growth of strategic sectors of the country's economy, with schemes as guarantees, in coordination with multiple banks, and on addressing financing scarcity, extending credit access to a greater number of MSMEs, for whom products are digitized and bundled.

In 2001, in line with its new goals, NAFIN launched an innovative program called "Cadenas Productivas" (Productive Chains) to facilitate reverse-factoring services to SMEs through an online platform. NAFIN was responsible for the development, production, and marketing costs of the electronic system⁶⁵.

Since its inception, the program's objective was to provide an enabling platform to develop the SCF ecosystem, allowing multiple private financial intermediaries of all sizes to participate in financing local SMEs. At inception, there were no openly known invoice financing systems in Mexico, and the factoring offering available to SMEs was paper based, with recourse, and offered at very high rates. These factors were main drivers for NAFIN's development of a platform and establishment of a multibank program. Some private-sector banks were beginning to provide SCF offerings, but only to their highly rated clients, and local banks were not actively participating in this market. Therefore, NAFIN catalyzed the development of a broader market for invoice financing by creating a technology platform through which NAFIN and other lenders could offer finance.

NAFIN's SCF Program in a Nutshell

The main product supported is the reverse-factoring type of solution (payables finance). The program works by creating "chains" between large buyers (anchor clients) and their suppliers. Participating buyers must invite their suppliers to join their program. Buyers tend to be large creditworthy firms, and suppliers are typically small firms that sometimes do not have a strong financial structure and have difficulty accessing credit from commercial lending institutions. The program enables these firms to acquire working-capital financing at competitive rates via reverse-factoring transactions with private participating FIs (PFIs)⁶⁶.

NAFIN provides the platform and applies a rediscounting and risk-taking approach in collaboration with PFIs. Both the funding and/or guarantee allow PFIs to achieve a capital relief to book additional transactions and reach out to more SMEs in the country. Since multiple financial intermediaries participate in the platform, competition between them is fostered to provide the best financing conditions for SMEs. NAFIN requires that all of the reverse-factoring services it brokers are offered without additional collateral or service fees, and it sets a maximum interest rate for financing SMEs.

All reverse-factoring transactions are done without recourse, which implies that the credit risk factors face is solely that of the large buyers and fully relies on the KYC processes of the PFIs. Initially, NAFIN required all PFIs to use its second-tier funding to provide credit through the system, but, to date, NAFIN's loans have not been mandatory for the reverse-factoring program to work, as NAFIN can charge PFIs a service fee for use of the platform.

NAFIN established a legal framework that enables suppliers to sign just one legal contract giving them access to financing with multiple PFIs, and it handles all the legal work, such as compiling documents, preparing and signing

documents, and so forth. Buyers must sign a platform-usage agreement with NAFIN and a contract with each PFI establishing mainly terms and rates. It also takes care of the anchor-client acquisition and onboarding processes of all participants. Main origination is brought by NAFIN, but a PFI that brings a deal can get exclusivity of the deal for a specific period of time.

NAFIN also provides second-tier financing to SMEs at different stages in the supply-chain cycle by offering guarantees to PFIs on distributor financing.

Key Success Factors

Because promotion of the program had to be made mostly at the SME level, NAFIN required different human and technical resources than if it were acting as a second-tier bank—namely, a new and larger retail sales staff and promotional resources. Deploying the required resources to establish the program was one of the main drivers of the success of NAFIN's program⁶⁷.

In addition to operating and promoting the platform, NAFIN educates SMEs about how to take advantage of the program by offering on-line and attendance courses on accounting standards, how to apply for credit, business ethics, marketing, and strategy.

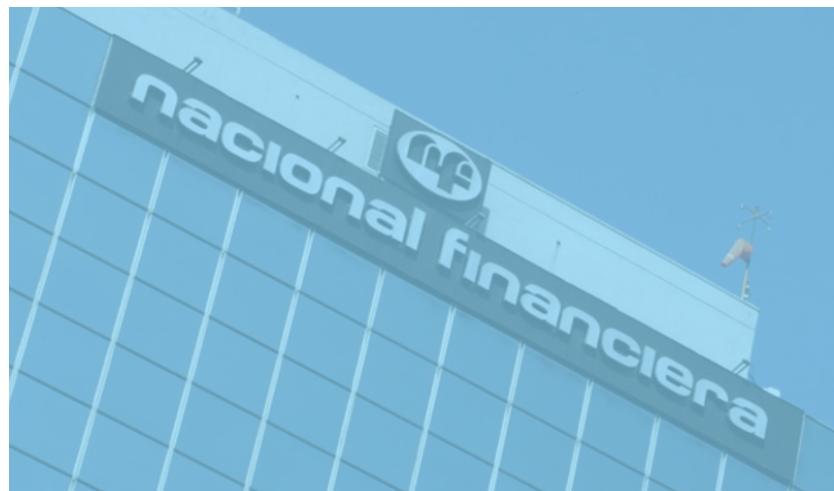


Table 5.1: NAFIN's Cadenas Productivas SCF Program Profile⁶⁸

Program Profile:	
Supplier	Domestic SMEs, must be invited by the anchor buyer
Buyer (anchor client)	<ul style="list-style-type: none"> Established private corporations located in Mexico, with annual sales of around Mex\$250 million (\$12.5 million) Federal government agencies, and local state governments
Distributor	<p>Domestic SMEs, distributors of participating anchor client</p> <ul style="list-style-type: none"> Minimum of two years' relationship with the anchor client Annual sales of around Mex\$2 million (circa \$100,000) Must have a credit facility with a PFI
Transactions supported	Domestic trade transactions
Currencies	Local currency and US dollars
Tenor	Up to 360 days
NAFIN's participation type	Infrastructure provider, funding (rediscount) and/or guarantees
Guarantee coverage	NAFIN takes up to 50 percent of the risk per transaction
Cost to PFI	<p>No sign-up cost for PFIs</p> <p>Funding cost for PFIs using NAFIN's funds</p> <p>Platform fees for PFIs using their own funds</p>

Furthermore, a key element for the growth of Cadenas Productivas was the mandatory onboarding of federal government agencies and entities in 2006. This allowed transparency in the handling of government payments while providing liquidity and timely information to suppliers and contractors, as well as administrative simplification for entities and agencies. From 2007 to 2014, the obligation for agencies and entities to post their accounts payables to suppliers in the NAFIN's system remained in force. The compulsory nature disappeared in 2015, but the largest government agencies continued to use the program. For 2020, the federal government is again required to post their payables on NAFIN's platform, thus giving their suppliers the opportunity to get liquidity from their account receivables.

Facts and Figures

In 2016, for the first time, an international FI joined NAFIN's electronic factoring platform. Before that date, only domestic financial intermediaries participated in the program. The company Greensill Capital Ltd., based in the United Kingdom, enrolled in NAFIN's SCF

program to provide financing to suppliers of the Mexican government-owned oil company Pemex. Greensill helped provide direct financing in US dollars to Pemex's suppliers through NAFIN's reverse-factoring program, avoiding additional currency exchange fees. This action diversified the liquidity sources for suppliers and direct contractors to strengthen the Pemex supply chain⁶⁹.

NAFIN's reverse-factoring program has been very successful. During 2018, the program encompassed around 460 large buyers, benefitting more than 20,000 SMEs. In that year, Mex\$206.49 trillion (approximately \$10.29 billion) were granted to SMEs through the SCF program, producing a year-end balance of Mex\$47.37 trillion (approximately \$2.35 billion). The SCF program contributes about 11 percent of the total balance of NAFIN's private-sector loan portfolio (including guaranteed loans)⁷⁰. Over time, NAFIN has been actively collaborating with development and central banks in several countries, including Argentina, Chile, Peru, and China, providing knowledge and capacity building for implementing similar programs.

As this example shows, NAFIN took strong leadership and, in accordance with its mandate, applied several approaches in parallel to address the particular situation of its market and country.

NAFIN's level of intervention as an SCF infrastructure provider was mainly determined by the fact that, at the launch date in 2001, there were no such private infrastructure providers, and that the intervention of a public institution was necessary to create the SCF ecosystem. However, NAFIN provided the infrastructure and the financing mechanisms and guarantees for PFIs, while creating an enabling framework to develop a secure and inclusive framework for SCF initiatives. The ultimate goal was fostering private-sector participation in local SME financing. Without a coordination mechanism for private parties, innovation might not have taken place.

The results of Cadenas Productivas reveal that a public institution like NAFIN has a role to play. In recent years, several Mexican private banks and fintech institutions have developed proprietary electronic platforms for conducting SCF transactions, suggesting that the NAFIN program certainly played a demonstration role, fostering innovation.



5.2 ARGENTINA: BICE e-Factoring Platform

About the Banco de Inversion y Comercio Exterior

The Banco de Inversion y Comercio Exterior (Bank for Investment and Foreign Trade, BICE) is a public bank in Argentina that grants medium and long-term credits for productive investment and foreign trade. Its sole shareholder is the Republic of Argentina.

Since the creation of BICE in 1992, it has been a second-tier bank that grants loans not only directly to companies but also through commercial banking entities, allowing them to achieve national coverage.

BICE is financed by its own assets, via placements in the capital market, and through credit lines from banks and multilateral credit and development agencies. It does not receive deposits from the public or contributions from the national budget⁷¹.

Background and Objectives of the Initiative

e-Factoring is an online platform, developed in house and launched in July 2018, that allows domestic SME suppliers of large companies to obtain liquidity by permitting them to choose the best alternative rate among participating banks.

Through this digital channel, BICE aims to overcome barriers in the financial system that hinder access to the liquidity that SMEs need for their basic operation. e-Factoring aims to foster integration between SME suppliers, large companies, and the financial intermediaries, strengthening long-term links by creating productive chains that improve competitiveness and the development of national economic sectors⁷².

Table 5.2: BICE Requirements for participants on e-Factoring⁷³

Requirements for Participants:	
SME supplier	<ul style="list-style-type: none"> Companies with business activity legally established in Argentina Suppliers of participating large corporations (buyer) Registered in the platform by their buyer Have at least one checking account in a bank authorized by the Argentina Central Bank Have signed the agreement to join the e-Factoring platform
Buyer (large company)	<ul style="list-style-type: none"> Qualified by national or foreign banks Have provided their suppliers list Have signed the agreement to join the e-Factoring platform
Banks	<ul style="list-style-type: none"> Have signed the agreement to join the e-Factoring platform

How e-Factoring Works in a Nutshell

The main product supported is reverse factoring (payables finance). Participating large corporations (anchor buyers) select the suppliers to join the platform, and BICE does the onboarding. The reverse factoring is done at competitive rates and without recourse to the supplier.

The operation of the program is described on BICE's website⁷⁴ in four steps. The website also displays the following explanatory videos for participants:

- Suppliers deliver products and services to large corporations and issue their invoices. Participating large companies nominate the suppliers to join on the e-Factoring platform and upload the approved invoices.
- Previously onboarded suppliers log on to the platform, select the invoices they want to discount, and choose from the banks associated with their buyer. They verify the transaction and, if they agree on the financial conditions, submit their request with their digital signature.

- The platform sends the request to the selected bank, and the bank credits the funds to the supplier's account.
- On the invoice due date, the large corporation pays the due amount directly to the bank.

Facts and Figures

As of December 2019, the e-Factoring platform had carried out 3,441 transaction for Arg\$1.57 billion (approximately \$23.4 million) since its inception in 2018⁷⁵.



5.3 ASIA: SCF Program of Asian Development Bank

About the Asian Development Bank

The Asian Development Bank (ADB) is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific while sustaining its efforts to eradicate extreme poverty. It assists its members and partners by providing loans, technical assistance, grants, and equity investments to promote social and economic development⁷⁶. Established in 1966, it is owned by 68 shareholding member states—49 from Asia and the Pacific region.

Background and Objectives of the SCF Program

SMEs represent more than 90 percent of all businesses across Asia. The contribution of SMEs to trade, jobs, and economic growth is constrained by many factors—one of which is inadequate access to finance. A 2019 ADB survey showed that SMEs experience the highest rate of rejection—around 45 percent of trade finance proposals sent to banks. Weak finances and a lack of collateral often prohibit SMEs from getting loans or financial support from banks⁷⁷. Closing market gaps for SMEs is critical to the growth and job creation that reduces poverty. The objective of the SCF initiative is also demonstrating to the broader market what is possible and showing that it already makes a positive difference.

ADB regards SCF as an innovative way to bring financing to SMEs. It offers a relatively low-risk, low-cost, and efficient way of getting money to SME suppliers by leveraging the credit rating of large buyers in a supply chain.

ADB is supporting banks willing to do more business involving SMEs with a limited risk weight asset consumption and additional funding source. ADB's

relatively new SCF program provides funded and unfunded risk participation to banks to support SCF for SME suppliers in ADB's developing member countries⁷⁸. The first SCF deal was done in collaboration with Standard Chartered back in 2014 in China.

ADB's SCF Program in a Nutshell

With the program, ADB applies a refinancing and risk-taking approach in collaboration with PFIs. It leverages the existing SCF product propositions, infrastructure, and local experience of partners in Asian emerging markets and enables them to grow their SCF programs by funding or just guaranteeing transactions for preapproved buyers. ADB's risk assessment for approval of lines is predicated on information provided by the PFIs⁷⁹, and ADB fully relies on the KYC and operational processes as well as the SCF IT solution of the PFIs.

Both the funding and/or guarantee from a Triple A (AAA) status development bank allows the PFIs to achieve a capital relief and to book additional transactions and reach out to more SMEs in developing Asia. ADB supports transactions involving suppliers in emerging markets in Asia for all kinds of industries. The main product supported is the approved-payables type of solution. Although ADB has launched the SCF program by offering guarantees to PFIs on post-shipment, post-acceptance transactions⁸⁰, it is now looking to move deeper into the supply chain by providing finance to SMEs at an early stage in the supply-chain cycle (that is, pre-shipment) and even pre-export finance, where market gaps for support to SMEs are the greatest⁸¹.

In order to become a partner of ADB under the SCF program, a bank must fulfill the eligibility criteria listed in table 5.4.

Table 5.3: ADB's SCF Program Profile⁸²

Program Profile:	
Supplier	SME from ADB's developing member country* <ul style="list-style-type: none"> • Minimum of two years' relationship with buyer • Solid production and delivery track record
Buyer	Established corporation <ul style="list-style-type: none"> • Rated at least BB or its equivalent • Located anywhere
Eligible goods	Goods, commodities, and equipment
Transactions supported	Cross-border and domestic trade transactions
ADB participation type	Loan or guarantee
Exposure limits	Varies based on credit assessment
Tenor	Up to 180 days
Coverage	ADB takes up to 50 percent of the risk per transaction (never exceeding PFI's exposure)
Currencies	US dollar, euro, Japanese yen, Chinese yuan Local currency programs may be approved on a case-to-case basis
Cost to PFI	No sign-up cost; participation fees apply

* ADB developing member countries are Afghanistan, Armenia, Azerbaijan, Bangladesh, Bhutan, Cambodia, China, Cook Islands, Fiji, Georgia, India, Kazakhstan, Kiribati, Kyrgyz Republic, Lao People's Democratic Republic, Malaysia, Maldives, Marshall Islands, Federated States of Micronesia, Mongolia, Myanmar, Nauru, Nepal, Pakistan, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Tajikistan, Thailand, Timor-Leste, Tonga, Turkmenistan, Tuvalu, Uzbekistan, Vanuatu, and Vietnam.

Table 5.4: Partner Eligibility Criteria for ADB's SCF Program⁸³

Eligibility Criteria for Partners:	
Information requirements	Provision of information sufficient for ADB to conduct risk assessment
Credit rating	A- on a global scale (minimum)
Risk management	<ul style="list-style-type: none"> • Sound systems to manage credit, operations, and documentations risk • Competent and adequate risk-management teams
SCF portfolio	<ul style="list-style-type: none"> • Post-shipment, post-acceptance financing (minimum) • SCF portfolio that matches ADB objectives
SCF portfolio rating	BB across all obligors on a global scale
SCF default ratio	Less than 2 percent across all products
IT infrastructure	<ul style="list-style-type: none"> • SCF clients use PFI's trade IT platform for SCF transactions • Supports PFI's ability to track and monitor SCF transactions

Facts and Figures

ADB did its first SCF deal back in 2014, with Standard Chartered Bank in China⁸⁴. Later, in September 2016, Standard Chartered Bank Malaysia Berhad and ADB signed a RM 80 million SCF agreement to benefit SMEs in Malaysia⁸⁵.

In November 2017, ADB and Deutsche Bank announced that they were partnering on an SCF program for helping fund SME suppliers of Middle East retailer Landmark Group, headquartered in the United Arab Emirates. Most of the suppliers that would benefit from the \$200 million annual funding arrangement are located in Bangladesh, China, India, Sri Lanka, and Vietnam⁸⁶.

In 2020, ADB made \$200 million available through its SCF program for companies manufacturing and distributing medicines and other items needed to combat COVID-19. Companies manufacturing and distributing products, including medicines and personal protective equipment, are increasingly strained as production and distribution ramp up to address COVID-19. The support from ADB, working in partnership with commercial banks, will provide such companies in Asia and the Pacific with additional working capital. Fifty-fifty risk sharing from partner commercial banks could boost support under the facility to \$800 million over a 12-month period⁸⁷.

As this example shows, national and international development banks can take strong leadership in line with their mandate and respond to the lessons learned from the crisis and support the buildup of the environment, infrastructure, and tools required to make all parties in the supply chain as well as the financial sector more resilient for the future.

5.4 INDIA: Trade Receivables Discounting System Initiative from the Reserve Bank of India

About the Reserve Bank of India

The Reserve Bank of India (RBI) is fully owned by the Government of India. The Preamble of the Reserve Bank of India describes the basic functions of the RBI as follows: "to regulate the issue of Bank notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage; to have a modern monetary policy framework to meet the challenge of an increasingly complex economy, to maintain price stability while keeping in mind the objective of growth."⁸⁸

Background and Objectives of the Initiative

Despite their important role in contributing to the Indian economy, MSMEs continue to face constraints in obtaining adequate finance. One big factor that affects the ability of MSMEs to convert trade receivables into liquid funds are slow-paying invoices⁸⁹. With the goal of addressing the challenge of access to finance for MSMEs in India, and in particular delayed payments, RBI introduced in 2014 the Trade Receivables Discounting System (TReDS) to enable private-sector FIs to offer SME financing via SCF solutions without the need to set up their own technology infrastructure.

A TReDS is defined as an electronic platform for facilitating the financing/discounting of trade receivables of MSMEs through multiple financiers⁹⁰ on a secure digital platform. The initiative was designed to encourage multiple private providers to receive licenses to operate a TReDS.

RBI set the regulatory framework for TReDS under the Payment and Settlement Systems Act 2007 and established clear guidelines for the setup and operation of a TReDS. RBI acts as the authority to grant the necessary licenses to the different providers of the technology platforms and to check their compliance with the established rules.

The objective of the TReDS, stated on the RBI guidelines⁹¹, is to facilitate financing of invoices/bills of MSMEs drawn on corporate and other buyers, including government departments and public-sector undertakings, by way of discounting by financiers. To enable this, a TReDS has to put in place a suitable mechanism whereby the invoice/bill is converted into a "factoring unit."⁹²

Entities (namely, technology providers) that want to set up and operate a TReDS should fulfill certain financial criteria (for example, minimum paid-up equity capital of Rs 25 crore), must pass a due-diligence process with RBI (fit and proper test), and have the necessary technological capabilities⁹³. RBI has currently granted licenses for operating a TReDS to three different Indian fintech institutions: Mixchange, Invoice Mart⁹⁴, and Receivable Exchange of India Ltd.⁹⁵

Each TReDS operates as an institutional invoice exchange that facilitates the financing of trade receivables that MSMEs have against their buyers (corporations, government departments, public-sector undertakings) through multiple financiers. The platforms provide an opportunity for financiers to build up a quality asset portfolio in the MSME space across a wide geography, and aim to minimize time, cost, and effort. The high degree of automation through the entire financing process helps the PFIs to bring down operations time and improves the customer journey.

How a TReDS Works in a Nutshell

Sellers (MSME suppliers), buyers, and financiers (banks or non-bank financial company factors) are the participants transacting on a TReDS. Onboarding to the platforms is fully automated, as are all confirmations and documentation between participants; there is no paper trail. Information is exchanged through an API, thus protecting host systems.

The process is as follows: (i) The invoice is uploaded by either the buyer or the supplier, depending on the method of discounting creating a factoring unit that is approved by the other party. (ii) Once the factoring unit is accepted by the counterparty, the financiers on the platform start to bid on it. (iii) The supplier selects the best bid, and the discounted amount is credited in its account within a day. (iv) The buyer makes the payment to the financier on the due date.

In principle, the exchanges allow for both supplier-initiated receivables purchase and approved-payables finance (reverse-factoring) solutions. Financiers are key participants on TReDS. They bid on factoring units that have invoices or "bills of exchange" as underlying instruments. TReDS currently permit only transactions without recourse and based on unconditional acceptance by the buyer as a financial obligation.

Settlement of funds works per regulated mechanism using the National Payments Corporation of India's settlement process subject to availability of funds in the financier and buyer account. During the onboarding of both the financier and buyer, a National Automated Clearing House mandate is taken and registered. With this, the funds can be automatically pulled from the bank account of a particular participant and transferred into the bank account of the corresponding party. The platform supports buyers with reminder messages to ensure that they arrange for the necessary amounts for settlement at the due date.

Further, according to RBI guidelines, the TReDS would have to put in place a separate recourse mechanism to handle settlement failures in respective payment systems⁹⁶.

Buyers may also request an extension for the payment from the financier on the platform, subject to acceptance by the financier. This provides additional flexibility in the buyer's liquidity management.

The Indian Government e-Marketplace (GeM), an e-procurement system, is collaborating with the different TReDS to facilitate the discounting of invoices for orders conducted through GeM. Public-sector enterprises are required to settle invoices for goods supplied within 10 days of the issue of a certificate of acceptance. Hence, GeM and TReDS platforms have worked out an arrangement whereby invoices for procurements carried out on GeM and which count with a certificate of acceptance by the public-sector enterprise, can be put up for discounting on a TReDS platform if the public-sector enterprise and MSME supplier are both registered therewith. With this, the public-sector enterprise has the time needed to make the payment, and the supplier receives early payment. Final IT integration is currently underway between GeM and the three existing TReDS platforms⁹⁷.

India has also imposed priority-sector lending requirements for banks—mandating that they meet certain lending targets for MSMEs. Participation in TReDs helps the financiers meet those MSME lending targets while building a quality asset portfolio.

Legal and Compliance

Each participant—the financier, buyer, and supplier—signs a “master agreement” with the TReDS exchange. As part of the onboarding process, suppliers also sign a standard purchase of receivables contract. The TReDS will be in custody of all the agreements⁹⁸.

All invoice acceptance/confirmation actions by the buyer and approval of the discounting by the supplier are conducted using digital signatures on the relevant TReDS platform, which also saves a permanent record on the system. All documents digitally signed on the platform have legal validity and enforcement as per the Information Technology Act of 2000. Also, the trade confirmation is done through digital signature—

thanks to the Goods and Services Tax, everyone has a digital signature, and directors of a company under the Companies Act are also required to have a digital signature in place. Hence, the supplier digitally signs the “deed of assignment,” which transfers the title of the receivable in the favor of the financier for every transaction where the bid has been won by the financier. The exchange platform sends the “notice of assignment” to the buyer per authorization from the supplier/financier. These steps meet the requirements of the Indian Factoring Act of 2011 and give better legal entitlement to the financier toward the receivable financed by them⁹⁹.

Another important aspect of TReDS is compliance. In 2018, the Department of Micro, Small and Medium Enterprises of India mandated that all companies registered under India’s Companies Act and having a turnover of more than Rs 500 crores (approximately \$66 million), and all central public-sector enterprises, are required to join a TReDS platform (the status of such registration is publicly available on MSME SAMADHANN—Delayed Payment Monitoring System)¹⁰⁰, thus making TReDS registration mandatory for such companies. The Registrar of Companies in every state has been nominated to be the competent authority to monitor the compliance of this notification¹⁰¹.

TReDS run a standardized one-time onboarding process that requires the entities to submit all KYC-related documents to the TReDS, along with resolutions/documents specific to the personnel authorized to transact on TReDS. Such authorized personnel are then provided with IDs/passwords for TReDS authorizations (multilevel). Indemnity in favor of TReDS, if required, may also be given if it is made part of the standardized onboarding process¹⁰². Financiers have access to and may rely on KYC documents lodged with the TReDS exchange, a feature that brings significant time and cost savings. Summary of Benefits Listed by the TReDs

Table 5.5: TReDS: Summary of Benefits for RBI and the Participants

RBI	Supplier	Buyer	Financier
Establishing an enabling framework for the financing of MSME	Access to financing their trade receivables without recourse and without need for collateral	Optimize the working capital by maintaining or extending days payable	Buildup of quality asset portfolio with MSME client
Strong control over the compliance of TReDs operators and transactions by ruling and monitoring the program operation	Reduced pricing due to auction principle on platform	Headroom for negotiating better COGS	Source of investment grade financing assets
Increase in the financing volume for MSME	Multiple funding partners	Option to extend the financing period with the lender when using reverse factoring	Easy client adoption by inheriting TReDS platform KYC
Creation of a secure and transparent transaction environment for users	Off-balance-sheet treatment of the sold receivables	Alternate and efficient funding method for making vendor payments	Reduce operational and credit risk due to buyer online acceptance of invoices

Numbers and Future Outlook

According to an internal analysis performed by the International Finance Corporation (IFC) in 2020¹⁰³, the cumulative volumes for the TReDS platforms were upward of Rs 20 billion (approximately \$264 million) per annum, with a monthly run rate likely to hit Rs 10 billion (approximately \$133 million, in March 2019). In the meantime, Invoicemart reported to having crossed \$1 billion in business volume as of March 4, 2020¹⁰⁴. Volumes are growing sharply, which can be seen as an indication of clients seeing the benefits. Over 30 banks have registered in one or more TReDS as financiers. Reverse factoring continues to dominate volumes in the TReDS platform—that is, buyers are getting more credit, but the volume of incremental credit to MSMEs is not increasing as much. Due to the auction principle for the pricing, many buyers and suppliers registered on the TReDS see financing rates reduced 100–200 basis points, according to the IFC analysis. As per discussion with platform participants, they qualified the technology standards as robust¹⁰⁵.

In order to enable TReDS to gain the necessary traction and relax procedural hurdles, the RBI Expert Committee on Micro, Small and Medium Enterprises stated in its report issued in June 2019 that it is now time to expand this system rapidly to enable additional forms of financing. The committee recommended the creation of a “second TReDS window” so that supplier financing can be provided easily¹⁰⁶. This window abstracts the need for the buyer’s acceptance of the invoice on the TReDS platform, resulting in a reduction of steps and a lowering of operational costs. As an alternative to an express and active confirmation by the buyer, the second window can make use of technological resources and alternative data to determine and reduce the risk of non-payment by way of API integration into TReDS platforms to facilitate MSME onboarding, invoice verification via the Goods and Services Tax, MSME bank transactional cash-flow data, Goods and Services Tax data, past loans and credit history, repayments tied to electronic liens on cash inflows, and more¹⁰⁷.

In particular, the Expert Committee recommended the following measures:¹⁰⁸ Note: The World Bank is currently also assisting the Government of India (including RBI) in improving the regulatory, operational, and technological framework for TReDS via its Raising and Accelerating MSME Productivity Project in India, pursuant to the Expert Committee's recommendations.

- **Expansion of the scope of the centralized KYC network** for capturing enterprise-level documents and to reduce delays in onboarding of MSMEs and corporations.
- **Creation of a pooled API of all three TReDS platform providers** would enable the financers to understand the past repayment history of buyers, thus enabling them to make more informed decisions. Further, it will also rule out the possibility of dual financing. The National Payments Corporation of India, which is acting as settlement entity for TReDS, may consider creating such an API.
- **Widening the scope of financers by permitting non-bank financial companies other than non-bank financial company factors** would possibly lead to discounting of invoices from MSMEs that supply to corporations with a lower credit rating. A minimum rating may be required for these non-bank financial companies. For the purpose, necessary amendments to the Factoring Act may be considered.
- **Completion of the integration of GeM and TReDS** within a timebound manner.
- **Reduction of the time for filing of a registration** of an invoice and satisfaction of charge upon it with Central Registry of Securitization Asset Reconstruction and Security Interest of India (CERSAI) to mitigate the possibility of dual financing.

- **Permission for the TReDS entities to act as agents for financers for filing of registration of charge with CERSAI and its satisfaction,** to improve operational efficiency. Therefore, the Factoring Act may be amended to permit TReDS entities to register charge with CERSAI.
- **Extension of the Credit Guarantee Fund Scheme for Factoring of National Credit Guarantee Trustee Co. Ltd.** to invoices to be discounted in TReDS platform through a second window. Such guarantee may result in the acceptance of invoices drawn on smaller/lower-rated buyers for discounting by factors and banks initially, and once transaction histories are built, they may dispense with guarantee subsequently. This could also lead in a way to better price discovery of the risks for the suppliers.



5.5 CHINA: Receivables Financing Service Platform by the Credit Reference Center of the People's Bank of China

About the Credit Reference Center of the People's Bank of China

The Credit Reference Center (CRC), established in 2006, is one of the public service units of the People's Bank of China (PBOC, the Central Bank). CRC is the operator of the consumer and commercial credit-reporting system. Apart from its credit-reporting function, and authorized by the Property Law (2007), CRC established the Collateral Registry, which covers the registration of the security interests on accounts receivable¹⁰⁹. Later, CRC extended the coverage of the Collateral Registry to other types of movable assets and other forms of transactions, such as lease transactions, inventory pledges, and so on.

Background and Motivation for the Initiative

Since China's Property Law was promulgated in 2007, accounts receivables have been legally recognized as collateral for credit, and accounts receivable finance has emerged and developed. But after several years, PBOC found that it had not been widely and massively applied in SMEs' financing as expected. The following constraints were observed¹¹⁰:

- It was difficult for banks or factors to verify the authenticity of the underlying transaction. They had few channels to obtain trade information, logistics information, or cash-flow data, and there were few online supporting systems, resulting in high investigation and operation costs. Many banks or factors were reluctant to provide accounts receivable finance.
- Many core enterprises in supply chains did not want to participate in SCF. They were unwilling to confirm the accounts receivable or provide relevant trade information. The essential issue was that modern credit culture in China was still developing.

Under these circumstances, PBOC-CRC developed a platform named Zhongzheng Receivables Financing Service Platform (hereinafter referred to as RFSP), in accordance with the international best practices introduced by IFC.

Description

The RFSP is led by PBOC-CRC. It is an information service platform built and operated to promote the financing of accounts receivables. The platform went online for trial operation on December 31, 2013, and facilitated the conclusion of financing transactions by providing a fast, convenient, and effective service for borrowers and lenders¹¹¹.

As a financial infrastructure, it builds a bridge among SME borrowers, lenders, and large firms by providing an online platform to operate accounts receivable finance. More importantly, it serves as a front to unite relevant government departments to promote SFC to support SMEs and promote credit culture from the national level¹¹².

The system is linked to the Collateral Registry operated by PBOC-CRC and thus provides convenient registration through the platform for receivables financing¹¹³. The purpose of registration is to establish legal protection against any claims made by a third party with regard to a receivable¹¹⁴. The CRC has operated the registry since 2007 through its subsidiary Zhongzheng (Tianjin) Movable Property Financing Registration Service Co. Ltd¹¹⁵.

How the RFSP Works in a Nutshell

The internet-based platform provides non-profit services. The platform deals with three types of users: account debtor or buyer (core enterprise), borrower (supplier), and lender (banks mostly). The platform has gone through the following three development stages¹¹⁶:

- As per the first version launched (V1.0), the platform allows the supplier to upload accounts receivable information to the platform (amount, payment term, and scanned invoices mainly). The buyer verifies the received information and confirms it with its digital signature. Based on the confirmed accounts receivable, the supplier fills in the financing request and pushes it to one, several, or even all the lenders registered on the platform. If a lender is interested, it negotiates the credit terms and performs the due diligence. After that, the bank issues the financing to the supplier, sends a notice of pledge/transfer through the platform to the buyer, and completes the registration of its security interests in the Collateral Registry directly through the RFSP, as the two systems are connected with each other.
- Since 2016, when upgraded to V2.0, platform interfaces have connected bank systems with ERP systems for confirming the authenticity of accounts receivable in a more comprehensive manner. To facilitate financing to the supplier, further additional data regarding accounts receivable and the underlying transactions and historical transactions data (for example, total amount of accounts receivable in the previous year, the current balance of accounts receivable, relevant orders, contracts, invoices, and so on) could be transmitted directly to the bank's system (with the supplier's authorization).
- With the launch of V3.0 of the platform in July 2018, finance based on the Government Procurement Order was introduced. Here the platform provides the banks with access to the government procurement system of provinces/cities. (There is no unified system.) It operates the information flow in the following two directions:

a) Extract information from the government

procurement system: Information regarding the government procurement orders, notice of the winning bid, procurement contract, and so on can be obtained by banks through the platform to confirm the authenticity of the procurement itself.

b) Input information to the government

procurement system: Banks can send information about the actual financing transaction back to the government procurement system through the platform, updating the government procurement system with the designated (supplier's) bank account to which payments have to be made, in order to ensure the repayment of the financing.

Facts and Figures

As of May 2020, the RFSP has 202,007 member entities (including 39,455 lenders and 162,552 accounts receivable creditors/debtors), facilitating a cumulative amount of ¥ 10.99 trillion (approximately \$1.57 trillion) of receivables financing¹¹⁷.



5.6 AFRICA: Afreximbank SCF Activities

About the African Export-Import Bank

The African Export-Import Bank (Afreximbank) is a pan-African multilateral FI dedicated to financing and promoting intra- and extra-African trade. The bank was established in October 1993 by African governments, African private and institutional investors, and non-African investors. It has the status of an international organization¹¹⁸. It is headquartered in Cairo, Egypt, and has regional offices in Harare, Zimbabwe, covering countries in southern Africa; Abuja, Nigeria, covering Anglophone countries in West Africa; Abidjan, Côte d'Ivoire, covering Francophone West and Central Africa; and Kampala, Uganda, covering countries in East Africa.

Background and Objectives of the SCF Initiative

As a development bank focused on trade finance, Afreximbank has a strategic objective of reducing the trade finance gap in Africa, especially for SMEs¹¹⁹.

The African Development Bank has estimated Africa's trade finance gap to be between \$110 billion and \$120 billion. The adverse impact of this is most acutely felt by the SMEs, which face a higher rejection rate of trade finance applications relative to large corporates. The high rejection rates are not solely attributable to poor credit quality; banks cite compliance constraints and the inability of clients to provide high-quality KYC as major factors. SMEs account for 70 percent of the number of firms on the continent and employ 80 percent of its workforce. Bridging the trade finance gap, especially for the SME segment, is thus a key challenge for FIs in the African market¹²⁰.

Afreximbank's Receivables Financing Programs

Afreximbank runs a receivables purchase/discounting program that comprises a family of facilities involving the purchase of specific, or groups of, receivables from the sale of goods and services to foreign or domestic buyers, with or without recourse to the seller. The facilities operated under this program are provided mainly indirectly via lines of credit extended to local PFIs. Financing is also directly provided to corporate clients who meet certain criteria in terms of transaction size and quality. Instruments used include forfaiting, invoice/receivables discounting, factoring and receivables management, and joint bill discounting/financing and refinancing¹²¹.

As a development FI, Afreximbank has led the way in introducing factoring and forfaiting and has done pioneering work in awareness and capacity building for these products across Africa in partnership with other institutions¹²².

While factoring volumes in Africa are currently modest, there have been encouraging developments that augur well for the future. Between 2015 and 2018, factoring volumes grew by 18 percent, from €18 billion to €22 billion¹²³.

Afreximbank projects Africa's factoring volumes to exceed \$50 billion by 2025¹²⁴. This development is attributed mostly to the following drivers¹²⁵:

- New market entrants supported by the sustained economic growth
- Rapid rise of Africa's middle class
- Emergence of innovative industries supported by technological advancements
- Rapidly expanding trade and economic relations between Africa and major economies in the south and an increasing focus on regional integration and intra-regional trade under the African Continental Free Trade Agreement

Some of the key challenges faced by the bank in promoting factoring across the continent include inadequate product awareness, knowledge, and skills; a lack of or unreliable credit information; a lack of credit insurance; economic difficulties and foreign currency shortages; weak or unavailable legal and regulatory infrastructure; and a lack of effective financing. To address these challenges, Afreximbank designed and is implementing the strategic pillars of factoring with the acronym FLACS highlighted in the following section.

Pillars of Afreximbank's Factoring Initiative

Afreximbank believes that factoring will allow African businesses to trade more competitively through the use of open account and other modes of importation other than letters of credit. Therefore, it has designed and implemented a strategy around five pillars (FLACS)¹²⁶, as outlined in table 5.6.

Table 5.6: Afreximbank's Strategic Pillars for the Factoring Initiative

Strategic Pillar	Activity
Financial intervention	Providing financing to factoring companies through lines of credits and guarantees to take into account the impact of COVID-19 on SMEs and various sectors. The financing structures consider COVID-19 market realities and offer terms and conditions that enable factoring companies to combat the COVID-19 pandemic and increase open-account trade. In addition, the bank proposes to offer reverse factoring to sustain supply chains.
Legal and regulatory frameworks	<ul style="list-style-type: none"> Advocacy on the adoption and implementation of the Afreximbank Factoring Model Law by engaging government officials, legislators, relevant African regional organizations, and regulators to improve the legal and regulatory environment. Egypt enacted a new factoring law in 2018 using the Afreximbank Factoring Model Law. Meaningful progress has been made in Nigeria with the Senate and Central Bank of Nigeria working with the Nigerian Export-Import Bank. Kenya, countries in OHADA, and so on are currently being pursued.
Awareness and capacity building	<ul style="list-style-type: none"> Continuously creating awareness of factoring across the continent through workshops, seminars and webinars. Continued focus on capacity building through the FCI e-learning platform, technical training on risk management, technology, transfer of know-how from seasoned factoring professionals to stakeholders of varying experience. Bespoke trainings and mentorship program using FCI network.
Strategic partnerships	Developing and nurturing strategic partnerships with organizations such as FCI, the Nigerian Export-Import Bank, the Making Finance Work for Africa Partnership, the African Development Bank's Fund for African Private-Sector Assistance, and the African Capacity Building Foundation*, attracting new members, partners, and sponsors.

Note: Kudakwashe Matereke, Afreximbank regional chief operating officer in East Africa, according to "Receivables Finance Can Help Close Africa's \$90 Billion SME Financing Gap, Says Kenya Central Bank Governor," a press release from Factors Chain International, March 11, 2020.

Afreximbank continues to play a key role in the factoring and receivables finance space in the continent. As of May 2020, gross loans under the receivables purchase program and lines of credit were about \$600 million and \$5 billion, respectively. Approved factoring limits stood at approximately \$25 million with about \$100 million under review.

With regard to facilitating the growth of factoring, Afreximbank endorsed the creation of a supporting legal and regulatory environment for factoring with the development and launch of a model factoring law for adoption by individual countries. The Afreximbank Factoring Model Law, launched in 2016, has been used by some African countries (such as Egypt) as a guide for the development of their own national laws on factoring¹²⁷. The bank is currently working with OHADA to use the model law to develop a Uniform Act on Factoring that will be implemented in 17 OHADA member states. In the same vein, the bank, working with the Nigerian Export-Import Bank and FCI, is influencing the promulgation of a factoring law in Nigeria that has progressed through the House of Representatives to the Senate¹²⁸.

Afreximbank is a member and sits on the board of FCI, and it is also the current chair of the Africa chapter of FCI. In this role, the development bank engages in facilitating exchange of experiences between local members in Africa and reporting on such experiences to FCI members worldwide.

Afreximbank's Payables Finance Initiative

As the next step on the journey to increase availability of SCF, Afreximbank proposes to introduce a payables finance program in various geographies in partnership with local and regional banks. Afreximbank will establish the SCF technology infrastructure in the form of a multi-funder platform based on a tested IT solution from a leading provider. The development

bank's approach is very flexible; it may take the role of a co-financier along with the participating funders or provide unfunded risk participation. The whole initiative will be accompanied by awareness- and capacity-building programs to maximize the market impact. The rollout is proposed in a phased manner, engaging with FIs in each region to provide financing in local currency and expanding geographic reach across the continent.

Afreximbank aims to launch a pilot with one partner FI in 2020 and to onboard FIs in 10–15 countries over the next two to three years. It is expected that the low-risk profile of payables finance will lead to increased adoption of SCF on the continent in line with the rapid growth in other regions. A number of African banks are also known to be actively pursuing commencement or scaling up of payables finance offerings, and this product is expected to grow rapidly as banks' marketing efforts lead to increased awareness and adoption¹²⁹.

Other Supporting Activities¹³⁰

As mentioned above, it is recognized that SMEs often face rejection of their financing applications due to lack of proper KYC. In order to facilitate the KYC process and reduce transaction rejection rates, Afreximbank has developed MANSA, an Africa-focused KYC repository. The relevance of this initiative was borne out by the BNY Mellon Global Survey 2019, which identified centralized KYC databases as the most effective technology solution for addressing compliance issues.

Afreximbank's trade promotion initiatives also include the Pan-African Payments and Settlement System, which is being developed to facilitate net settlements between African countries for intra-African trade and will complement implementation of the African Continental Free Trade Area.

5.7 EUROPE AND MIDDLE EAST AND NORTH AFRICA: European Bank for Reconstruction and Development's Trade Facilitation Program

About the European Bank for Reconstruction and Development¹³¹

The European Bank for Reconstruction and Development (EBRD) was established to help build a new, post-Cold War era in Central and Eastern Europe. It has since played a historic role and gained unique expertise in fostering change in the region—and beyond—investing more than €140 billion in over 5,600 projects. It has continuously expanded its reach and is currently active in nearly 40 countries, from central Europe to central Asia and the southern and eastern Mediterranean, plus the West Bank and Gaza.

Uniquely for a development bank, EBRD has a political mandate in that it assists only those countries committed to and applying the principles of multiparty democracy and pluralism. Safeguarding the environment and a commitment to sustainable energy have also always been central to EBRD's activity. More recently, the Green Economy Transition approach has made climate a key measure of the bank's performance. In 2019, such finance accounted for 46 percent of its total annual investment.

Background and Objectives of the Initiative

EBRD's Trade Facilitation Program (TFP) was developed to promote and facilitate international trade to, from, and within central and eastern Europe, the Commonwealth of Independent States, and the southern and eastern Mediterranean region. Under TFP, guarantees are provided to international commercial banks (confirming banks), thereby covering the political and commercial payment risk of transactions undertaken by issuing banks in EBRD's countries of operation¹³².

ERBD itself receives refinancing, and donors from several governments (including Austria, Germany, Italy, the Netherlands, Norway, Switzerland, and Taipei China) support TFP financially through risk-sharing funds. These funds support the program's activities in southeastern Europe, Armenia, Azerbaijan, Belarus, Georgia, Moldova, Kazakhstan, the Kyrgyz Republic, Russia, Tajikistan, Turkey, Turkmenistan, and Ukraine and enable EBRD to provide longer tenors and to take higher exposures in trade transactions.

Features and Functionalities of TFP in a Nutshell

EBRD applies the risk-sharing and refinancing approach to support trade and SCF transactions of their PFIIs. It therefore includes the following guarantees and facilities¹³³:

- **Guarantees:** The program can guarantee any genuine trade transaction to, from, and between the countries of operation. The program provides unconditional guarantees payable on first written demand for up to 100 percent of the face value of the underlying trade finance instruments. Guarantees may be used to secure payment of the following instruments issued or guaranteed by participating banks:
 - Documentary letters of credit; trade-related standby letters of credit from issuing banks; deferred payment letters of credit; and letters of credit with post-financing advance payment bonds and payment guarantees
 - Bid and performance bonds and other contract guarantees
 - Trade-related promissory notes or bills of exchange

An EBRD guarantee may be requested either by the issuing bank or by the confirming bank. TFP can discuss details of the transaction, percentage of cover, tenor, and pricing before a formal guarantee request is submitted.

- Revolving credit facility:** In addition to providing trade finance guarantees, EBRD also extends short-term loans to selected banks and factoring companies in its countries of operations. These are structured to fund trade-related advances to local companies exclusively for the purpose of pre- and post-shipment finance and other financing of working capital necessary for the performance of foreign trade contracts and domestic and international factoring operations. Credit agreements are signed between EBRD and the selected banks and factoring companies. Selection criteria are similar to the criteria used for issuing banks.

EBRD added factoring to the trade program in order to further support the transfer of innovative trade finance solutions and know-how to its countries of operation. It also provides financing for domestic factoring activities, in local currencies in a number of countries.

With regard to the scope of financed transactions, a wide range of goods and services—including consumer goods, commodities, textiles, equipment, machinery, and power supply, as well as construction and shipbuilding contracts, cross-border engineering projects, and other services—are covered. Some environmentally sensitive activities may be considered subject to satisfactory completion of environmental review procedures and approvals.

The selection of banks is subject to EBRD's approval and the signing of appropriate legal documentation. There are no costs or charges to join TFP. The eligibility criteria for becoming a partner bank are shown in table 5.7.

Besides the inclusion of factoring transaction within TFP, EBRD is active as an advocate and advisor for SCF, exploring ways of bringing greater use of SCF to the economies where EBRD invests. Historically, very few large buyers in the EBRD regions have pushed the development of buyer-led SCF solutions, but this is changing¹³⁴.

Table 5.7: TFP Eligibility Criteria for Issuing and Confirming Banks¹³⁵

Criteria for Participating Banks	
Issuing banks	<ul style="list-style-type: none"> Registered in all of EBRD's countries of operation (including banks with majority foreign ownership and subsidiaries of foreign banks) An appropriate level of financial standing Good corporate governance, clear shareholder structure Willingness to establish or already established international trade finance business
Confirming banks	<ul style="list-style-type: none"> All international commercial banks with established record of trade finance operations with banks in the EBRD region Selected banks in the EBRD region with experience in trade finance instruments

Hence, the development bank takes a strong role in advocacy and advisory for SCF in the countries of operation and is currently building up further capabilities and staff. EBRD's efforts aim to ensure that local banks in the region are prepared to meet these new SCF needs.

EBRD is an active cooperating partner of ITFA and is actively participating in and organizing conferences and events dedicated to the SCF topics. (An example is the Tallinn SCF Summit 2020, a one-day event held to discuss the growing use of SCF techniques and new opportunities to further digitize end-to-end trade flows in the economies where EBRD invests.)¹³⁶

Facts and Figures

In 2018, TFP already had more than 100 issuing banks and more than 800 confirming banks. It operated in 26 countries and concluded over 20,000 transactions. The total transaction value since inception in 1999 is €15 billion. Issuing banks in the region participate in TFP with total limits in excess of €1.5 billion¹³⁷.

5.8 HONG KONG: eTradeConnect Initiative

About the Hong Kong Monetary Authority

The Hong Kong Monetary Authority (HKMA) is Hong Kong's central banking institution. It was established on April 1, 1993, by merging the Office of the Exchange Fund and the Office of the Commissioner of Banking. HKMA has the following four main functions:

- Maintaining currency stability within the framework of the Linked Exchange Rate System
- Promoting the stability and integrity of the financial system, including the banking system
- Helping to maintain Hong Kong's status as an international financial center, including the maintenance and development of Hong Kong's financial infrastructure
- Managing the Exchange Fund

Background and Objectives of the HKMA Initiative

HKMA's research identified that the existing trade and trade finance processes have hindered the growth of trade finance due to the following¹³⁸:

- **Untrusted participating parties:** The trade process lacks visibility of transaction status and verification of documents' genuineness.
- **A document-intensive manual process:** Trade finance processes remain very labor intensive, involving large amounts of paperwork and a non-standardized workflow.

Together with such pain points as low transparency, efficiency, and accuracy, a heightened risk of duplicate financing, fraud and error, the processes result in insufficient financing for SMEs' trade.

Based on its role to support maintaining Hong Kong's status as international financial center, including the maintenance and development of financial infrastructure, HKMA announced on October 31, 2018, the official launch of eTradeConnect, a blockchain-based trade finance platform that addresses the recognized deficiencies and pain points of trade finance. Formerly known as the Hong Kong Trade Finance Platform, eTradeConnect aims to improve trade efficiency, build trust among trade participants, reduce risks, and facilitate trade counterparties to obtain financing by digitizing trade documents, automating trade finance processes, and leveraging the features of blockchain technology¹³⁹.

HKMA's Fintech Facilitation Office drives the initiative. The consortium members behind the eTradeConnect platform were initially seven banks: Australia and New Zealand Banking Group Ltd., Bank of China (Hong Kong) Ltd., Bank of East Asia Ltd., Development Bank (Hong Kong) Ltd., Hang Seng Bank Ltd., HSBC, and Standard Chartered Bank (Hong Kong) Ltd.—and now has 12 participating banks¹⁴⁰.

The Asia-Pacific consortium is managed by the Hong Kong Trade Finance Platform Co. Ltd., a single-purpose company and wholly owned subsidiary of HKICL Services Ltd., which itself is a wholly owned subsidiary established on February 6, 2018, by Hong Kong Interbank Clearing Ltd., a private company jointly owned by HKMA and the Hong Kong Association of Banks.

The whole initiative is still in the early steps.

Description in a Nutshell

Technically, the solution is built on Hyperledger Fabric. So far, eTradeConnect has digitized purchase order and invoice creation, pre- and post-shipment trade finance on open-account trade, duplicated financing check, and payment status updates. The platform aims not only to help move the formerly heavily paper-based trade finance system into the digital era but also to achieve the following various advantages¹⁴¹:

- Sharing of trade finance documents among participants on a real-time and “need-to-know” basis for protection of data privacy and security
- Enhancing transparency of transactions that operate on an open-account basis so that trading terms of a purchase order become more visible to all relevant participants
- Lowering the risk of fraudulent financing, as trade data stored in the platform can be verified and cross-checked
- Reducing the risk of duplicate financing and subsequently encouraging banks to provide trade loans
- Standardizing and digitizing trade documents to help reduce reconciliation efforts and human errors

eTradeConnect further enables facilitation of third-party confirmation and the use of smart contract to reduce the response time for transaction enquiries, provide financing to customers in a faster and more efficient manner, and automate the reconciliation between the purchase orders and invoices¹⁴².

Participating banks are invited to innovate and introduce non-conventional trade finance products to capture new market opportunities¹⁴³.

On eTradeConnect, customers and their trading partners can conduct trades and trade financing by sharing information in an effective and cost-efficient way¹⁴⁴. Connection to the platform for clients works not directly, but via the participating banks. Platform functionalities and features listed for clients include execution and conclusion of open-account contracts, access to trade financing, and reconciliation of information¹⁴⁵.

The network is currently working toward digitizing the connections with logistics service providers, connecting with different trade finance platforms from other jurisdictions, and integrating with ERP systems.

In order to facilitate cross-border trades, HKMA has been proactively looking for opportunities to connect eTradeConnect with trade platforms in other regions and signed in October 2018 a memorandum of understanding with the European we.trade consortium, which operates on the same underlying technology¹⁴⁶. While eTradeConnect focuses primarily on the Asia-Pacific region, this partnership may help open a broader trade corridor between Asia and Europe.

Future Developments and Proofs of Concept

- On November 6, 2019, a memorandum of understanding was signed between Shenzhen Fintech Institute (the subsidiary of PBOC’s Institute of Digital Currency) and Hong Kong Trade Finance Platform Co. Ltd. to conduct a proof-of-concept trial that aims to connect the PBOC Trade Finance Platform and eTradeConnect¹⁴⁷.
- In November 2019, eTradeConnect announced a proof of concept to connect the platform with CargoSmart and shipping industry participants that are proposing to form the Global Shipping Business Network. Facilitated by PwC, the proof of concept aims to show that linking the supply-chain data, from the shipping industry, with trade finance data, from eTradeConnect, is able to provide enhanced transparency, traceability, and efficiency for the 12 member banks and their trade finance customers¹⁴⁸.
- eTradeConnect has conducted another proof-of-concept to integrate with customer procurement systems. “ERP.Connect,” a digital asset designed by PwC as a proof of concept, enables seamless connection among platforms for submission of necessary digital information and documents on corporate procurement, order management, and treasury to facilitate trade financing directly from the company’s ERP system¹⁴⁹.
- Looking ahead, the focus for eTradeConnect will be on establishing connectivity with various DLT trade platforms using cross-chain technology.

5.9 WORLDWIDE: International Finance Corporation's Role in SCF

About the International Finance Corporation¹⁵⁰

The International Finance Corporation (IFC), a member of the World Bank Group, is the largest global development institution focused on the private sector in developing countries. IFC was founded on a bold idea: that the private sector is essential to development. It helps developing countries achieve sustainable growth in three broad ways: by financing investment, mobilizing capital in international financial markets, and providing advisory services to businesses and governments.

IFC works through FIs to provide much-needed access to finance for millions of individuals and MSMEs. This is an important part of the World Bank Group strategy to end extreme poverty and build shared prosperity¹⁵¹.

Established in 1956, IFC is owned by 184 member countries, a group that collectively determines its policies. IFC has six decades of experience in the world's most challenging markets. With a global presence in more than 100 countries, a network consisting of hundreds of FIs, and more than 2,000 client firms, IFC has been leading the way in private-sector development.

IFC's Role in SCF

IFC is committed to supporting MSMEs, which are critical for the economic and social development of emerging markets. These businesses generate income and create the majority of jobs—between 70 percent and 95 percent of new employment opportunities—in emerging economies.

When it comes to trade finance offered by FIs, more than 80 percent of trade is secured by some form of collateral, credit, guarantee, or insurance. Subsequent to

the financial crisis, gaps in trade finance have widened further, and the MSMEs are affected the most, especially the traders. More than 50 percent of MSME requests for trade finance are rejected by banks across emerging markets, and more than 70 percent of MSMEs don't have access to alternative financing. This means that a large proportion of MSMEs remain excluded from the trading system, inhibiting their growth, especially beyond borders¹⁵².

SCF is one of the strongest drivers for improving access to finance to SMEs (as suppliers and buyers in the value chains). With its commitment to support SMEs, IFC has been a pioneer in building and improving SCF markets in developing countries. This has been achieved through advocacy and knowledge dissemination, SCF investment program, public and private-sector partnerships, and technical assistance to both commercial and development banks in emerging markets.

SCF Investment Services

In IFC's efforts to help FIs cater to this market needs, a \$500 million global trade and supply-chain finance (GTSF) program was launched in 2010, aimed at providing affordable short-term financing to suppliers in emerging markets. The GTSF program provides short-term financing to suppliers selling to large domestic buyers or exporting to international buyers by discounting invoices once they are approved by the buyer. IFC provides this financing directly to suppliers via web-based supplier finance platforms or indirectly through FIs, helping to address a huge shortfall in access to finance for SMEs¹⁵³. Since the program launch in 2012, IFC's GTSF program has disbursed about \$3 billion to close to 1,000 suppliers across 14 countries. The average invoice size financed was approximately \$13,000, demonstrating the program's commitment to supporting SMEs globally¹⁵⁴.

To further support the SCF market, IFC works with banks to provide them with risk-sharing facilities and

credit lines to target new SME segments of the market, including SCF. In addition, IFC selectively invests equity in and partners with fintech companies in the SCF space. These companies are essential to connect buyers, sellers, and funders in the market and have increased productivity, transparency, and the timeliness of the delivery of invoices and reduced operational risks.

SCF Advisory and Advocacy

An IFC SCF advisory services program, launched in 2014, helps banks build or scale SCF operations of the client banks. These enable banks to win market share, mitigate underwriting risks, and build their corporate and SME client base. IFC has developed a proprietary SCF competency assessment tool that helps banks benchmark themselves against the SCF competency framework as well as structure SCF programs in an efficient manner. The SCF advisory proposition of IFC is built around the following pillars:

- SCF business model
- SCF market sizing and feasibility assessment
- Product selection and development
- Automation through SCF technology platforms
- Credit underwriting and risk management
- Selection and onboarding of the key SCF players
- Implementation though pilot and rollout

IFC also takes an active role as an advocate of SCF market development by sponsoring major conferences worldwide and speaking on panels, especially those that focus on developing SCF markets in developing countries. IFC regularly publishes materials on the topic of SCF, and it conducts market studies to identify the challenges and needs of SMEs in the value chains, map the ecosystem, identify the funding gaps, and the potential opportunities for SCF. IFC organizes educational webinars and sessions for market participants in the countries of operation

to raise awareness and market knowledge in SCF and to draw attention in the local market to the immense potential that a viable SCF market could have to unlock private-sector capital.

Creating SCF Markets

IFC leverages its longstanding role as an honest broker and its established networks in countries whose SCF markets are still nascent by engaging with regulators, FIs, financial-sector and SME industry entities, and corporations. IFC has commenced creating marketwide SCF programs in the countries of operation and addressing the broader SCF market barriers. For this, IFC deals with the enabling framework, policy dialogues with key stakeholders, market analysis and scoping, capacity building with all market players, technical assistance, and establishment of multi-funder technology platforms.

IFC is working with regulators in several countries to institute changes to the factoring laws and insolvency regimes, creating the appropriate frameworks to institute movable collateral registries, promoting SCF standards and guidelines, and establishing SCF-specific targets, as well as changing the laws to accept electronic signatures.

Conclusion

Given IFC's unique position as a multilateral institution focused on mobilizing the private sector, IFC can leverage its multiregional/country view and its local footprint. This allows IFC to work with multiple stakeholders, including banks, large real-sector companies, SMEs, technology platforms, and regulators, to improve the ecosystem and provision of finance especially to SMEs within the supply chains. IFC's combination of investment and advisory solutions is aimed at improving access to finance for SMEs.



Development banks, central banks, and other public entities can take various SCF approaches based on their underlying business models and their mandate, with the final aim of paving the way for the private sector's ability to provide SCF.

Chapter 6

Guidelines for the Development and Implementation of an SCF Proposition

6.1 Preparation and Planning

Like any other project, the development and implementation of an SCF proposition is a complex exercise which needs to be thoroughly planned and managed.

Figure 6.1: Building Blocks for an SCF Development Project¹⁵⁵

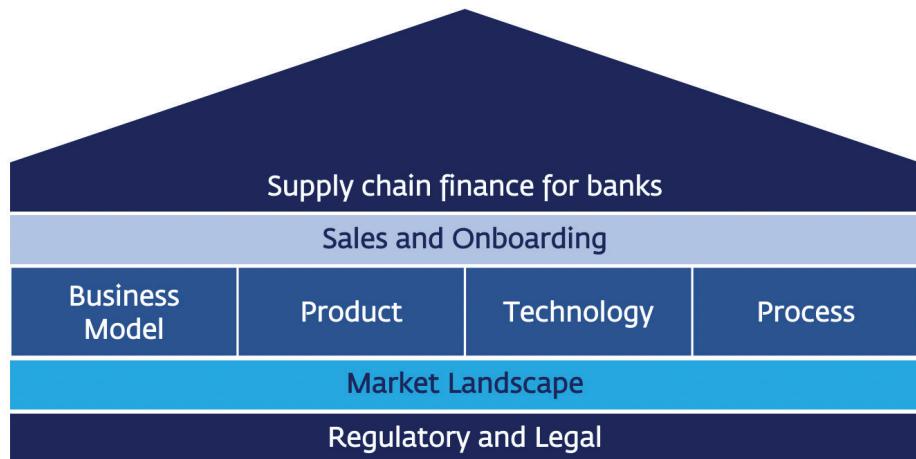


Figure 6.1 indicates the main building blocks for such a project. The following sections will detail different aspects of these building blocks.

It must be noted that the building blocks in a project are usually not independent of each other, and good project management and governance shall ensure efficient transfer of outputs and alignment to provide for adequate and timely decisions. A good analysis and plan shape the entire project, indicating which tasks are to be completed at which stage and which significant milestones need to be met along the way. Timelines should outline the deliverables and actions. The links between the tasks should also be outlined, helping to reveal

When designing the strategy of an SCF initiative, the goals, objectives, and scope of the program must be considered

dependencies and preempt any potential blockers. IFC advisory services, for instance, have specialized in supporting FIs with comprehensive analysis of their current competencies/capacities for SCF and mapping it with those that need to be built up for a successful SCF initiative¹⁵⁶.

Furthermore, it is of equal importance for a successful project to involve the right people at the right time—this refers to internal and external experts as well as to decision makers—and to communicate clearly the goals of the whole initiative as well as the deliverables of each workstream. In this context, project budgets must be planned and assured not only for the technology investments but also for marketing activities and human resources during the project and for the operating model after go-live.

6.2 Strategy

Strategy is vital to a successful project. When designing the strategy of an SCF initiative, the goals, objectives, and scope of the program must be considered (strategic framework). A plan must be developed to achieve them, including the clients to be served and the organizational structure required (business model), and a financial feasibility study (business case) should be built to evaluate the required investment.

Clearly identifying these elements will help to define a high-level road map and obtain the approval and commitment of senior management and the stakeholders involved.

6.2.1 Strategic Framework

As indicated above, the strategic framework should address the SCF project goals and how it will contribute to the fulfillment of the development bank's mandate. In defining the strategic framework, the following topics should be considered:

Objectives

For many development banks, supporting SMEs is within their policy mandates. SMEs are engines of job creation and economic growth, but lack of finance is one of their biggest hurdles. The global MSME finance gap is estimated to be \$5.2 trillion; at least 20 percent is tied up in supply chains¹⁵⁷.

As part of the initial strategy, it is important to determine the current situation of the country/region with respect to the finance gap of MSMEs. This can be done by identifying the current supply of financing for SMEs by banks or other financial intermediaries against the estimated unmet credit demand for SMEs, setting the foundation for spotting the market failure that the development bank will be trying to bridge, to a certain extent, with the implementation of an SCF solution while also highlighting the opportunity for other FIs to tap into the SME market.

In addition to achieving results in closing the financing gap for SMEs and thereby fulfilling their political mandate, development banks that implement

SCF initiatives can achieve their goals as creators and developers of new niche markets as outlined in chapter 1, developing innovative schemes to attract and channel resources from the private sector to SMEs.

Therefore, development banks can also set the following qualitative targets:

- Being a successful market initiator or catalyst for other financial intermediaries to participate in the SME financing market
- Driving growth and competitiveness among SMEs by creating an integrated digital platform that supports SMEs, enabling finance at a low interest rate by establishing an alternative source of finance
- Self-positioning as an innovation hub and key enabler within the local SME market landscape by bringing corporate companies (and government entities) and SMEs together via a technology-led SCF solution

As a result, development banks can expect different impact outcomes while supporting SMEs through SCF propositions.

Geographic Scope

Depending on the development bank's coverage area (multilateral, regional, national), a geographic scope should be outlined for the SCF initiative. For example, the economic situation of the country (or countries) they serve must be considered, and a market analysis should be carried out to decide on the most appropriate SCF product (or products) to address the financing gap for SMEs.

Product and Target Group Scope

Choosing which type of SCF products to offer is one of the main activities when designing the strategy as well as the road map of the rollout. Among other important key considerations described in the following sections, it is in the first place important to understand the market structure, size, and competitive landscape. Both a demand-side market insight and a supply-side competitive analysis are key ingredients for deciding which products to be deployed.

When targeting corporate buyers, suppliers, or distributors, it is crucial to analyze their needs, specific problems, and expectations toward an SCF offer. These target groups face multiple challenges in the course of the implementation of an SCF program; understanding them is one of the starting points for the proper design, setup, and marketing of an SCF initiative.

The competitive analysis involves the key players offering SCF solutions in the country (if any) and classifying them by relevant characteristics (for example, product type, organization, target beneficiary). This helps to understand the broader context of SCF solutions available in the country as well as the areas of undersupply.

When choosing the product(s) to start with, however, the following factors must also be analyzed:

- Interest rates to which SMEs have access (if they have access to financing at all)
- Structure of the different sectors of an economy and the nature of the respective value chains, in order to choose the sectors that are conducive to SCF (for example, sectors with long payment terms)
- Analysis of clients (suppliers, buyers, distributors) and their relationships (for example, domestic or cross-border), and so on

The selection of the target industries for the SCF initiative can be done in the following two major stages¹⁵⁸:

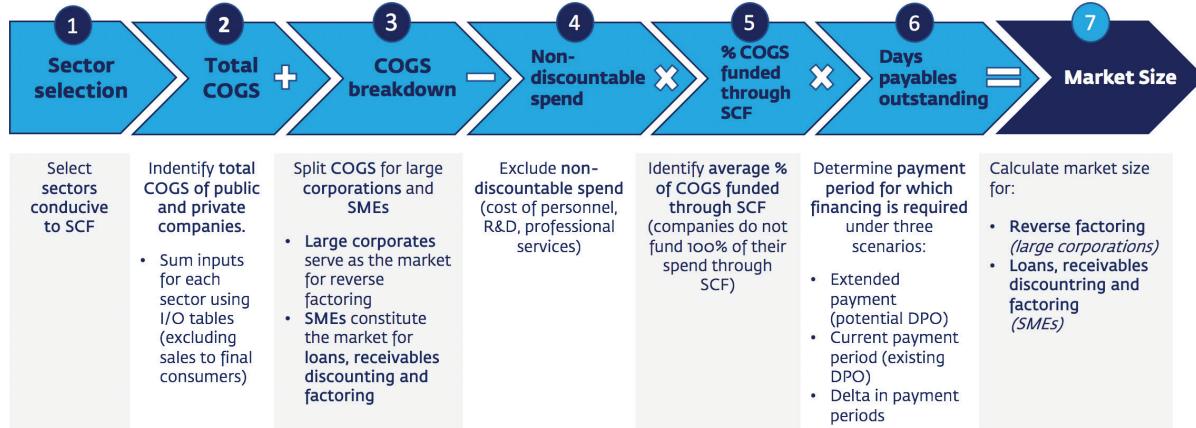
- Exclusion of industries that are not conducive to SCF (for example, service-oriented business)
- Prioritization of the remaining industries, which is typically based on SCF assets

The total size of underlying SCF assets is driven by the size of COGS and the percentage of discountable spending and percentage of COGS funded through SCF. In a next step, the market potential for different SCF products is analyzed by looking at the days payables outstanding (DPO) and days sales outstanding (DSO) benchmarks of each industry and calculating the market size, as displayed in figure 6.2¹⁵⁹.

As a result, development banks could identify the total number of possible customers and volumes for their SCF products and estimate the potential program results and benefits.

In addition to the opportunities that may be found in the private sector, a great opportunity also lies with the public sector. In fact, one of the great strengths and differentiators of a development bank in comparison to a commercial bank launching a similar program is being part of a public mandate and therefore unfolding greater political power when it comes to persuading and incorporating large public-sector buyers to the program, so that financing to SMEs can be deployed.

Figure 6.2: IFC Market-Sizing Methodology¹⁶⁰



The case studies described in the previous chapter demonstrate that a number of development banks decided to start their SCF initiatives with a reverse-factoring (payables finance) solution. Starting with this product has many advantages for development banks (listed in more detail in section 2.3.3). Standing out among them is providing efficient financing to a considerable number of supplier SMEs through a powerful technological platform based on the credit risk of large corporate buyers.

Approach/Role

The strategic framework should consider the SCF business model and approach that the development bank will take from the options outlined in chapter 4, either as a provider and enabler of SCF infrastructure or with any type of direct or indirect financial participation (funds, guarantees).

Furthermore, a combination of options can be established, and the role/approach can vary depending on the customer segments the development bank wants to serve. For example, it could take the role of a sole financing party with government entities and a co-financing party with corporate clients.

Strategic SCF Road Map

The development bank will want to set a strategic road map for the sequence in which it rolls out its different envisaged SCF initiatives. Or it can establish a phased approach for one specific product—for example, an initial phase as a sole funder and a following phase with other financial intermediaries' participation (multi-funder). The latter will also depend on its business model and its funding structure.

The strategic framework timeline should consider developing the initial SCF model and piloting as well as building long-term capabilities to take advantage of potential opportunities.

Measurement

Performance indicators for measuring success also need to be established. Clear performance indicators can be defined at a more detailed stage and depend on the chosen approach and products, but some high-level indicators can be established within the strategic framework for measuring success of an SCF initiative and to support decision-making processes about the following ongoing program adjustments:

- Number and value of transactions recorded
- Number of corporations onboarded
- Number of SMEs that are being financed
- Number and volumes financed of participating funders
- Indicators on the financing rates for the SME provided through the program

In addition to quantitative KPIs, the development bank can also establish qualitative indicators—for example, an increase in the SMEs' awareness of SCF solutions, as well as the capacity building and SCF knowledge development in domestic or local FIs. Such type of indicators can be analyzed through market surveys. For example, ADB has conducted surveys. The latest one, issued in 2019¹⁶¹, aimed to identify challenges facing efforts to narrow market gaps in trade finance.

Strategic Stakeholders

Finally, internal and external stakeholders' contribution to the SCF initiative must be clearly addressed. Senior management should be involved in order to ensure the success of the SCF initiative and to provide for a clear communication of responsibilities of the internal stakeholders.

Building a wide network of external stakeholders from private and public sectors (for example, regulators, associations, and so on described in section 2.1.3) would also help scale up SCF program. Strategic alliances can be considered with and between these participants.

6.2.2 Business Model

The business model aims to describe how to carry out the new proposition dealing with the following components:

- Client segments
- Value proposition
- Operating model (human resources, technology)

Client Segments

Client segmentation based on clients' varying needs and attributes aims to ensure the selection of appropriate SCF products that bring different benefits for SMEs, large corporations, and government institutions.

As mentioned in chapter 2, the motivations of buyers, suppliers, and distributors to participate in SCF programs vary depending on many conditions and especially on their role in the supply chain. Each business segment has a demonstrated need for liquidity and working-capital improvement, but on top of that, it's important to clarify in more detail the specific needs and characteristics of each segment.

In order to understand the main needs of each business segment and thus be able to address them properly in the design of the strategy and a suitable SCF product, development banks may start with some target group assessment capturing directly what they have to say. This can be done with a primary market research by for example conducting structured interviews during which a number of anchor clients as well as SME are asked about their experiences, concerns, and expectations regarding the subject matter.

Further, secondary market research based on valuable statistics and analysis around sector-specific payment terms as well as payment behavior and value chain analysis (like they are for example provided regularly by credit insurance companies) will enrich the analysis and support conclusions about the needs and characteristics of each industry.

The buyer's situation, for instance, could be assessed with questions around the following topics:

- Main concerns with regard to the production cycle
- Strategically important supplies and/or critical suppliers
- Nature and quality of relationship with suppliers
- Potential risks for disruption of the supply chain
- Length of DPO and DSO in comparison to industry benchmarks
- Cash-flow situation and management
- Major investment needs in the near future

Needs among suppliers might be very similar—especially if they are mainly SMEs—and may spring from challenges related the following:

- Nature and quality of relationship with main customers
- Pressure from buyers to deliver products on tight schedules
- Long payment terms and payment delays
- Lack of enforcement of late-payment legislation
- Liquidity requirements to finance purchases
- Constraints in access to bank finance or stressed bank limits and covenants
- Financial literacy, treasury capabilities, knowledge about SCF

As for distributors, analysis about their main needs and challenges could include the following, among other topics:

- Limitation in the access to other sources of financing
- Existence of significant time gaps between the credit terms of the large manufacturers they purchase from and the date when accounts receivables from their sales converts into cash
- Figures for DPO, days inventory outstanding (DIO), and DSO
- Growth opportunities if there were no restrictions of financing their inventory

Development banks can leverage the large anchor's knowledge about its multilayer upstream and downstream supply chain. Anchors usually have useful data due to their own concerns and interests regarding their distributors—for example, related to increasing their sales and managing the payment collection with their distributors. Many buyers/large corporations also have a deep understanding of their suppliers' needs and challenges, which is crucial for developing a suitable program for a specific geography.

All of the above client parties—anchors, suppliers, and distributors—should be further assessed with respect to their expectations for a financial product. This is important for reaching high adoption rates, as it deals with ease of access and use of the solution as well as pricing patterns and takes into consideration the technical and know-how capabilities of the various organizations.

Value Proposition

The value proposition is the reason why clients turn to one bank over another. It solves a client problem or satisfies a client need. The value proposition should include a detailed definition of the product(s) to launch and the benefits for each participant as well as a detailed description of the financial and nonfinancial motivations of potential clients.

It should also be developed upon market research seeking to reveal if an SCF solution already exists in the country/region and benchmarked against it. If there is no SCF initiative running in the country, the value proposition is mainly determined by the mere fact that the SCF program will offer a new alternative source of finance and risk mitigation for the target group. Where it already exists, the value proposition of launching an SCF initiative can be in the operational ease of using the product compared to a manual product, as well as the efficiency gains and the rapid provision of liquidity. Further, there is also the opportunity to provide for a fair offer in terms of pricing compared to existing financing options.

Depending on the business model, encouraging an FI's participation, either through funding or guarantee schemes, allows for cheaper rates, as banks benefit from a capital relief, supporting the growth and development of the national SME financing market.

Another competitive advantage for an SCF solution offered by a development bank compared to an SCF solution offered by a commercial bank is being a platform for multiple funders. With this proposal, development banks can take an important role in promoting competitive funder's rates for the benefit of SMEs.

Operating Model

Human Resources

Determining the human resources needed relies upon if a development bank would manage and run the platform or if it is just a refinancing partner or guarantee provider, in which case it may not need a lot of additional people for its SCF initiative. The organizational structure to be assigned will also depend on the current bank size (people) and may grow over time when results begin to be achieved.

In case the full scope of activities is assumed by the development bank, it is important to define clearly what

functions, skill sets, and capacities are expected to be necessary for the ongoing frictionless provision of the SCF program.

IT Infrastructure (Technology)

Technology is a key resource for making SCF efficient and scalable. In the event of an SCF infrastructure provider approach, an assessment of the existing alternatives in the market should be conducted to decide if a development bank should make or buy an SCF platform, as section 6.4 aims to explain.

Depending on the latter, it will be possible to outline an approximate IT cost, which should be included in the financial projections within the business case to assess the project sustainability.

6.2.3 Business Case

Business cases are typically argued in terms of cost-benefit analysis, which in the public sector may include both financial and nonfinancial costs and benefits, allowing a more comprehensive understanding of the benefits of the SCF initiative. The key purpose of a business case is to bring confidence and accountability into the field of making investment decisions. Therefore, its main component is a financial analysis.

A financial-viability assessment should include sources of income and costs to be covered. In terms of income, a common financial approach for development banks is that the revenue model must guarantee at least the sustainability of the SCF initiative. Table 6.1 outlines revenue streams based on a development bank's business model of an SCF initiative.

Table 6.1: Financial Analysis: Revenue Streams

Model	Revenue Streams
First-tier model	Sole-funder model: Interest income based on the term and volume of trade being financed to clients
	Multi-funder model: Servicing fees (for example, based on the volume transacted from other funders)
Second-tier model	Funding other intermediaries: Interest income based on the transfer pricing and related to the term and volume of trade being financed by funders
	Granting guarantees: Guarantee fee based on the client risk level established by funders
	SCF infrastructure providers: Servicing fee based on the volume transacted from other funders

Costs must be considered to determine the sustainability of the program. Depending on the development banks' SCF approach, costs might include the following:

- **IT infrastructure, if applicable**, with regard to the initial investment and the ongoing operating costs. These costs are usually the main ones within the budget.
- **Personnel costs associated with the SCF initiative's sales and operation processes.** It is common to start with an SCF team of internal staff, but in any case, the time that the staff will dedicate to the new program, both the direct and indirect teams, must be considered in order to determine the financial outlook.
- **Costs for outsourcing customer service.** Customer service may be carried out internally with existing resources, but costs for call-center services and/or for supplier onboarding must be considered to include them in future cost structures.



- **Other costs**, such as taxes on interest income and/or fees, need to be considered depending on the regulatory conditions of the development bank and local tax legislation.

With these data, at least three- to five-year financial projections can be calculated to determine performance indicators such as net present value, return on investment, internal rate of return, and the break-even point.

SCF initiatives usually follow a medium- to long-term strategy; there are significant costs at the beginning to configure the program, but in the long run, there are benefits for all that exceed the costs. In fact, SCF programs are totally self-sustaining and can generate, if this is the financial approach, significant additional annual net income for development banks, net of technology and operating expenses.

6.3 Product: Key Considerations When Building an SCF Product

6.3.1 Legal and Regulatory Environment

One of the first areas to check before deciding on a specific SCF product proposition is the legal environment and relevant regulation. The aim is to understand the overall legal and regulatory environment—that is, to assess the extent to which national laws facilitate SCF and its various products and to identify any limitations that may exist that can inhibit SCF, its products, or certain components of such products.

When assessing which legal instruments are suitable for the SCF initiative, the following list of topics gives a flavor of the legal and regulatory aspects to look at. Such a listing can never claim to be exhaustive or complete; depending on local jurisdiction and circumstances, further aspects might need deeper analysis.

Regulatory Environment for SCF

- This may include **licensing requirements** for providing specific financing or banking services. For example, in many countries factoring requires a bank license; in others, it is completely unregulated. A survey conducted by EBRD among their countries of operation shows a clear inclination toward regulation of factoring: 26 of 37 reviewed countries had a regulatory body in place supervising factoring companies. The survey also showed that the majority of countries that do regulate factoring services do not impose capital-adequacy requirements for factoring companies; only eight countries were exceptions to this. Twenty-one of the 26 countries that have a regulated factoring industry require a specific license to start providing factoring services; in the other cases, a simple registration in a designated register would suffice¹⁶². However, in some jurisdictions, development banks might be exempt from such licensing requirements and are not subject to regulation.
- It is also important, however, to check **regulatory reporting** requirements and/or the need for going through a **product-approval process** with the regulator (for example, central banks).
- Further, it has to be checked if there are any specific **central bank guidelines on lending against commercial contracts**.

Legal Basis for the SCF Instrument

- **Factoring law or other rules of the civil code:** Some countries have specific factoring laws in place to rule the transfer of titles or rights in a payment obligation. In countries where this is not the case yet, civil code and commercial law must be checked for applicable instruments. Some countries are also members to international

conventions on factoring (UNIDROIT and UNCITRAL) or are in the process of introducing a new legal framework to enable SCF product offerings.

- **Type of legal instrument:** Analysis has to be done to determine which of the legal instruments are in principle available in the jurisdiction of the country and suitable for the SCF product scheme (for example, purchase of receivables, assignment of receivables, pledge of receivables, subrogation, redemption of receivables).
- **Deal perfection:** Certain requirements, such as the notification of third parties in the case of an assignment or purchase of a receivable, may be an important prerequisite to perfect the transaction and to ensure priority against third-party claims. Regarding notifications, timing and formal requirements may also play a role.
- **Restrictions by law:** It must be checked if any restrictions by law—for example, on the origin of the receivables (only from the sale of goods and services) or on the maturity of receivables (for example, only under one-year duration)—can be factored or if there is a maximum time for the exposure of FIs to those receivables.
- **Execution of contracts:** As SCF products come along with modern technology, concluding contracts directly on the IT platform (for example, by accepting the terms and conditions electronically or by using an electronic signature) is an important ingredient for the efficient onboarding process. Therefore, it must be clarified if local laws provide for the valid application of electronic signatures. Further, requirements may apply with respect to the formal modalities of contract execution and the check of the signing party's authorization to act on behalf of the company/institution that they represent.

- **Secured transaction law and collateral registry:** While the secured transactions framework is not imperative to offer some SCF products, it becomes critical for viability and scale in some cases, and it is certainly beneficial to have a modern secured transactions law in place (for example, a full-fledged law on secured transactions based on the UNCITRAL Model Law)¹⁶³. For instance, modern principles of secured transactions law (such as creation of rights over future assets and the ability of secured creditors to describe collateral as a class) become condition precedents for products like pre-shipment finance. With respect to receivables, laws should help protect the propriety interests of creditors and their priority in case of conflicting claims (for example, over a pool of receivables). Secured transactions laws can also help with enforcement (both judicial and extrajudicial) in case of a debtor's default. There is an important distinction between SCF products that rely on intangible assets (for example, reverse factoring, which revolves around receivables in a "closed" environment and anchor-shifted risks) and those that rely on a combination of both tangible and intangible assets (for example, pre-shipment finance). In the latter case, secured transactions law and registry become more critical.

Collection and Repayment

- **Enforceability of the rights:** This will depend a lot on the governing law of the transaction and the court practice. Enforcement gets even trickier if in international transactions other jurisdictions are involved, due to the governing law of the underlying contract. In principle, the legal framework must allow a creditor or assignees of accounts receivable to collect from the payors directly, without court intervention. Collection efforts and legal suits, processes, and time for getting a court decree can play a role, too.

- **Insolvency law:** It must be checked in the relevant insolvency law under which circumstances the insolvency administrator will allow a clawback of sold receivables, in case the supplier files for bankruptcy and looked for adequate mitigation for such situations.

Legal Structuring and Drafting

- **Legal documents:** SCF products usually involve a set of legal documents, as several parties are involved. It is worthwhile to spend some time carefully defining the rights and obligations for the relationships between the participants and when drafting the legal documentation. Although example templates are available at public resources, the documents must always be tailored so that they are in line with the envisaged product features and operational possibilities. It is also advisable to assign the drafting into the hands of legal counsel experienced in the SCF area. The illustrations and descriptions of the different product schemes in Chapter 2 give an idea of and some examples for the contractual relationships that need to be considered.
- **Accounting treatment:** The legal concept of an SCF product expressed in the specific legal documentation, together with the operational execution, has an impact on the way the transactions have to be considered in the accounting of the participants. These effects must be considered when structuring and drafting the legal documentation.
- **Specialty Islamic banking:** In many emerging countries, it is also important to provide for sharia-compliant product structuring in order to reach an important part of the market. Hence, it is highly advisable to analyze possible structures and to become familiar with the approach preferred by the relevant scholars of the region in which

the product shall be launched (for example, commodity murabaha structure versus a purely tawarruq-based structure).

6.3.2 Compliance and Anti-Money-Laundering

In all of their operations, FIs must be compliant with several local and international compliance requirements and AML regulations and set up the procedures for conducting KYC checks as well as for preventing money laundering and the financing of terrorism.

FIs must also be prepared to perform sanction screening, a control employed within FIs to detect, prevent and manage sanctions risk. Screening should be undertaken as part of an effective financial crime compliance program, to assist with the identification of sanctioned individuals and organizations, as well as the illegal activity to which FIs may be exposed. It helps identify areas of potential sanctions concern and assists in making appropriately compliant risk decisions.¹⁶⁴

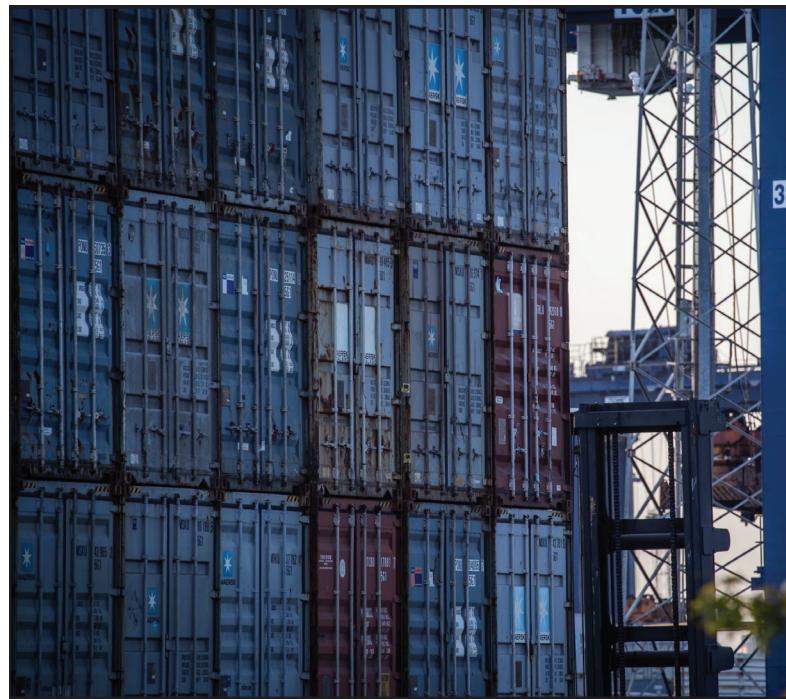


Table 6.2: Considerations for a Regulatory and Compliance Program¹⁶⁵

Considerations for a Regulatory and Compliance Program	
<p>A thorough regulatory and compliance program would include a review at the following stages to ensure strong program compliance standards and post-transaction monitoring:</p>	
<ol style="list-style-type: none"> 1. At program outset, conduct a comprehensive KYC, AML, and sanctions review on the proposed program and the parties involved. Most common market practice is for the finance provider to do a thorough due-diligence review to ensure the program complies with the finance provider's compliance policies and guidelines. These reviews may include the following: <ul style="list-style-type: none"> • Identifying high-risk jurisdictions and acceptability thereof to the finance provider • Obtaining client KYCs • Conducting due-diligence checks on program counterparties based on established risk criteria 2. At the transaction level, conduct ongoing monitoring and review for the life of the program, as follows: <ul style="list-style-type: none"> • All party names in transactions should be screened at the time of transaction drawing. • Screening should be conducted in line with the finance provider's guidelines and policies for similar trade transactions. Example: periodic party screening to ensure that none of the buyers has since been added to the sanctions list. • Customer due diligence and unusual activity screening should be conducted and consistent with the finance provider's policies and procedures. This is done on a pre- and post-transaction basis and may serve to identify anomalies in client behaviors or changes after the time of program approval. • Periodic post-transaction sampling of invoices and related documentation should be done through submitted spreadsheets. (<i>Note: This is also an item that would normally be covered in the receivables purchase agreement.</i>) 3. Post-transaction, perform periodic post-transaction reviews according to the institution's risk-based approach. Typically, these are performed annually. 	

Clarifying the necessary steps for a proper KYC process is of utmost importance for the SCF proposition, as this part is often regarded as a big hurdle in onboarding and a hindrance to broader expansion of SCF.

In order to supporting a smooth supplier onboarding, SCF providers apply web-based onboarding tools that automate and track the whole KYC workflow.

Compliance departments that are usually responsible for checking the documents provided have automated links to national and international company registries to verify the data provided about the company, its beneficial owners, or the authorization of the signatories.

When designing the KYC workflow, it might also be worth considering established KYC utilities—for example, Nordic KYC Utility AB in Europe, Afreximbank's MANSA Repository Platform in Africa, or the global SWIFT Registry. These registries aim to eliminate the burden of having to deal with multiple sources, contending with outdated data, and repetitively reaching out to correspondents by aggregating KYC information in a globally recognized standardized format and providing banks in a centralized database with everything they need. KYC utilities can help to overcome one of the biggest challenges in the compliance space, both for FIs and corporations¹⁶⁶.

6.3.3 Credit and Risk

The whole credit and risk analysis must be aligned with the principal approach of the development bank or any public-sector FI that is going to apply for its SCF offer. Involved risks will vary greatly with the role and functions that the development bank will assume. And even if, due to the structure of choice, there is no direct credit risk resulting from the provision of financing or a guarantee, there still might be some operational and performance issue to look at for potential sources of risk.

With regard to credit and risk, the following considerations are advisable:

Risk and credit policies: Check the current rules that the development bank has established and formulated in policies as a framework for providing financing and risk taking as well as for the management and monitoring of the defined credit and risk positions. There might be restrictions and certain maximum thresholds with regard to the allowed exposure by country, sector, client, currency, and so on, and also a set of rules on operational governance.

Eligibility criteria: Besides the business-side criteria for selecting the target clients for the product, the development bank, in line with the above-mentioned policies and in order to mitigate certain risks, can elaborate a catalogue of clear eligibility criteria with regard to the following:

- Participants (for example, minimum turnover, rating or duration of relationship with the buyer size, location or type of a supplier)
- Type of underlying assets (for example, invoice or purchase order)
- Volumes (minimum and maximum)
- Financing periods (for example, maximum tenor)

These eligibility criteria serve as a guidance for the sales team and deal-approval committees.

Risk types and mitigation: It must be identified whether a specific risk category applies for the envisaged SCF product proposition and if adequate mitigation measure can be taken. Risks to be considered are usually commercial risks, legal risks, operational risks, fraud risks, and country and political risks. Table 6.3 presents an overview of frequently mentioned risk types in receivables-based financing. In the distributor or purchase-order finance structures, additional risk categories and measures have to be assessed.

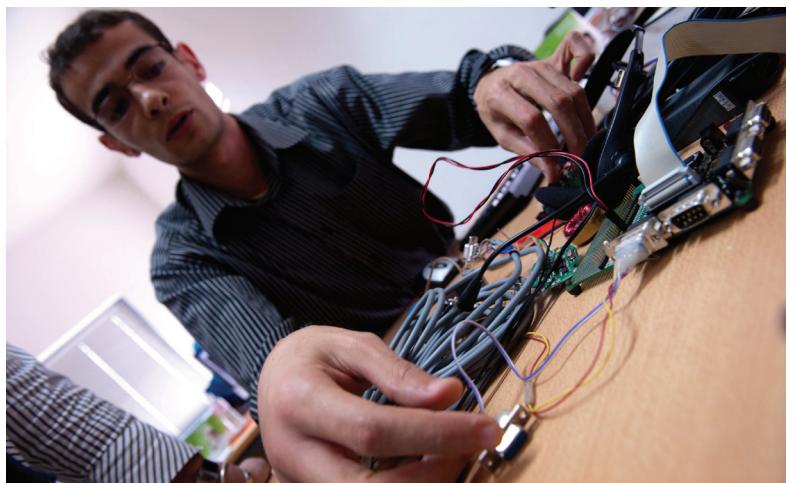


Table 6.3: Risk Areas and Risk Types

Risk Area	Risk Types	
Commercial risk	<ul style="list-style-type: none"> • Default risk • Dilution risk • Rating risk/creditworthiness • Concentration risk • Interest rate risk 	<ul style="list-style-type: none"> • Currency risk • Insolvency risk (debtor) • Insolvency risk (supplier) • Performance risk • Double financing
Legal risk	<ul style="list-style-type: none"> • Counterparty risk • Validity of claim risk • Enforcement risk 	<ul style="list-style-type: none"> • Deal-perfection risk • Preexisting security arrangements • Bans on assignments
Operational risk	<ul style="list-style-type: none"> • Manual handling mistakes 	<ul style="list-style-type: none"> • IT operation risks
Fraud risk	<ul style="list-style-type: none"> • Collusion risk • False invoices (e.g., inflated amounts) 	<ul style="list-style-type: none"> • Non-existence and non-validity of invoice
Country or political risk	<ul style="list-style-type: none"> • Risk of new rules in a country • Risk of political conflict situations 	<ul style="list-style-type: none"> • Risk of foreign-exchange payment restrictions
Counterparty performance risk	<ul style="list-style-type: none"> • Funding partner risk • Insurance partner risk 	<ul style="list-style-type: none"> • Supplier performance risk • IT provider risk
Reputational risk		

Credit and risk monitoring: This needs to be established in close collaboration with the relevant stakeholders and can be supported by specific credit and risk reporting aligned with the purpose of the SCF initiative and as a measure of getting early warnings when certain levels of risk concentration are hit. When specific risk events occur, there should be a predefined action plan on what measures to take and by whom. Examples for credit and risk reporting include, among others, reports on outstanding exposures per client, total exposure report, limit usage and expiry reports, delinquency report, exception reports, compliance reports, sharia audit reports in the case of Islamic banking, and so on.

6.3.4 Accounting and Tax

Any type of financial product—be it finance, investment, or risk taking—will also imply a certain treatment with regard to accounting and taxes. Therefore, the product design must deal with such implications for all the participants and aim to mitigate any potential risks for them.

Accounting Treatment

In the SCF product space, certain accounting treatments are preferred, and they also play a role for motivating the participants to use the specific product, as it helps them to achieve beneficial effects. International accounting rules (mainly IFRS or US GAAP) and local accounting standards may propose divergent treatments.

In receivables finance concepts, it makes a difference of whether a purchase/assignment of the receivable is structured with or without recourse to the supplier. In the latter case, under IRFS rules, the seller of the receivable can disregard the receivable from its balance sheet.

On the buyer side, the aim is often to keep the positions as long as possible as a trade payable, which are by nature short term. "If a buyer borrows to settle its trade payables, this will be reflected as bank debt. However, if the same buyer develops a payables finance program for its suppliers, the trade payables may remain as trade

payables on its balance sheet if certain criteria are met.¹⁶⁷ The accounting treatment especially of payables finance programs depends on several structural and operational aspects of whether a different accounting treatment is triggered. Therefore, responsible drafting of the whole legal documentation, combined with prudent usage of the product by the corporate buyers, is important.

Rating agencies (namely, Moody's and Standard and Poor's) have also had a look into the SCF models. After analyzing some cases (for example, Abengoa, Carillion)¹⁶⁸, they had critical remarks but stated that each case must be looked at individually. Agencies ask "for greater transparency so that its impact on Buyer's balance sheets can be assessed and properly evaluated."¹⁶⁹

As for the development bank, it is also necessary to clarify the accounting treatment of the chosen SCF vehicle. There is a difference in the recognition in the development bank's balance sheet whether

- The SCF proposition provides a **financing in form of a loan** (for example, in purchase-order finance or distributor finance); or
- If a **guarantee/risk participation** is given to another FI; or
- If a **refinancing line** is given to another FI; or
- If the development bank receives a **payment obligation of a debtor** resulting from the purchase of a receivable representing an underlying commercial transaction between the trade parties.

In the context of which instrument is booked, the specific prudential regulation will further determine the applicable capital requirements and the loan-loss provisioning that the development bank will have to calculate and consider in its reporting.

Taxation

With regard to taxation, the assessment will deal mainly with the treatment of the income generated from the SCF transaction. The question is therefore very much related to the design of the pricing model. For different components—namely, interest and fees—the treatment of whether they constitute a taxable income or not can vary. The main tax categories that often play a role in the context of SCF are, for example, VAT, tax on bank services or similar, stamp duty, withholding taxes, and other local charges.

Tax laws in some countries have formulated an exemption of certain banking services with regard to VAT. However, this may apply only on the interest income, whereas, for example, factoring income in many tax jurisdictions is qualified as being subject to VAT. In some cases, VAT is charged on the entire factoring transaction—namely, the service fee and the interest payments. The 2018 EBRD survey shows that 28 of 37 surveyed countries apply the same tax treatment for bank/non-bank factoring companies. There are situations where non-bank factoring companies are required to charge VAT on both components of the price of factoring, while banks are able to charge it only on fee for services.¹⁷⁰ In some countries, the concept of VAT does not exist (like Kuwait or Hong Kong)¹⁷¹. In other countries, a special tax on financial activities applies, rather than VAT (for example, Senegal)¹⁷².

In a few countries, stamp duties are still applied to a specific type of legal instruments used for the transfer of rights (for example, in Austria, for the purchase of receivables when a written deed is issued).

In cross-border transactions when at least two tax jurisdictions are involved, it gets even trickier, since the assessment must include also whether the other financial authority may oblige a participant to pay withholding taxes. Many bilateral agreements between states for the avoidance of double taxation foresee procedures for these situations.

In the first place, the legal concept and structuring must consider such implications to ensure that taxes will not have a negative impact on the overall cost of the SCF product. Careful wording of legal documents should further help to mitigate being held liable for taxes on behalf of the supplier in another country.

6.3.5 Operational Aspects

When implementing a new product, it is fair to note and acknowledge that, despite the desirable high degree of automation via an IT platform, there will still be processes that run outside of a specific system and need manual or semimanual handling. Especially when multiple entities and departments work together, the target operating model needs to be properly designed. Hence, the mapping and description of the end-to-end process flow requires proper planning to avoid friction, unnecessary steps, or operational risks. It should cover the processes along the whole product life cycle:

- It starts with the **sales phase**.
- It then tackles the **onboarding and setup**.
- It describes all procedures during the **ongoing business** (transactions and their monitoring).
- Provides for all **reporting** issues, and
- Handles the procedures for **termination of a relationship**.

Further, roles and responsibilities, decision-making and approval rules, and service levels need to be agreed and documented.

The people capacity building remains equally important and can be addressed with tailored trainings of staff in sales teams as well as for back-office and support functions—before the go-live and ongoing.

6.4 Technology

6.4.1 Analysis of Information Technology Environment and Preconditions

Modern SCF propositions are enabled by IT solutions that are specifically designed for such a purpose. Before deciding on the right technological setup for SCF, an analysis of the existing IT environment and preconditions is required in order to ensure that a new IT solution can be plugged in without causing major disruptions or changes for the existing business.

- The first activity can be an initial review of the as-is IT system landscape and architecture, encompassing the core systems, front- and back-end applications, administrative applications, interfaces with external and internal systems, gateways, and connectivity channels.
- Further, it is extremely important to analyze the data and IT security policies and regulations to follow.
- It is also highly advisable to run an impact analysis on the existing IT systems when starting a new business application from a technical and functional perspective (data entries and exchange).

The internal view of technology is not the only precondition for planning the SCF technology approach; the capabilities, preferred devices, and applications of target clients also deserve a deeper look. This supports the access and helps with acceptance of the new SCF solution.

6.4.2 Definition of the IT Approach

Depending on the chosen SCF product when defining the IT approach, there are a couple of options to get an opinion on, as they might also have decisive effects on the budget requirements.

The key question in the beginning is the “make or buy decision”—that is, whether the development bank wants to tailor the SCF solution with a greenfield development (either by employing its own IT capacities or by outsourcing the development) or if one of the ready-made SCF solution offered by specialized IT vendors shall be used. The pros and cons of each option must be assessed carefully. Certainly, the make option has advantage that the solution will be built to suit the exact requirements. On the other hand, it usually comes with a longer time to market and tends to have a higher cost. With the buy option, the using entity can benefit from quicker deployment and in many cases can leverage the longtime market experience of the vendors that is continuously included based on the client’s requests to enhance the solution.

In case the development bank opts for make, the development capacities and adequate business expertise for defining the functional requirements must be ensured before software coding can start.

If the decision is to buy, then an evaluation takes place of which platform operational models are advisable for the specific case and under which conditions they are allowed from an IT security or regulatory perspective. Many IT vendors offer their SCF solution as SaaS on the cloud (private or public). As some institutions might still have concerns with where the data is hosted, on-premises installation is also an option.

Other IT-related analysis and decisions touch the following aspects:

- Defining the technology ownership in case of a multi-funder model or if the application shall be shared with other FIs
- Defining users and their expected numbers
- Defining the to-be system landscape and architecture
- Elaborating the functional and technical requirements in close alignment with the business requirements of the envisaged product

6.4.3 Vendor Selection

In case an external technology provider shall be found for the SCF initiative, it is imperative—especially for government institutions such as development banks—to comply with public tender regulation. They usually have specific procurement policy and processes that ensure exactly this. The early involvement of procurement representative in the project makes absolute sense. Later, during the request-for-proposal (RFP) process, procurement is usually the single contact with participating vendors from launching the RFP material until the communication of the final vendor decision. For state-owned development banks, it is imperative to guarantee a fair execution of the whole tender process.

RFP Process

As a first step, the vendor-**selection approach** must be defined. In principle, if the expectations and requirements are pretty clear, an institution can launch a full-fledged RFP immediately. Other institutions might prefer to first get a brief overview of what to expect from possible solutions by conducting a short request for information and then sharpen the detailed RFP document before they issue the official tender.

For both approaches, a screening of the potential vendors helps to create an adequate **list of vendors** that later on will be invited to participate in the RFP process. For keeping the work on both sides efficient, it has limited value to send the full RFP material to any type of vendor.



Main chapters of an IT RFP include a description of the SCF initiative, the subject matter of the RFP, and the specific tender rules. Then vendors are asked to respond to the RFP questionnaire regarding the following:

- Ability to meet the **business functional and technical requirements**
- **IT security**
- The proposed **development and implementation project** and respective timeframes
- **Training support** and **ongoing support**
- **Business continuity** and **disaster recovery plans**
- **Details about the vendor's company** (references, financial situation, number of employees, development capacities, and so on)
- Detailed **pricing offer** for all the positions in the solution proposal

To be able to evaluate the vendor's offers, the **evaluation criteria** and their relative importance for the decision need to be defined. This ensures a transparent, structured, and well-documented **decision-making process**. Scoring models with an evaluation matrix and weights per criteria are often used. The main influencing factors for the vendor decisions are the functional score of a solution, the result of the IT security assessment, and, of course, the commercial offer in terms of "total cost of ownership."

The last step, the negotiation and conclusion of a contract with the selected IT vendor, is more than a commercial issue to be handled with a simple procurement contract; engagement with special legal counsel familiar with IT law and intellectual property rights is highly recommended.

6.4.4 IT Development and Implementation Project

Implementation usually starts with detailing the functional and technical specifications. After this, the customization and development of new features will be executed by the IT vendor and/or the internal IT department. After implementation and finalization of all the defined interfacings with existing internal and/or



external systems, some end-to-end testing is executed. The duration of the whole process depends on the development effort and can range from a few weeks to some months. After final approval and acceptance of all the deliverables, the system can go live with the first real client cases (pilot launching phase).

6.5 Marketing and Sales

Go-to-market approach: Very early in the project, the go-to-market (GTM) should be planned. Basically, GTM consists of an action plan specifying how the development bank wants to reach target clients and achieve awareness and uptake of its SCF value proposition. Although reaching a competitive advantage may not be the top-priority goal for a development bank compared to commercial banks, it is still of utmost importance to put an emphasis on the formulation of the differentiators of the new SCF offer and clearly communicate how the product is going to make a difference for the target clients. The purpose is to design a blueprint for delivering a product or service to the client, taking into account such factors as pricing and distribution. Main considerations for GTM may encompass the following:

Table 6.4: Considerations for Go-to-Market

- Determination of the market opportunity and **target market segments** (including priorities)
- **Pilot client selection** for initial market penetration
- Understanding of the **buying process** and the **business issues for decision makers**
- Identification of the **decision makers**, approvers, recommenders, influencers, snipers
- **Value proposition** that resonates with decision makers
- **USP:** Establishment of a differentiated position from substitutes and alternatives
- **Product roadmap** and product life cycle
- **Pricing model** for the product
- **Distribution strategy** and sales process
- **Demand creation and management plan** to create and follow up on qualified opportunities
- **Implementation and onboarding plan** to ensure the product offering is set up to perform properly
- **Training for the support organization** to handle implementation and user inquiries
- **Identify partners** for creating awareness, interest, implementations and supporting customers

Client acquisition: To get started in SCF propositions, development banks can use their political and business relationships to attract initial corporate clients to start populating the program. They can also establish agreements with other government institutions to extend financing to SMEs that are government entities suppliers.

Distribution channels: Channels are customer touchpoints that play an important role in the customer experience. The SCF distribution network should combine both traditional relationship management and digital channels. Finding the right mix of channels to satisfy how customers want to be reached is crucial for taking the SCF value propositions to market. Table 6.5 shows a traditional approach.

Table 6.5: Distribution Channels

Distribution Channels	
Personal relationship channels	SCF sales team: The sales team focuses on origination, structuring, and execution of SCF solutions for clients across segments
	Corporate/SME relationship managers: Client-coverage relationship managers in conjunction with SCF Sales negotiate transactions with customers and work together to present the deals for approvals
	Mid-office team: Implementation of the product offer, followed by ongoing client service, should be done jointly by the SCF Sales and the implementation/mid-office teams
Digital channels	SCF platform: SCF technology platform should enable efficient communication between the bank and customers and allow for smooth customer onboarding and seamless customer support
	Bank online platform and homepage: Both channels can provide marketing and background information about the SCF product as well as a direct link and log-in for the SCF product application

Direct and alternative channels can serve the following functions¹⁷³:

- Raising awareness among customers about the development bank's SCF products and services
- Helping customers evaluate the development bank's value proposition
- Allowing customers to select specific SCF services
- Delivering tailor-made value propositions to certain customer segments
- Providing post-implementation customer support

Client coverage model: In line with the distribution channel strategy, and depending on the actual SCF model approach, the sales coverage toward target clients is in the hands

of either the development bank or the commercial bank partners. Nonetheless, it is important to make sure that, for all client-facing activities, the service provided by relationship managers, product specialists, and implementation support staff is balanced well. The related positions will probably need to be newly defined, and hiring and education will need to start well in advance.

The setup of a dedicated SCF team may therefore include the following:

- An **SCF leader** who assumes the overall responsibility to drive the SCF program
- A **sales team**: Building a client relationship effectively is key for SCF success. The SCF team will form the cornerstone of the SCF lending strategy, preparing the sales pitches, performing client analysis, identifying the proper products, structuring the deals, organizing the credit applications, and so on. Therefore, some industry specialization is recommended.
- An **implementation team** that aims to work closely with the sales team to ensure end-to-end accountability for structuring and executing the solutions. It coordinates different teams across the bank to ensure an aligned delivery of the product to the clients.
- A **call center** (can be outsourced) to answer calls from clients and assist in the use of the SCF platform; this can be especially helpful when the program grows, as it relieves sales teams with regard to client service.

Effective customer management in the SCF program would be reached when relationship managers understand the full range of financing solutions within the SCF product range and in the development bank overall.

An (existing) sales process must be designed or adapted so that the SCF sales team achieves a successful onboarding. It is also important that the entire institution is aware of the new program that will be launched to align knowledge and provide better customer service.

Pilot phase: Very often in the case of new product propositions in a market, the take-up is easier later on, after there are successful example cases that show that the SCF proposition works well. The strategy to pilot a new proposition with just one or two clients also allows the internal organization and the IT system to prove their capabilities to deliver the product as planned, to become familiar with the new procedures, and to adjust where necessary.

Onboarding of clients: Onboarding is considered to be one of the most crucial elements for the success of an SCF program, as it is the entrance to do business. The process of onboarding clients, both buyers and suppliers as the case may be, must have a logical sequence to ensure, on the one side, a well-accepted and frictionless customer journey, and to cover, on the other side, all the legal and KYC aspects. Modern SCF providers nowadays run the onboarding with special onboarding tools partly in connection with call-center support either internally organized or outsourced.

Marketing and public relations: Both well-designed marketing tools and public-relations activities should accompany the go-live of the new SCF propositions. Some public-relations measures can take place even in anticipation of the launch in order to prepare the public, relevant stakeholders, and target audience early on for what the whole initiative is about and what can be expected from it. Marketers these days have plenty of choices; the spectrum of instruments include digital and physical communications as well as media channels. The experts from marketing departments can also support the design of platform user interfaces and the training tools.

Training and education: In markets where SCF products do not have a presence yet or still have very low penetration, awareness-creating and capacity-building efforts are key for successful adoption by users. Education and training programs for both target clients and staff can be offered in parallel with go-live but ideally are kept as a continuous offer for interested parties. Awareness levels in the market will also increase with the entrance of more FIs offering these types of products. The task of educating the market is distributed among several entities, though.



Development banks, central banks, and other public entities can take various SCF approaches based on their underlying business models and their mandate, with the final aim of paving the way for the private sector's ability to provide SCF

Chapter 7

Conclusions and Key Takeaways

Providing liquidity and working capital is the core focus of SCF solutions, making them an effective tool for development banks and other public entities to channel financing to SMEs. As such, SCF solutions support their goals, including in the areas of providing access to finance for SMEs, closing the finance gap, financial inclusion, and digitalization of the financial sector. SCF solutions provide SMEs with working-capital financing but, due to their structure, have a much more favorable risk profile.

Plenty of SCF players offer a variety of SCF products and related services within diverse business models—namely, funding providers, risk takers, and transaction infrastructure providers. These players may take on more than one of these functions at the same time. However, market penetration, in terms of number and type of SCF players as well as product availability and usage, differs among countries. While in most developed countries, the concepts are widespread and have already been used for a long time, some emerging markets are just starting the adoption. The emerging markets could benefit exponentially from the availability of such SCF products, especially for enhancing access to finance to underserved segments such as SMEs.

Technology has a big influence on how SCF products are structured. Many specific IT solutions have been developed in the past decades to support these types of products. New trends in technology, such as AI and ML, IoT, and DLT, to name just a few, hold big potential to disrupt the incumbents' business models and to enable reaching the underserved segments in the economy better than ever before.

Development banks, central banks, and other public entities can take various SCF approaches based on their underlying business models and their mandate, with the final aim of paving the way for the private sector's ability to provide SCF. Hence, when determining a suitable level of intervention, they shall follow the principles of trying to complement and enhance/expand the private-sector activity, rather than substituting or competing with them. In practice, variations and/or hybrid versions of these approaches also appear, or development banks make use of various models in parallel.



The SCF approaches and models differ remarkably in terms of financial investment and risk taking, as well as with regard to the reach of SMEs. In simple terms, approaches can be grouped in the following three categories:

- Service-oriented approaches (enabling framework, advocacy and advisory approaches)
- Financing and risk-sharing approaches
- Technological infrastructure approaches

Development banks and other public entities working under the enabling framework approach deal with the establishment of suitable and solid legislative and regulatory environment that will form the basis for the contractual agreements and operational conditions of SCF programs. For instance, secured transactions and prudential regulation reforms are key elements to provide for a sound enabling framework that motivates FIs to offer SCF solutions to the SME segment at attractive prices. Establishing a legal and regulatory environment where movable assets can be used effectively as collateral and, at the same time, provide effective credit protection is a critical step toward responsible and inclusive access to finance. Both regulators and central banks can play an important and leading role for secured transactions/ABL reforms.

Further, they can take care and use their influence with regard to the establishment of standards for e-invoicing, e-identity, or digital payments infrastructure in order to support the effective adoption of SCF.

When development or central banks take an advocacy and advisory approach, their activities are multifold. Aiming to pave the road for growth in SME financing, they range from pure knowledge transfer and training activities to working with government agencies and regulators to establish an appropriate regulatory and legal environment and fully hands-on advisory mandates to set up SCF programs in partnership with other private and public FIs.

They also may assume a financing approach, resulting in either a direct or an indirect funding participation or risk-sharing. Direct financing approaches can be adequate in markets or economies where (local) commercial banks have limited interest or lack the technical capabilities for financing SMEs via SCF solutions.

Finally, development banks can play an important role as providers of the digital infrastructure for SCF products. They either develop an SCF platform on their own, utilize existing IT solutions from external vendors, employ third-party platform providers, or team up with partners in a DLT consortium. The types of SCF platform where the target clients (buyers, suppliers, distributors) and (multiple) funders meet vary in terms of legal relationships, functionalities, connectivity to external applications (for example, collateral registries or ERP), and pricing mechanisms.

The examples of SCF initiatives by development and central banks portrayed in this guidebook show the beneficial effects of such initiatives. However,

there is no one-size-fits-all approach; there are various ways to tackle similar problems respecting the different environments. The development banks or central banks designed their SCF initiatives according to their mandates and roles and tailored them to the needs of their country/region.

Several of the development banks in the example cases work in a second-tier business model; hence, they applied a refinancing and/or risk-sharing approach (for example, NAFIN). They also partly leverage the SCF product offers of the PFIIs (for example, ADB, EBRD, Afreximbank). They also applied more than one of the approaches in parallel.

In most of the described example cases, the establishment of the underlying legal and regulatory environment was a significant prerequisite for the SCF initiative. Collaboration between parties and the use of various data sources as well as the creation of the technical interfaces are important ingredients.

Onboarding government entities as key client segment (sometimes even mandatory) turned out to be an important success factor in several of the example cases, and it supported and sped up adoption (for example, NAFIN, PBOC-CRC, TReDs).

Several of the advanced and mature example cases monitor their initiatives' success, continue developing the initiatives, and have plans to improve and/or build out the scope of their initiatives. Table 7.1 reviews key takeaways for development banks and central banks with regard to starting, developing, implementing, and running an SCF initiative:

Table 7.1: Key Takeaways

Key Takeaways		
Strategy	1	When designing the strategy of an SCF initiative, the goals, objectives, and scope of the program must be considered (strategic framework). A plan must be developed to achieve them, including the clients to be served and the organizational structure required (business model), and a financial feasibility study (business case) should be built to evaluate the required investment. It is important to ensure that the proposed SCF initiative will have value and priority in accordance with the objectives and expected benefits.
	2	A sound market analysis and market sizing should be undertaken to reveal the most prevalent needs in a country and sector in order to determine the SCF product and to design an SCF offer with impact for the development bank's goals. Competitive analysis helps to determine the value proposition of the SCF initiative.
	3	The SCF strategy needs to have a mid- to long-term perspective. The whole SCF initiative should have management attention and commitment for the investment.
	4	Performance indicators (quantitative and qualitative) should be established within the strategic framework for measuring the success of an SCF initiative and to support decisions about ongoing program adjustments.

Key Takeaways

Project preparation	5	Development and implementation of an SCF initiative requires careful preparation, good planning, and professional execution. It is of utmost importance for a successful project to involve the right people at the right time—this refers to internal and external experts as well as to decision makers—and to communicate clearly the goals of the whole initiative as well as the deliverables of each workstream.
	6	Especially with regard to the enabling framework, it is important to involve and onboard the relevant stakeholders right from the beginning and to seek the collaboration of regulators and lawmakers.
Product and processes	7	The legal and regulatory framework in a country plays a significant role when deciding the instrument used and for a successful launch of an SCF initiative.
	8	Each SCF initiative requires its own product program design reflecting the legal, regulatory, risk, credit, compliance, operations, and accounting aspects of a new product. There is no one-size-fits-all solution—what works in one country or institution may not necessarily work in another.
	9	The whole credit and risk analysis must be aligned with the principal approach that shall apply for the SCF offer. Involved risks and risk-mitigation measures will strongly vary with the role and the functions that the development bank will assume.
	10	The product design must deal with implications for accounting and tax treatment for all the participants and aim to mitigate any potential risks for them.
Technology	11	Technology is decisive for a modern SCF product offer. It starts with the make-or-buy decision. The latter can be achieved either by sourcing an SCF IT solution from an external vendor or by partnering with a third party for the operation of the platform, both requiring a sound vendor/partner selection project. In case the development bank opts for make, then development capacities and adequate business expertise for defining the functional requirements must be ensured before software coding can start.
	12	Providing a technological infrastructure requires considering not only the initial development or contracting of the platform but also the ongoing tasks related to the operation of the platform. It also includes the collaboration agreements that must be developed to bring on board other FIs and building adequate incentives to motivate their participation.
Go-to-market	13	Basically, GTM consist of an action plan specifying how the development bank wants to reach target clients and achieve awareness and uptake of its SCF value proposition. The purpose is to design a blueprint for delivering a product or service to the client. GTM may encompass the unique selling proposition, pricing strategy, distribution channels, client coverage, and the ongoing service model.
	14	In markets where SCF products do not have a presence yet or still have very low penetration, awareness-creating and capacity-building efforts are key for successful adoption by users. Education and training programs for both target clients and staff can be offered in parallel with go-live but, ideally, are kept as a continuous offer for interested parties.

Final Remarks

Development banks, central banks, and also commercial banks in emerging markets have the opportunity to leapfrog some steps in a usual product-development cycle by building on the experiences of other regions. They also have the big chance to base their SCF initiatives on the best-in-class technology or even to create some advanced proposition. With the help of the newest technology, they can even reach out for financing the deep tier in their economy's supply chains.

Even though it seems to be a complex exercise, and there is no one-size-fits-all solution, there is plenty of experience to leverage for building an SCF proposition tailored to the purpose and specifics of each particular economy.

Due to their global reach, the World Bank Group and IFC advisory teams have gained practical experience over many years' work in multiple geographies and jurisdictions and with commercial and public entities. They developed a vast tool set for handling SCF projects ranging from finding the right SCF strategy, designing the product, selecting the right partners, and advising with regard to the establishment of the enabling framework.



Endnotes

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³ GSCFF (Global Supply Chain Finance Forum), *Standard Definitions for Techniques of Supply Chain Finance* (2016).

⁴ ADB (Asian Development Bank), "Supply Chain Finance—Good for Banks and SME," Asian Development Blog, October 2018.

⁵ Firm-level surveys conducted in developing economies by the World Bank Group revealed that loan applications are rejected mostly due to insufficient or unacceptable collateral. The unavailability of assets is frequently not the problem; rather, it is the inability of the legal framework to facilitate the use of those assets as collateral.

⁶ WBG (World Bank Group), *Secured Transactions, Collateral Registries, and Movable Asset-Based Financing: Knowledge Guide* (2019).

⁷ WBG, *Smart Contract Technology and Financial Inclusion* (2020).

⁸ WBG, 2017 Survey of National Development Banks.

⁹ Stephany Griffith-Jones and José Antonio Ocampo, *The Future of National Development Banks* (2018).

¹⁰ Developing countries in particular host an average of three or more national development banks. Latin America and the Caribbean have the largest number of national development banks (152), followed by Africa (147), Asia and the Pacific (121), Europe (49), and West Asia (47). National development banks serve mostly the infrastructure, agriculture, and trade sectors.

¹¹ <https://sustainabledevelopment.un.org/>

¹² WBG, 2017 Survey.

¹³ WBG, 2017 Survey.

¹⁴ WBG, 2017 Survey.

¹⁵ WBG, 2017 Survey.

¹⁶ WBG, 2017 Survey.

¹⁷ GSCFF, *Standard Definitions*.

¹⁸ GSCFF was formed by the Bankers Association for Finance and Trade, the European Banking Association, Factors Chain International, the International Chamber of Commerce, and the International Trade and Forfaiting Association.

¹⁹ GSCFF, *Standard Definitions*.

²⁰ MH Corporate Finance (2020).

²¹ IFC, 2019.

²² IFC, *Supply Chain Finance Knowledge Guide* (2020).

23 IFC, *Supply Chain Finance Knowledge Guide*.

24 MH Corporate Finance (2019), based on GSCFF, *Standard Definitions*, with further amendments. It is worth mentioning that other perspectives and views on SCF suggest an even broader view of the scope and product categories. GSCFF's definition is focused on working capital and does not stress, for example, the collaborative aspects of SCF. As SCF deals with "liquidity invested in supply chain processes," a categorization of SCF products could also consider the financing of fixed assets (for example, equipment) or equity in the framework.

25 Enrico Camerinelli, "Credit Rating for Supply Chain Finance" in *World Supply Chain Finance: Report 2019* (BCR).

26 MH Corporate Finance, "Introduction to Supply Chain Finance" (2019), based on GSCFF, *Standard Definitions*, with further amendments.

27 For the purpose of this guidebook, the definitions and descriptions below are either from GSCFF, *Standard Definitions*, or in line with them.

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- 52 WBG, *Secured Transactions, Collateral Registries, Movable Asset-Based Financing*
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