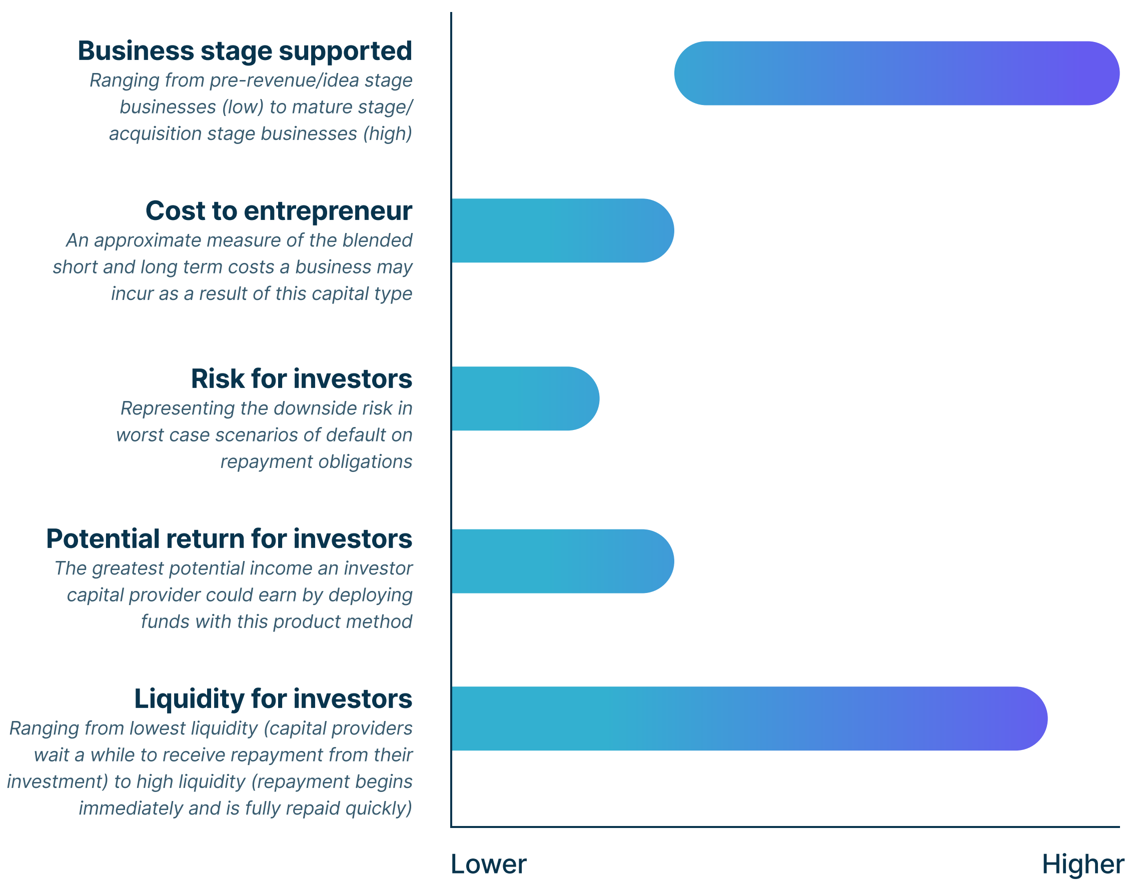
Supply Chain Finance

TL;DR

Supply chain finance (SCF) refers to a set of financing options for businesses to access working capital by using existing customer orders.[11]

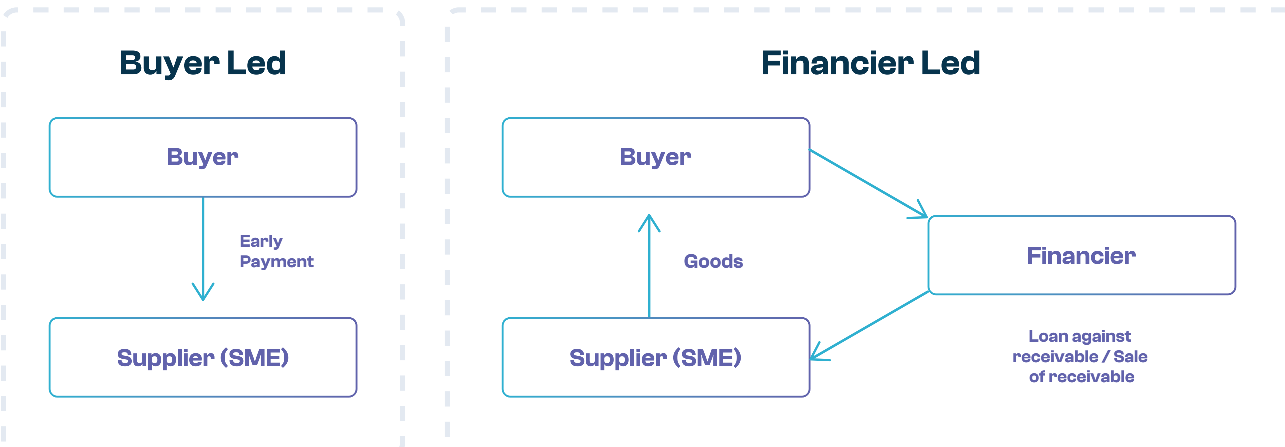


What is supply chain finance?

Supply chain finance (SCF) is an approach to financing that has been developed over centuries. It allows small businesses to access working capital in a timely fashion by using existing orders from customers. The use of SCF has been traced to Phoenicia and the Roman Empire, when farmers and merchants would obtain financing from lenders based on their future harvests, productions or shipments.

There are three distinct categories of SCF agreements: advanced payable, receivables purchase, and loans. In essence, businesses can negotiate an early payment from a customer, sell their receivables, or borrow against them.

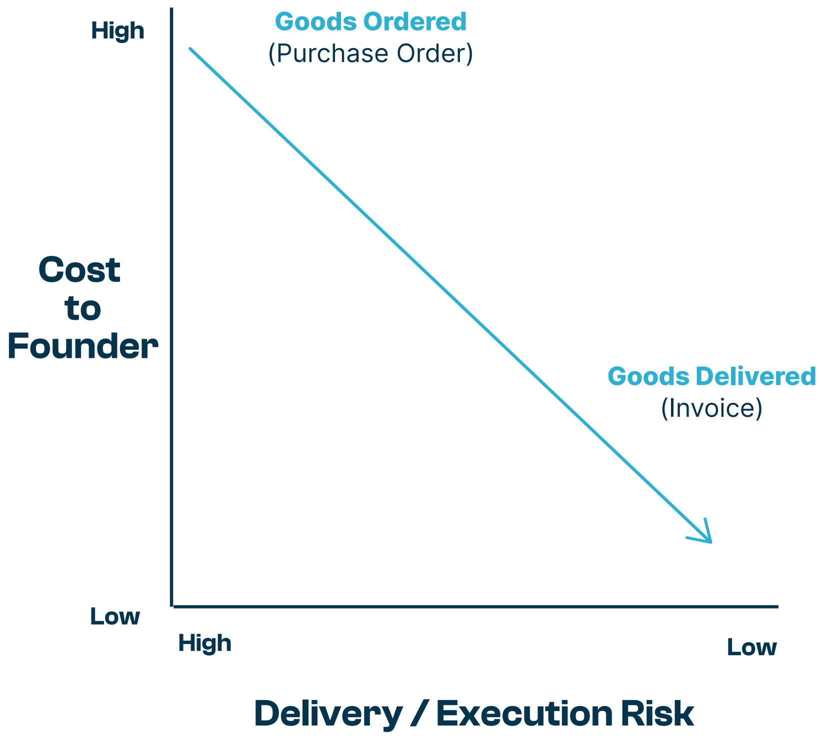
Early payment SCF transactions are “Buyer Led” i.e. buyers offering early payments to suppliers. These early payments might be discounted or the buyer will assess a fee based on how early the supplier is paid. Selling or borrowing against receivables are generally “Financier Led” transactions, where private financiers step in to provide capital and facilitate payments between buyers and suppliers.



Within these categories, the timing of payments is important to the riskiness and the cost of the transactions. Payments that are made after the goods are delivered (i.e. using an invoice) are significantly less risky for buyers and financiers than payments made before goods are delivered (i.e. using a purchase order).

For financier-led approaches, if the transaction involves an invoice for goods or services that have already been delivered, the primary risk is nonpayment by the buyer. If it is buyer-led, there is essentially zero risk, as the buyer has already received the goods or services and is simply paying earlier than their usual terms.

If the transaction involves a purchase order, i.e. the goods and services have yet to be delivered, the level of risk is higher for both buyer-led and financier-led SCF. This risk level should be reflected in the pricing of the SCF.



SCF often solves a problem that many large buyers do not recognize. For a supplier, a 90-day payment term upon invoicing can effectively mean up to six months of pre-financing requirements for the delivery of a service or product. Such amounts of cash can come at steep interest expenses for smaller suppliers that do not have the track record or credit history of their large buyers.

SCF can help funders and buyers implement systems of prompt payment, ensure transparency across their suppliers of who is paid when, and create predictability and access to timely capital for small businesses. Although it is a short-term funding solution, it can help businesses manage cash flow for their operational needs and help stimulate growth.

SCF is used extensively outside of the US, particularly in Latin American markets. This is primarily an outcome of the developments in electronic tax invoicing, which allowed for e-invoicing to be used in different segments of the economy, enabling SCF to take root, given standardized and verifiable documentation of transactions for which credit can then be extended.[12] Latin American countries hold a significant proportion of the trade finance market, but over half is concentrated in the Asia-Pacific markets. China in particular has a strong influence on SCF not just due to their large trade activities globally, but as a result of their technological capabilities in the digitisation of SCF. Within Africa, overall SCF activities were negatively affected by the banking regulations following the global financial crisis, but there is a lot of opportunity in the market following the signing of the African Continent Free Trade Agreement (AfCFTA). There is also room to adopt more integrated practices within European markets, with regard to legal frameworks as well as the limited uptake with digitization. Despite all these global developments, 80% of eligible assets in the market remain untapped, with an estimated global trade financing gap of $1.7T. This is where nonbanking players such as FinTech have come in to try to fill the gap in the market, but there is still substantial work to be done to provide capital to the companies that need it the most.

SCF is often used for cross-border transactions; in these cases it is often referred to as trade finance. Historically there has been significant confusion around the terminology surrounding SCF. The Global Supply Chain Finance Forum has been created by a number of industry associations to create a standard language for stakeholders and establish best practices. As much as possible, we have used their language and definitions in this chapter.

Capital Product Fit

When is SCF a *good* fit for businesses?

Bridging: It should be used to bridge a cash gap or allow companies to maximize production capability to scale.

Profitability: SCF changes the timing of payments, not the underlying economics of the company, so companies need to either be profitable or have the reserves necessary to fund any overall loss for the company.

Seasonality: Seasonal businesses or those that have significant spikes in demand are good candidates for SCF.

Procurement: For large public and private contracts with formal procurement processes, suppliers without documentation or track record to prove they are financially trustworthy enough to deliver the contract will be excluded from the bidding competitive process. This includes smaller providers and those historically underserved by traditional financial institutions, including Black-, brown-, minority-, and/or women-owned businesses.

When is SCF *not* a fit for businesses?

Long Term Financing: At a foundational level, SCF is primarily a short-term source of cash flow for a business for its operational needs. It does not solve core financial issues that a business may find affecting its balance sheet.

Complexity: SCF shifts forward the timing for companies to receive payments. If the company's financial team does not account for this shift, the company might not be able to cover their costs in a given month. This means that finance departments of small businesses need a level of sophistication; they must do more sophisticated forecasting and planning to account for the variations in cash flow.

Personal guarantees: When funders request a personal guarantee, founders might need to evaluate the risk that this represents to them when considering signing a funding agreement.

Why would founders want to *choose* SCF?

Timing: When founders want to access timely working capital secured against future orders.

Affordability: If the cost of SCF is affordable compared to alternative funding options.

Opportunity: When the profit from a sales or procurement opportunity is higher than the cost of SCF.

Customer size: When founders have large customers with a good track record in terms of purchases.

What should businesses *look out for* with SCF?

Cost: SCF can be predatory in its pricing. For many companies, this is the only option for financing for a large project, so they may be inclined to pay exorbitant fees. There exists a need for affordable SCF for small suppliers.

Fit for Purpose: Because SCF is a form of short-term financing, when used over periods longer than a few weeks or months, it can become expensive for businesses.

Guarantees: If personal guarantees are requested by funders and the risk is considerable.

Timing: As SCF moves payments forward, sometimes prior to the delivery of the goods and services, the complexity of accounting may increase. Companies will need to ensure their accounting team accurately records and forecasts payments against expenses.

Types of Agreements

As discussed above, there are three distinct categories of SCF agreements: advanced payable, receivables purchase, and loans. In essence, businesses can negotiate an early payment from a customer, sell their receivables, or borrow against them.

Within each of these categories, payments can be made using invoices (i.e. paid after the goods have been delivered) or purchase orders (i.e. paid before the goods have been delivered).

Advanced Payable

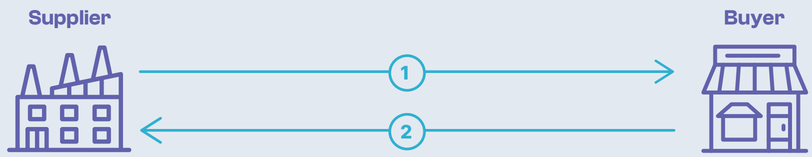
Early payment of an invoice or purchase order. This is a buyer-led program where sellers in the buyer's supply chain can, at their option, access liquidity by receiving a discounted early payment.

This early payment can be completed using invoices or purchase orders. The cost of the financing should reflect the risk of the transaction and the cost of capital for the buyer. As discussed previously, the risk to buyers of an invoice-based advanced payable transaction is effectively zero; thus the cost to the suppliers should reflect the cost of capital for the buyer and the administrative cost of the program. For buyers with excellent credit records and thus the ability to access capital cheaply, the delta between their financing cost and their suppliers' financing cost will likely be considerable. This represents a significant opportunity for large buyers, including corporations and governments, to create affordable supply chain financing programs that leverage their low cost of capital.

For purchase order-based advanced payable transactions, there does exist execution risk on the part of the supplier, so the cost of financing should reflect this risk.

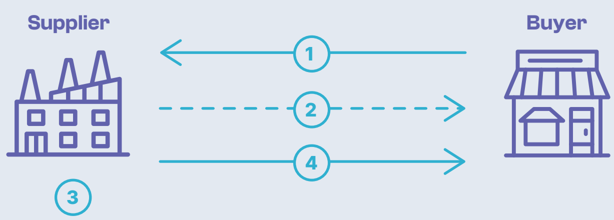
Many of the buyer-led options with early payments that can be used in this case include Corporate Payment Undertaking, Dynamic Discounting, and Bank Payment Undertaking.[13]

SCF - Early Payable - Invoice



1. Supplier delivers goods to buyer with invoice
2. Supplier elects to receive payment immediately at a % discount (dynamic discounting)

SCF - Early Payable - Purchase Order



1. Buyer issues purchase order for goods from supplier
2. Supplier requests early payment at a % discount
3. Supplier uses the early payment to fund working capital for the order
4. Once production in finalized, supplier delivers it to the buyer

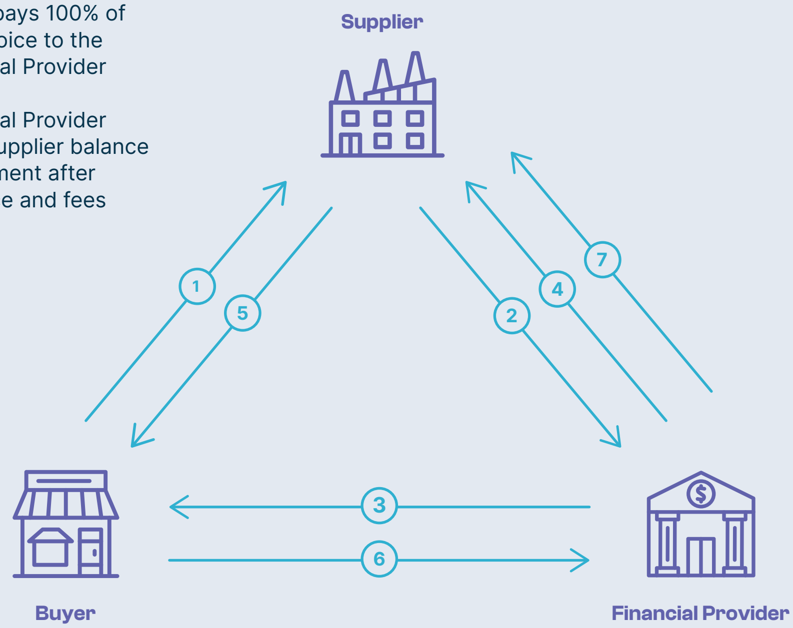
Receivables Purchase

A receivables purchase is an agreement between a finance provider and a client (supplier) to fund the purchase of an individual or a portfolio of receivables in order to receive cash flow advancement to fund working capital needs. Unlike an early payable arrangement, which is buyer-led, a receivables purchase is a financier-led program where there is funding against invoices or purchase orders as a form of collateral.

In this case, a supplier generates a purchase order or invoice for the buyer, and a financial provider comes in as a third-party to finance the supplier’s purchase order or invoice based on the buyer’s credit quality. This allows the financial provider to obtain the final payment from the buyer once the supplier fulfills their obligation or has reached the payment term. The financier can then claim their fee and return the rest of the proceeds to the supplier. This form of financing often includes Forfaiting, Factoring, Receivables Discounting, and Payable Finance.

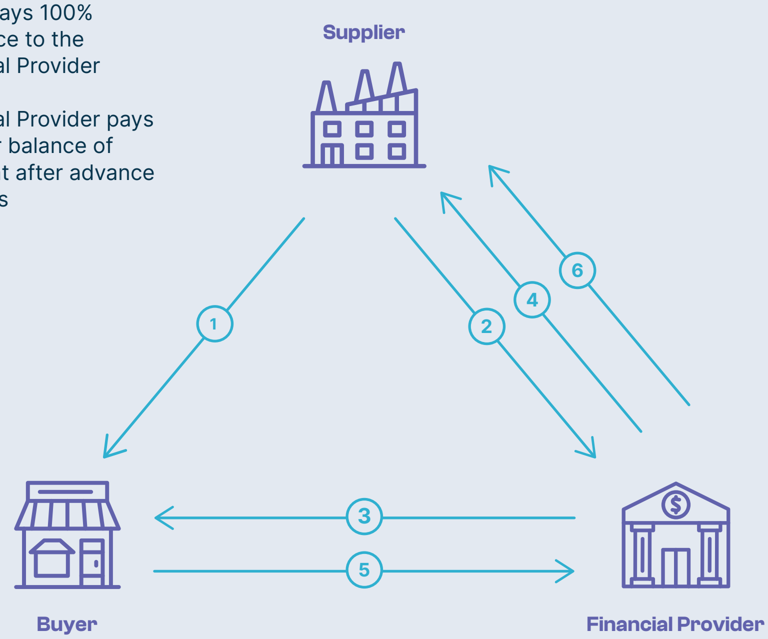
SCF - Receivables Purchase - Purchase Order

1. Supplier and Buyer enter into a commercial agreement and purchase order is generated
2. Supplier requests cash advance on the Buyer's order
3. Financial Provider assesses Buyer's payment capabilities and credit track record to structure a financing solution for the supplier
4. Financial Provider advances X% of purchase order in cash
5. Supplier delivers the goods to the buyer once production is done
6. Buyer pays 100% of the invoice to the Financial Provider
7. Financial Provider pays Supplier balance of payment after advance and fees



SCF - Receivables Purchase - Invoice

1. Supplier delivers goods to a buyer and issues an invoice
2. Supplier requests cash advance on the Buyer's order
3. Financial Provider assesses Buyer's payment capabilities and credit track record to structure a financing solution for the supplier
4. Financial Provider advances X% of invoice in cash
5. Buyer pays 100% of invoice to the Financial Provider
6. Financial Provider pays supplier balance of payment after advance and fees



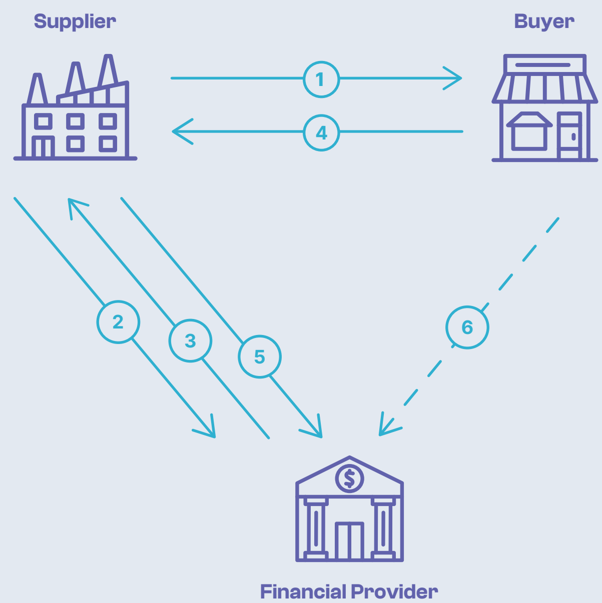
Loan

Loans make money available to another party in exchange for future repayment of the principal amount with interest or other finance charges. A loan may be for a specific, one-time amount or can be available as a variable credit line or overdraft up to a specified ceiling amount. It is also possible to make loans of actual real and financial assets.

While a loan can take many forms, there are some similarities in the mechanics of a receivables purchase, except loans often rely on the credit quality of the supplier as opposed to that of the buyer. These include loans against receivables, distributor finance, loans against inventory, and pre-shipment finance.

SCF - Loan - Invoice

1. Supplier delivers good to Buyer and issues an invoice with payment details
2. Supplier submits loan drawdown request with any agreed documents
3. Financial Provider provides funds to the supplier
4. Buyer pays for goods received
5. Supplier repays Financial Provider at maturity using the funds received from Buyer
6. *In some cases, the Financial Provider may receive funds directly from Buyer or debit the Supplier's account held with it of invoice to the Financial Provider*



US Landscape

Currently underdeveloped market: The US supply chain finance landscape is underdeveloped compared to peer, OECD economies; the SCF industry is generally limited to one-off financier-led arrangements, with few systematized or even buyer-led arrangements.

Lack of standardized, e-invoicing: A significant reason for this country's limited SCF options stems from its lack of electronic invoicing. "E-invoicing" is widely used elsewhere and even mandated across many nearby Latin American countries. Standardized e-invoicing provides confidence to third-party financial institutions that contracts are legitimate and easily transmitted, creating a market for SCF.

Innovations in public procurement: Large public purchasers in Los Angeles—LA World Airports, LA Metro, the City, and the County—are innovating to create economies of scale across their organizations and underwriting against their promise of payment, with a dedicated funds administrator, to create lower cost of funds and directly connect contracts to capital.

- LA's Contract Finance Assistance Program, as reported here (specific programs: Los Angeles World Airports; City of LA), directly connects public contracts to financing via a dedicated third-party funds administrator.

- New York State's Bridge to Success Loan Program creates short-term bridge loans that boost the ability of Minority/Women-owned Business Enterprises (MWBEs) to participate in state contracts. This program helped the state double MWBE contracting between 2011 and 2013 in conjunction with the state's Bond Guarantee Assistance Program, supported by State Small Business Credit Initiative funds from the federal government.

Recent initiatives: In 2015, the US Office of Management and Budget called for all-electronic invoicing for all federal procurement by 2018, detailing inefficiencies of paper invoicing for the US government's 19M invoices per year: the difficulty of managing mixes of digital and manual processes; $266M in annual federal government savings from a transition to all-electronic processes; and concomitant business costs and losses from slow payment to suppliers, with the average paper invoice costing $10 and taking 10 days to manually process. The federal mandate appears to have gone into effect with little fanfare. Whether e-invoicing will be widely adopted by the private sector or state and local governments remains to be seen, and is the subject of an ongoing project of the Federal Reserve Banks.

While the FedPayments Improvement program has focused recently on topics such as digital currency and peer-to-peer payment (e.g., Venmo), the group looks to implement a document exchange by 2023, to modernize US B2B payments, potentially facilitating the growth of an SCF US market.

FAQs

How expensive is supply chain finance?

It depends on the technique used. In an early payable case, the cost represents the discount the seller provides for receiving an early payment for its goods/services. In a receivables purchase case, the cost is the fee that the financial provider charges to deliver an advanced payment on the corresponding invoice, which can vary from 3% to 5%. Finally, in a loan case, the cost would be the corresponding interest rate payable on the loan, which can vary depending on the funding provider, ranging from 15% to 25%.

Why would funders be interested in supply chain finance?

SCF can strengthen the relationship between buyer and supplier, since the buyer may be able to negotiate longer payment terms or price discounts with its suppliers and thereby improve its own working capital position.

Furthermore, SCF offers high-quality, transaction-based, short-term financing based on the credit of a primary buyer and supporting the business objectives of both trading parties.

SCF can also be a tool to drive racial equity by supporting local diverse businesses and strengthening local supply chains. Efforts to re-shore production in light of global supply chain disruptions and concern over racial inequities have converged on SCF as an ideal tool to channel local purchasing and demand toward long overlooked BIPOC-owned firms.

How might SCF help alleviate the effects of other macroeconomic issues and worldwide problems?

SCF solutions could help globally by offering alternatives to cover increasing upfront costs for production.

World inflation has been increasing consistently due to production costs and energy prices. Moreover, climate change effects such as floods and droughts have increased food insecurity, which further threatens the sustainability of food production systems by destroying lands, livestock, crops, and food supplies. Finally, the war in Ukraine and sanctions on Russia are disrupting shipments and production delivery of nearly 30% of world wheat exports and 18% of corn.

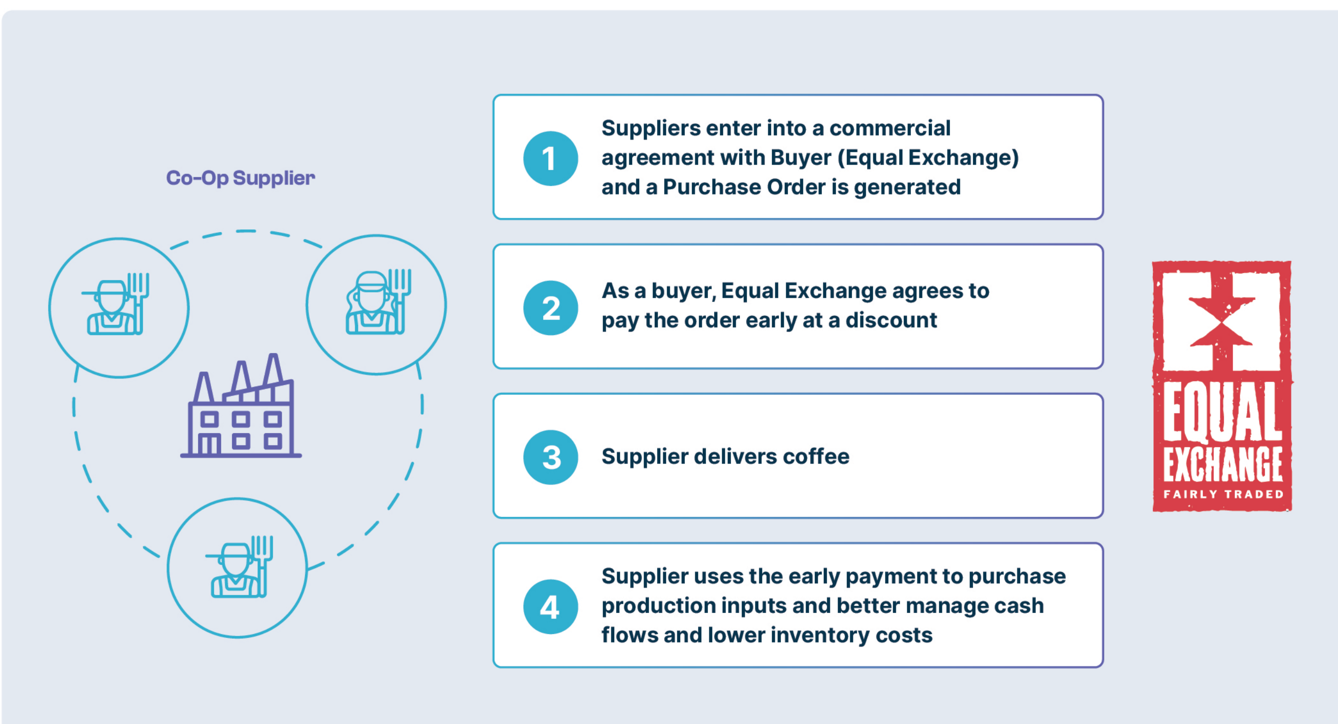
Finally, there are opportunities to use SCF with a climate, gender, racial equity, or development lens to address global crises and structural inequities within our current financial system.

Supply Chain Finance Case Studies

Case Study 1 - Equal Exchange - Advanced Payable

Coffee farmers in Latin America constantly need working capital during their planting and harvesting seasons to be able to pay for the products, equipment, and labor required to grow their coffee crops. These farmers' options for accessing local funding are extremely limited and often unaffordable. Equal Exchange, a US-based fair trade coffee company that regularly purchases coffee from these farmers, decided to use its own company balance sheet to help these farmers by purchasing their coffee early with some discount.[14]

Equal Exchange intentionally bought stock from farmers soon after harvesting, many months before it expected to sell it in the US, and stored it in its own warehouse facilities. This approach is distinct from traditional coffee companies, which purchase coffee beans on demand when they need to sell them. The traditional on-demand approach keeps the large coffee companies' inventory low but requires the farmers to bear the cost of storing the coffee and managing their cash flow while they wait for buyers to purchase their stock. Equal Exchange's approach shifts the inventory burden off farmers' balance sheets and onto those of Equal Exchange.

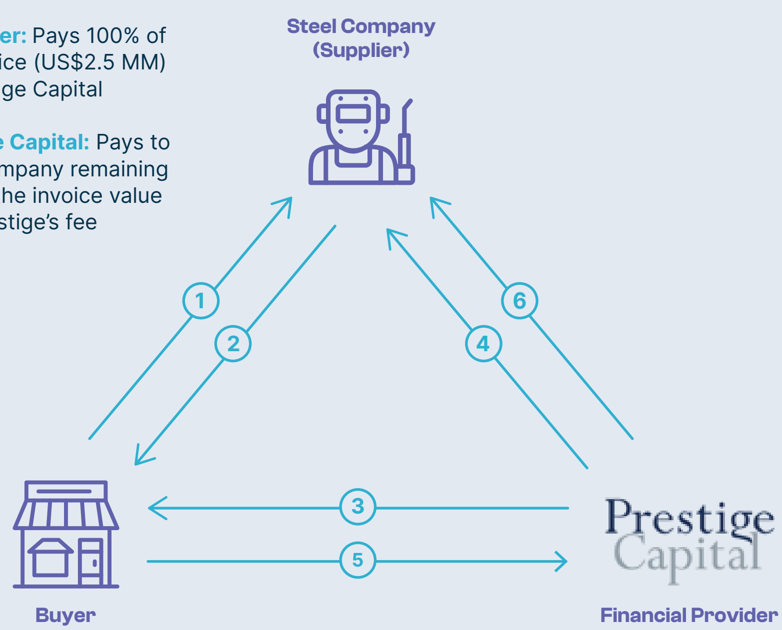


Case Study 2 - Prestige Capital - Receivables Purchase

A steel company with projected sales of $10M with historically cash-on-delivery terms with customers is suddenly forced to offer net 60-day terms[15] to retain key customer accounts. One of the steel company's customers places an order of $2.5M, after which the steel company delivers the product and sends the corresponding invoice. However, the steel company needs the cash flow now to support the daily operating expenses and inputs for the steel production to fulfill the customer order.

Prestige Capital, as a factoring services provider, analyzes the customer's credit quality, not the steel company's, in order to structure the right financing solution. Prestige Capital advances $2M (80% of the order) to the steel company in order to finance the operating expenses and inputs for production. Once the customer pays 100% of the invoice to Prestige Capital, not to the steel company, Prestige Capital sends to the steel company the remaining 20% of the invoice value less Prestige Capital's fee (1.5%, but this varies based on the deal size and invoice days outstanding) of the total invoice value. As a result, the liquidity that Prestige Capital provided to the steel company empowered it, by enabling it to leverage an opportunity for growth.

1. **Customer:** Sends US $2.5 MM order to steel company
2. **Steel Company:** Sends invoice to customer for US $2.5 MM with a 60-day payment agreement
3. **Prestige Capital:** Analyzes customer's credit quality, not precisely the client's, in order to structure the right financing solution
4. **Prestige Capital:** Advances US$2 MM (80% of invoice) to steel company
5. **Customer:** Pays 100% of the invoice (US$2.5 MM) to Prestige Capital
6. **Prestige Capital:** Pays to steel company remaining 20% of the invoice value less Prestige's fee

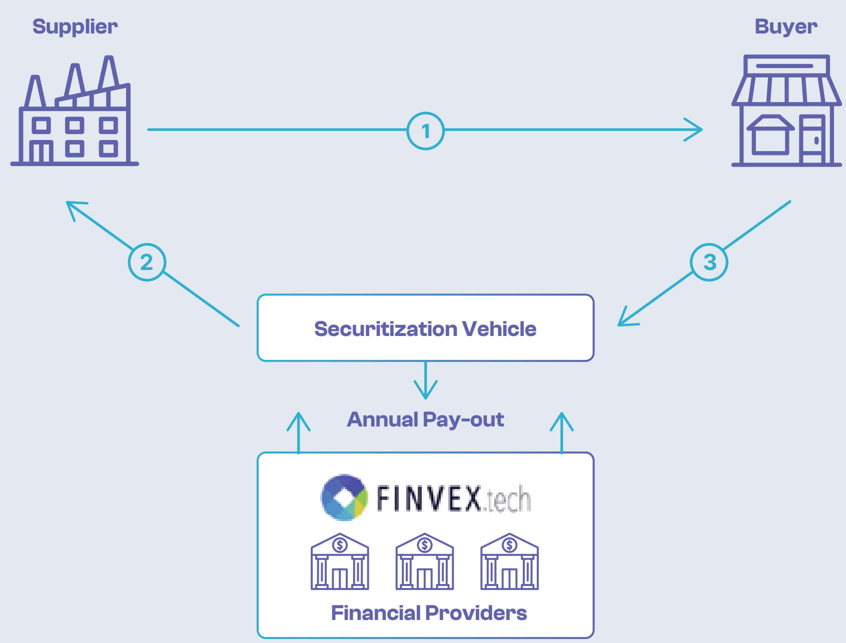


Case Study 3 - Finvex.tech - Receivables Purchase

A furniture manufacturer is looking to expand its sales to its largest clients (big-box stores). In order to do this, it offers its clients better payment terms of 30 days. The furniture manufacturer would traditionally need to fill this gap with shareholder capital or bank debt. To deal with this, the manufacturer gets in touch with Finvex.tech, a company that provides a tech- integrated impact financing solution to help companies improve their working capital and strengthen their supply chain.

Finvex.tech's solution can create its own receivables financing and attract financiers into a joint finance structure. A joint program with the manufacturer and Finvex.tech's Securitization Vehicle is created. This is a mezzanine structure with equity and a senior tranche. With this program, the manufacturer sends an invoice to its client with a 30-day payment term. The joint financial structure purchases these receivables from the manufacturer and charges a 1% rate per month. The big-box store can then pay directly into the finance structure. After this, the securitization vehicle can then provide external financiers with a return of 7% due to the strong credit ratings of the big-box stores.

1. Manufacturer (Supplier) sells furniture to buyer on 30 day terms and issues them an invoice
2. The SV pays immediately against delivery with a discount of 1% per month
3. Pays full amount in instalments or on invoice due date

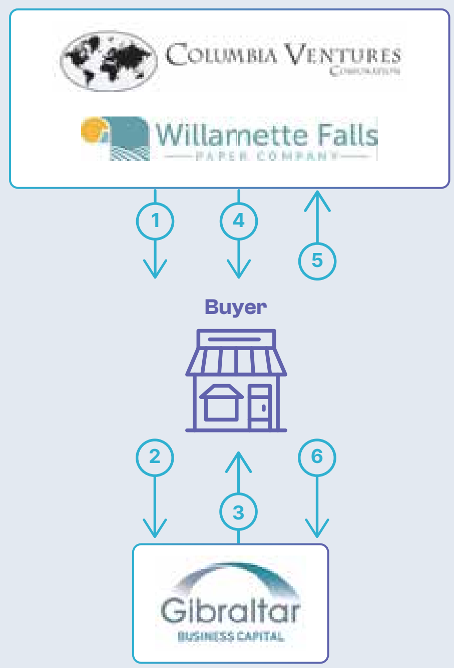


Case Study 4 - Gibraltar Business Capital - Loan

An Oregon-based independent manufacturer that utilizes sustainable and recycled fibers to produce coated freesheet, offset, envelope, packaging, and specialty papers was on a solid growth trajectory driven by rapid sales demand. Its core financial sponsor was the family office Columbia Ventures Corporation, but the company needed liquidity to fund its production inputs; thus it sought a lender for a $7.5M asset-based loan.

Gibraltar Business Capital provided the credit facility supported by advances against accounts receivable and inventory. Additional flexibility was provided to the company through a no-covenant structure since the company's financial sponsor was a reputable family office. Gibraltar Business Capital turned out to be the right lender because of its borrowing base creativity and its ability to provide a loan without tying up all the company's assets.

1. WFPC (Supplier) enters into a commercial agreement with a Buyer and a purchase order is generated
2. Supplier seeks working capital loan from GBC
3. Provides $7.5M Loan with flexible terms
4. WFPC delivers the finished products to the Buyer once production is done
5. Buyer pays for goods received
6. Repays GBC at maturity using the funds received from Buyer plus interest



Resources

Models

Equal Exchange
Prestige Capital
Finvex.tech
NY State's Surety Bond Assistance Program
LA Metro Contractor Development and Bonding Program
US EXIM Supply Chain Finance Guarantee
Business Development Bank of Canada Purchase Order Financing
Adventure Finance
Gibraltar Business Capital

Reports

Global Supply Chain Finance Forum Guide

More Reading & Listening

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Bank of America Supply Chain Finance Resource Center
Asian Development Bank Trade and Supply Chain Finance Program
World Bank Blogs: Supply Chain Financing
SupplyChainBrain Podcast

For more tools and resources, visit innovative.finance/resources.

Endnotes

[11] Definition adopted from the Global Supply Chain Finance Forum Standard Definition: 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.Definition from IFC 2019: SCF refers to the techniques and practices used by financial intermediaries to manage the capital invested into the supply chain, reducing the risk for the parties involved. These aim to lower financing costs and improve efficiency for buyers and sellers by automating transactions and tracking invoice approval.

[12] Barreix, A., & Zambrano R. (2018). Electronic Invoicing in Latin America. Inter-American Development Bank

[13] http://supplychainfinanceforum.org/techniques/corporate-payment-undertaking/

[14] Equal Exchange case adapted from Adventure Finance (https://www.adventure.finance/)

[15] The customers will now have 60 days to pay for the order once the invoice is received.