

# Supply Chain Financing and Small- to Medium-Sized Suppliers

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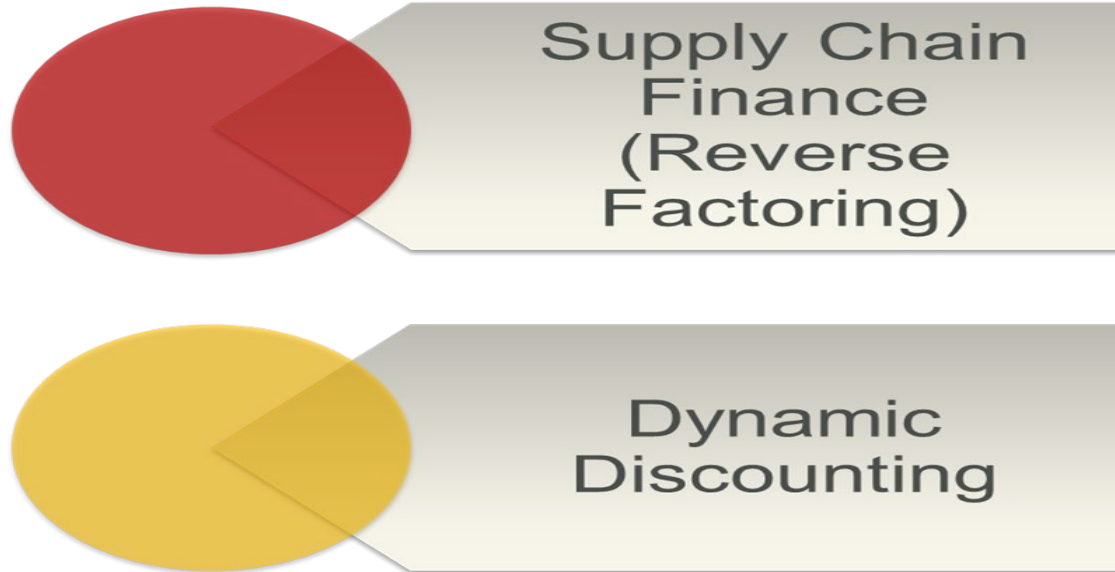
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- SCM and SC financing
  - To source, make, and deliver
  - To fund
- Emergence of fintechs
  - A new breed of companies
  - Increased connectivity and computing power
- SME suppliers and deep-tier financing (DTF)
  - Fintechs as a mediator
  - Distributed ledger technology from blockchain

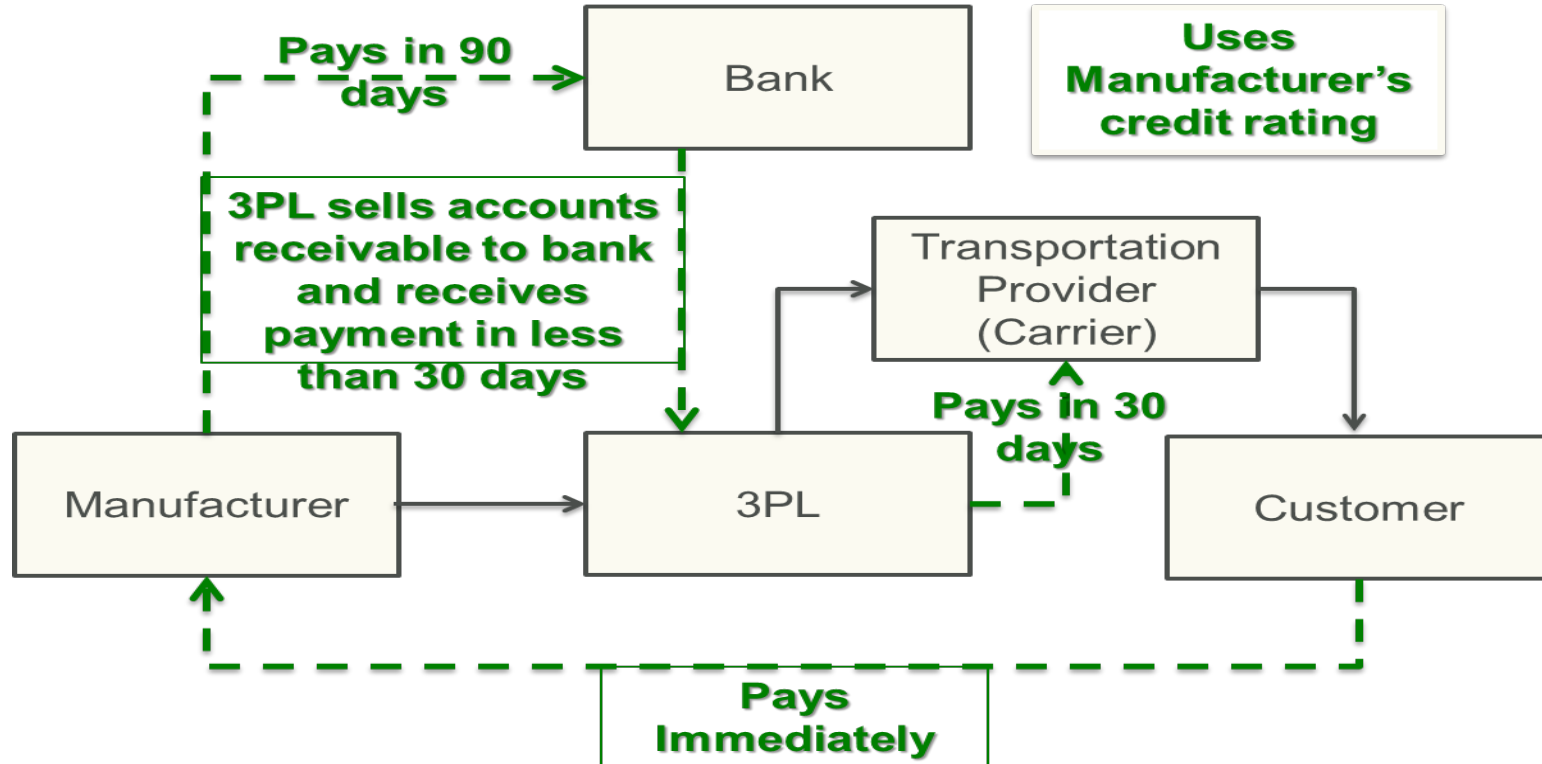
- Using the supply chain to fund the organization, and
- Using the organization to fund the supply chain.

**Fund the Growth**

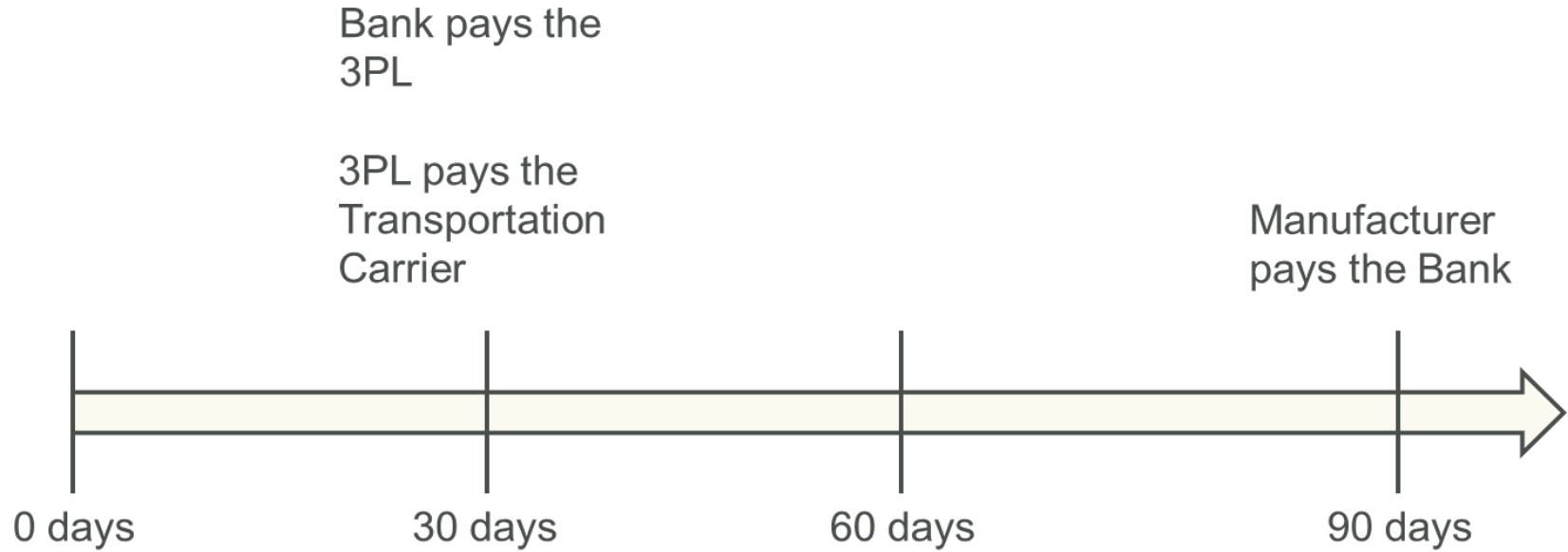
# SCF and Fintechs



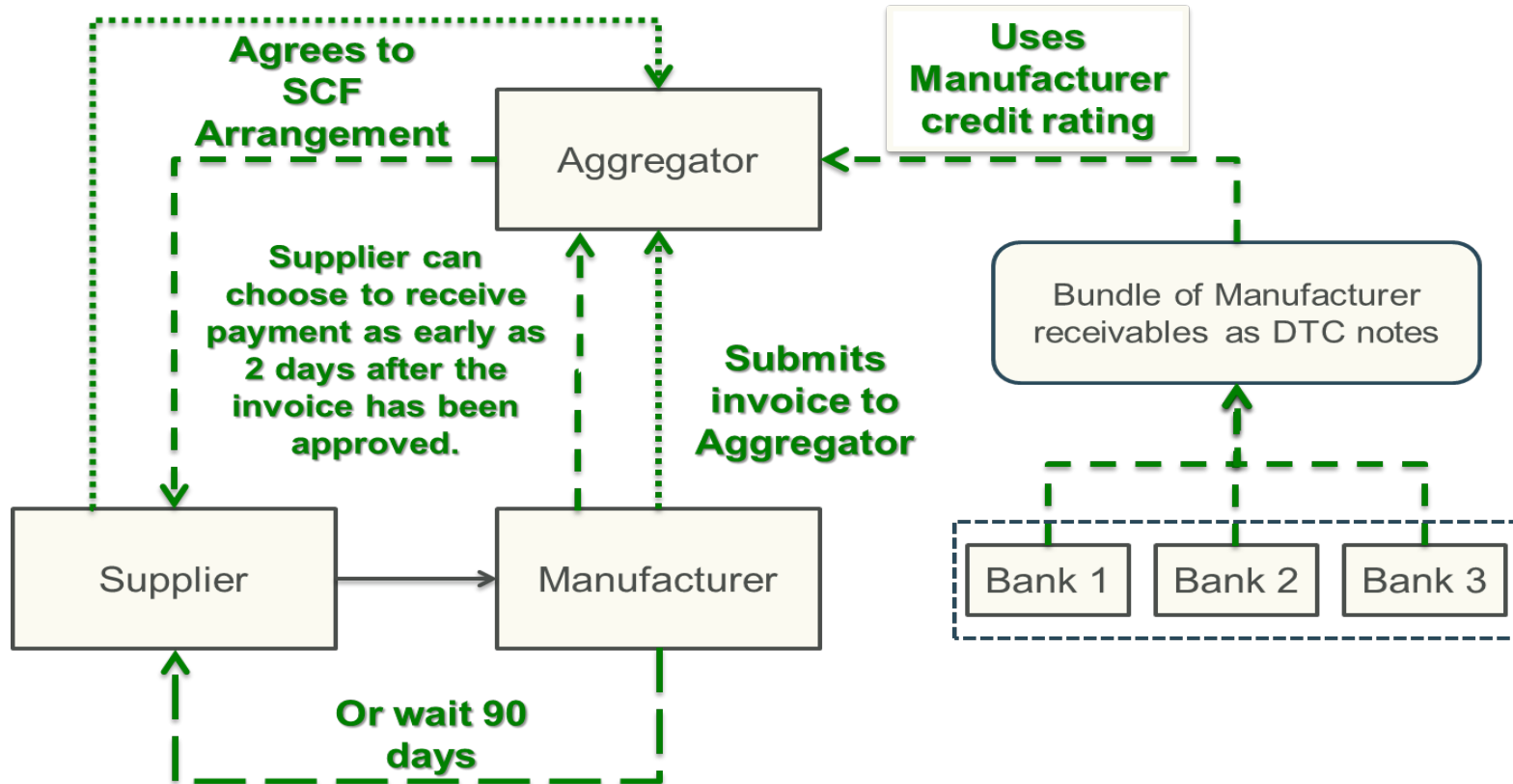
# Reverse Factoring Example 1



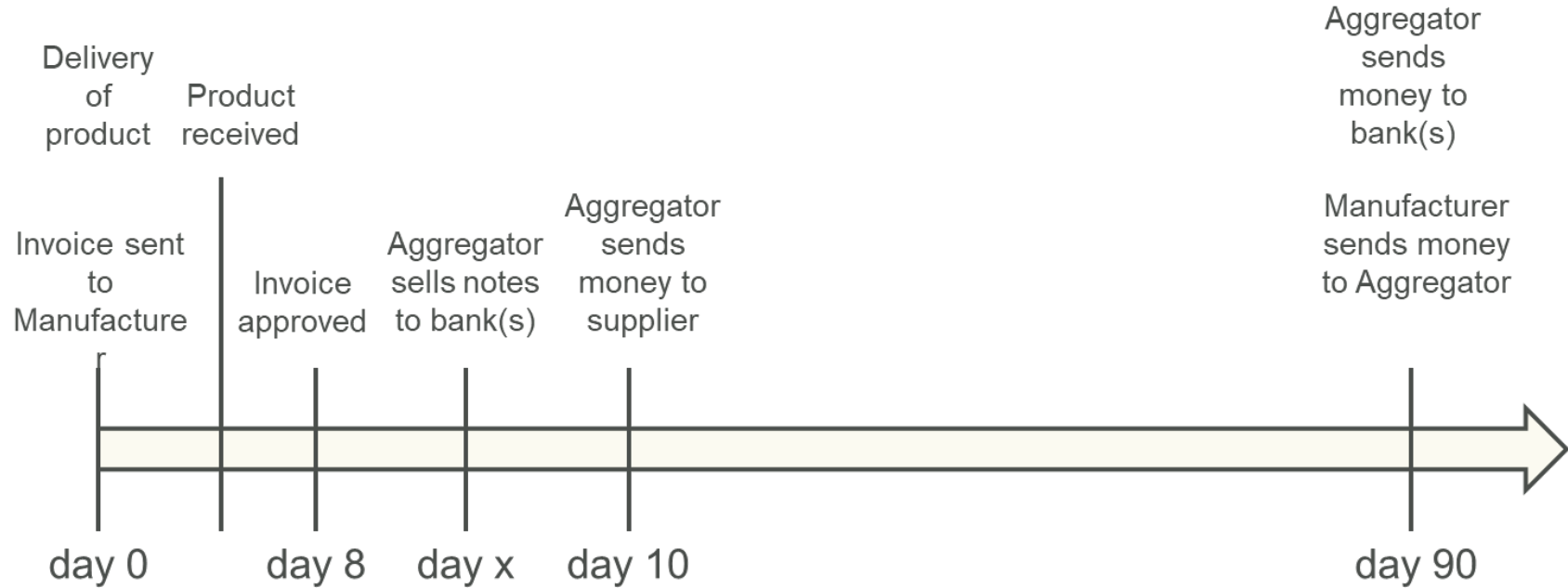
# Timeline



# Reverse Factoring Example 2



# Timeline

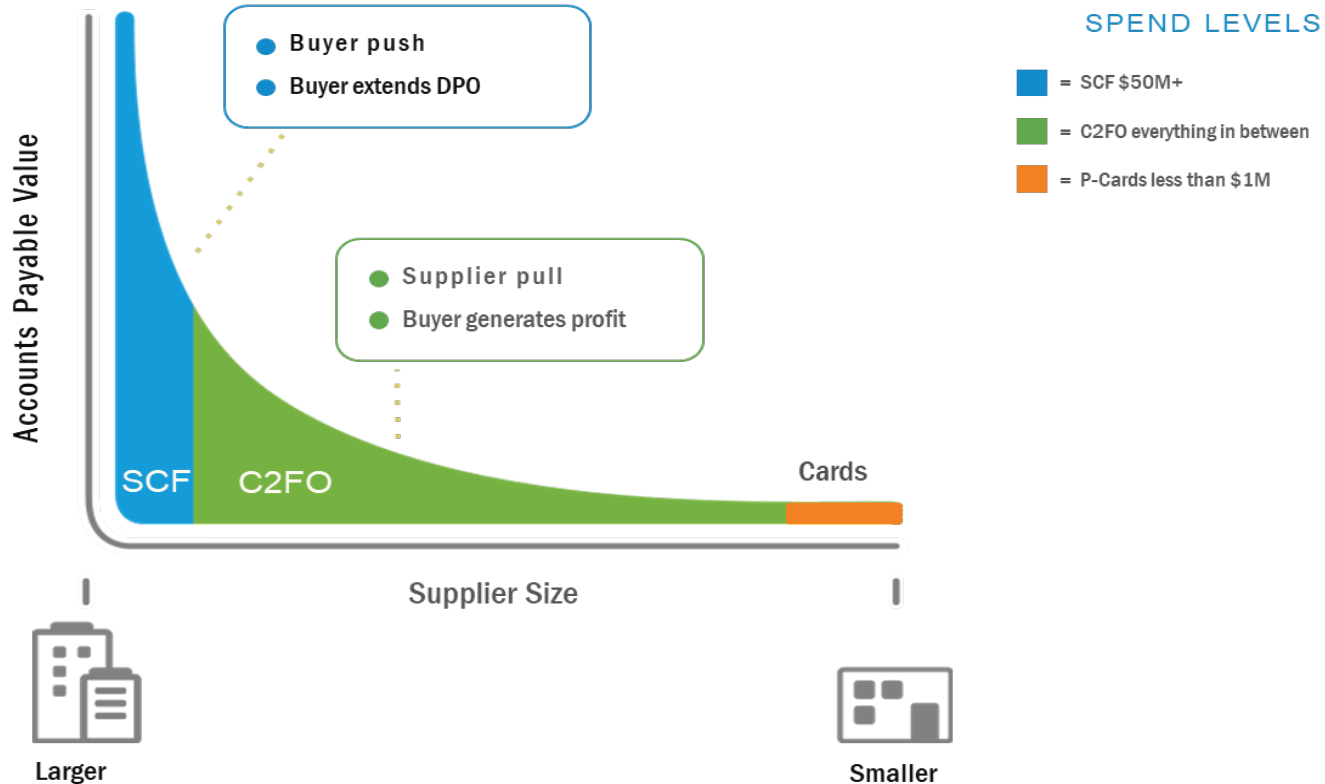




# Dynamic Discounting

- Supplier offering a discount to get paid early
- Early payment discounts on approved invoices awaiting payment
- 2/10 net 30 and its implications
- Buyers have option of choosing an APR
- Supplier invoices discounted based on a sliding scale derived from the number of days supplier is paid early

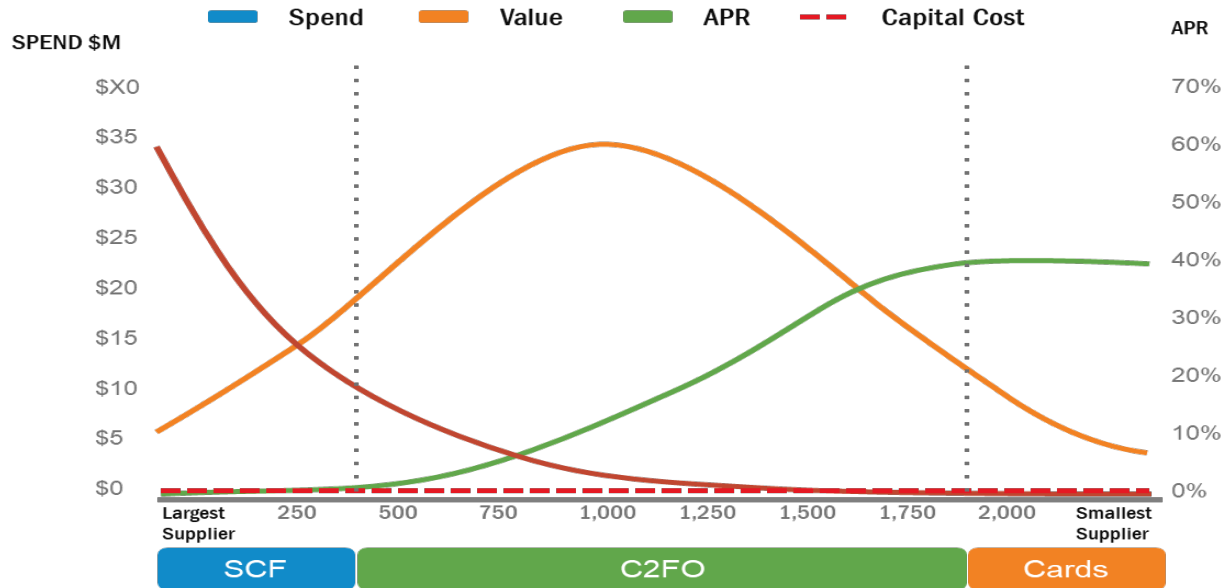
# Supplier Size and Dynamic Discounting



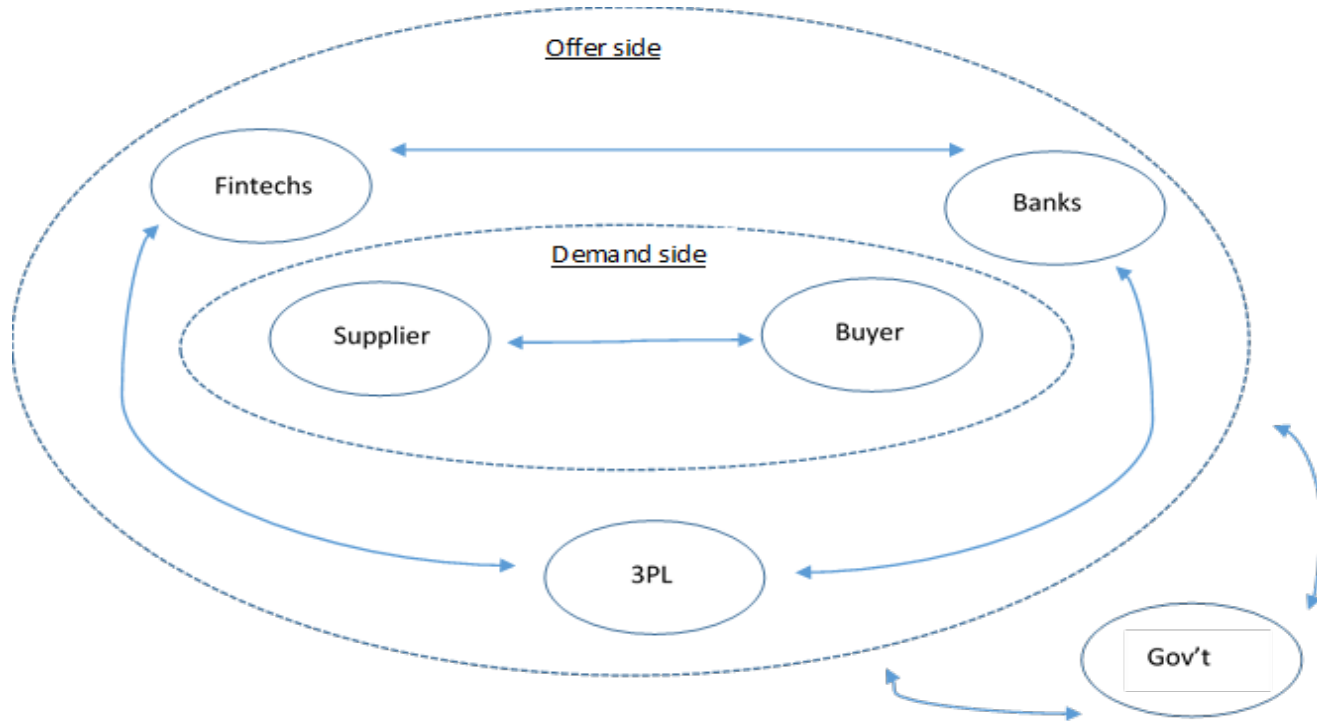
# Dynamic Discounting and Value Opportunity

TOGETHER THEY HELP ADDRESS ALL PARTS OF THE SUPPLY CHAIN  
AND MAJORITY OF VALUE OPPORTUNITY IS IN MIDSECTION OF SPEND

Typical spend distribution of Fortune 500 company



# Lay of the Land



Key Roles and Ties (Adapted from Templar, Hofmann, and Findley, 2020)

# Buyer's Perspective

- Fund the growth
- Manage cash flow and improve CCC
- Keep my suppliers healthy (but my health comes first)
- Monitor suppliers
- Offer fintech-driven solutions

# Supplier's Perspective

- Work hard to get contracts
- When successful, procure parts and raw materials and reserve capacity
- Complete work as agreed and deliver products
- Send invoice and wait for payment
- Work with buyers to get paid early
  - Cash discount
  - Reverse factoring
  - Dynamic discounting

# Observations during COVID-19

- Buyers delayed payments or stopped payments to conserve cash.
- Numbers do not lie—DPO's extended.
- Another evidence from banks—their cash management revenues were down but they saw increased demand on their SCF services from SMEs.
- Fintechs and large buying companies are collaborating.
- A fintech accused of using AI to compute how far to squeeze the supplier in dynamic discounting for a large buyer.

# Small- to medium-sized enterprises (SME)

- According to U.S. Small Business Administration (2019), SMEs represent *99.9% of all companies and employ 47.3%* of the private sector workforce.
- In the European Union, SMEs with *less than 250 employees represent 99.8%* of all enterprises (Eurostat, 2019).
- In emerging and transition economies, SMEs' share and economic impact are *even more significant* (Kull et al., 2018).
- The SME suppliers that *raise funds at a higher cost* shoulder the burden of a supply chain's financing and take on a funder function for the larger and more resource-rich buying companies.



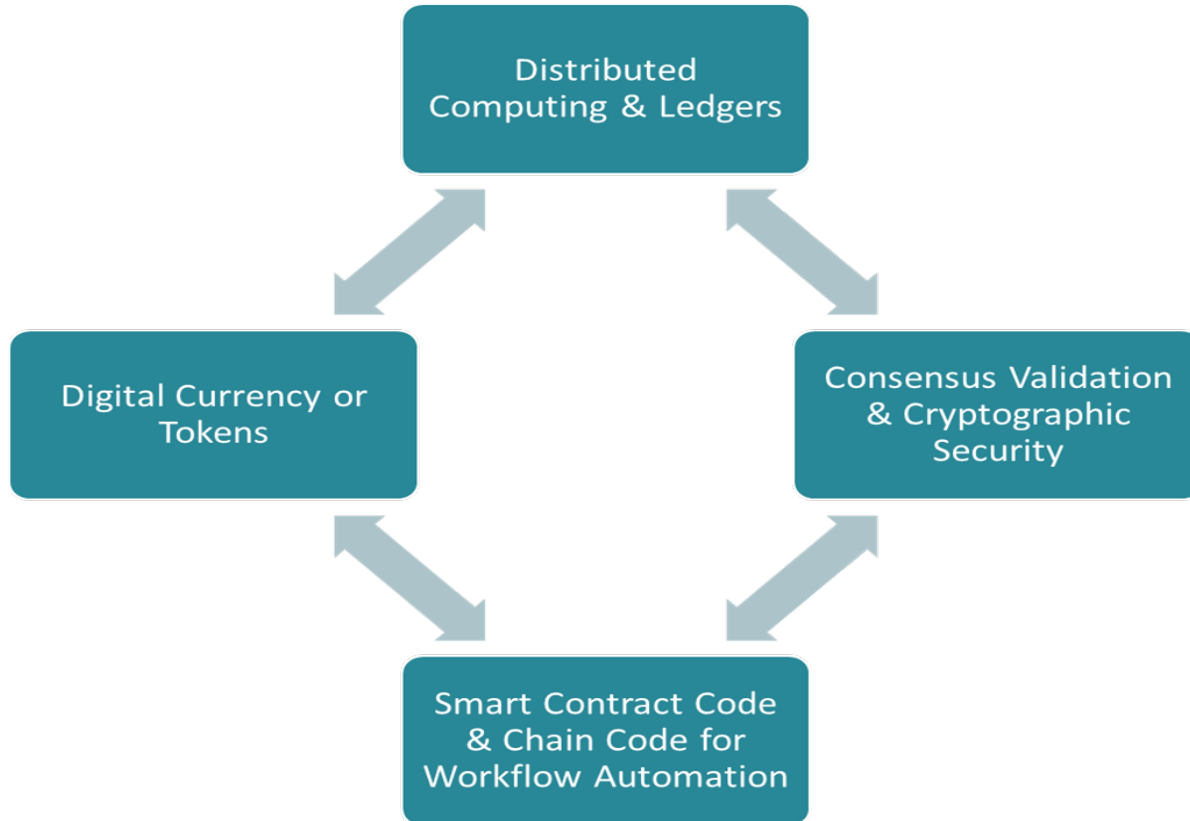
SME suppliers and their role during a major disruption

- They act as a buffer in the macro-economic sense
- For that to happen, they need to be economically viable

SME suppliers take up an important part of the economy and society.

- Need to figure out how to provide liquidity
- Fintechs are providing a way using the distributed ledger technology (DLT)
- DLT comes from Blockchain

# Basic building blocks of blockchain



# Distributed ledgers

- It tracks changes to data and records an immutable transaction history.
- A ledger is a spreadsheet, and blockchain as a distributed ledger looks like a series of transactions ordered and grouped into blocks.
- It can be shared and synchronized across a supply network that spreads across multiple firms and organizations.

# SCF and SME suppliers

- Historically, SCF has been focused on the large buying company and its first-tier suppliers
- The pandemic has highlighted the importance of extending the SCF services to the SME's in the long-tail of the supply chain—deep tier financing (DTF)
- Fintechs have emerged to help facilitate that using the DLT from blockchain and other centrally administered technology platforms

# What DLT does

- DLT enables decentralized data storage and can generate trust between the parties
- Using DLT resolves compliance issues, such as know-your-customer (KYC) frictions and anti-money laundering (AML) regulations
- Most initiatives have focused on the post-shipment period using approved invoices. More recently, financing during the pre-shipment period has been gaining more attention (i.e., inventory financing or purchase order financing)

# Fintech-driven DTF initiatives

	Centrifuge	Tallyx	Skuchain	Tradeshift	Transper	RootAnt
Description of DTF	“Deep-tier finance is an innovative financing solution for locked-up working capital in supply chains.”	“Deep-tiered financing [...] enables banks to inject liquidity to deep-tiered suppliers.”	“Deep-tier finance utilizes the power of the blockchains to deliver collaborative commerce with full visibility and trust.”	“Deep-tier financing is creating a new perception of how to provide positive cash flow into the supply chain.”	Deep-tier financing is described as “providing liquidity and transparency in the deep-tier supply chain to reduce costs and credit risk.”	“A deep-tier financing solution allows value to trickle down the entire supplier ecosystem, providing early payment flexibility to suppliers.”
Practical solution	By using an open blockchain protocol for supply chains, suppliers can improve their creditworthiness. As they build a reputation with their customers, it will help obtain financing.	Decentralized applications enable buyers and sellers to manage their end-to-end trading processes. They offer working capital through various SCF programs.	With smart contracts, they digitize various traditional trade finance documents like letters-of-credit and make them accessible through the blockchain.	Procure-to-pay solutions, supplier-contracting solutions and financial services enable companies to develop custom or commercial apps on their enterprise trading platform.	By providing transferable payment obligations against accepted invoices, they transfer instant money along the supply chain via a platform.	The deep-tier financing platform BANCO for the regional market sets up an SCF ecosystem where institutional investors, large buyers, SMEs and other stakeholders can connect.
Technological approach	Distributed networks.	Distributed networks.	Distributed networks.	Centralized technology platform.	Centralized technology platform.	Centralized technology platform.
Implementation status	First applications implemented at pilot customers at the end of 2020.	In mid-2020, the first applications were implemented.	Offering market-ready blockchain-based B2B trading products.	Tradeshift had over 500 global customers in 2018.	Agreed on a strategic partnership with a global bank in 2019.	The platform is live in Southeast Asia, China, Japan and other ASEAN regions.
Source	<a href="http://www.centrifuge.io/products/deep-tier-finance">www.centrifuge.io/products/deep-tier-finance</a>	<a href="http://www.tallyx.com">www.tallyx.com</a>	<a href="http://www.skuchain.com/traction-manager/">www.skuchain.com/traction-manager/</a>	<a href="http://www.tradeshift.com/frontiers/future-of-finance">www.tradeshift.com/frontiers/future-of-finance</a>	<a href="http://www.transper.construction">www.transper.construction</a>	<a href="http://www.rootant.com">www.rootant.com</a>

# Summary

- SCF is about using the supply chain to fund the organization and using the organization to fund the supply chain
- SCF methods have largely benefited first-tier suppliers
- SME's on the long tail of the supply chain have been neglected in the past of SCF endeavors
- With DLT and new technology platforms, their needs are starting to be addressed
- Innovations are coming in the pre-shipment financing