



Supply Chain Finance (IV)
**Supply Chain Finance Innovation in
*the Logistics Industry***

The Li & Fung Management Book Series

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Management Theories and Business Models

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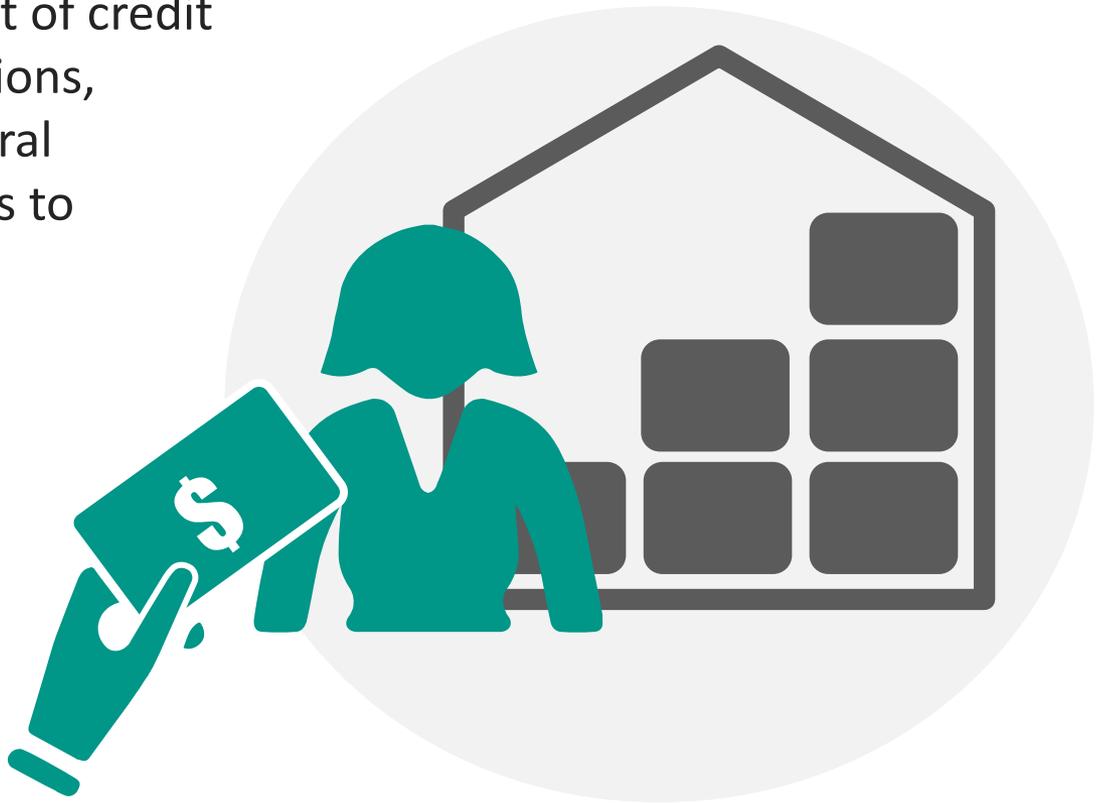
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Logistics finance

- Logistics finance, in essence, is a type of short-term financing method in which a debtor uses the inventory to obtain financing
- Cash flow cycle, the amount of credit offered by financial institutions, and the presence of collateral have important implications to logistics finance
- Logistics finance is one of the most extensively researched areas in supply chain finance



Boom of logistics finance, why?



- The boom of logistics finance is accompanied with the rise of modern third-party logistics providers (3PLs)
- 3PLs have been playing a major role driving the development of logistics finance
 - They are often both the platform provider and integrated risk manager
 - Apart from the provision of modern logistics service, many 3PLs also work with financial institutions to offer financial solutions to their customers

Logistics finance models: From traditional to modern

Traditional logistics finance model

- The 3PL plays only a limited role in logistics finance.
- Despite a good understanding of the transactions between buyers and sellers, the status and value of goods, and inventory level, and so forth, the 3PLs do not deliver the information to the financial service providers on a timely basis.
- The result is information silos along the supply chain.
- As financial service providers do not participate directly in the logistics process, their limited knowledge about the collateral makes controlling the loss from defaults extremely difficult.

Modern logistics finance model

- The 3PL plays a much greater role.
- Suppliers temporarily transfer the title of ownership to 3PLs to obtain financing; they must also provide a purchasing guarantee to the 3PLs.
- This arrangement solves the conflict of interests between buyers and sellers.
- Capitalizing the experience and know-how, the 3PLs optimize the supply chains of buyers and sellers to lower overall inventory cost.
- Through collaborating with the 3PLs, financial service providers can lower the rate of default by overcoming the problem of information asymmetry.

4 models of logistics finance driven by 3PLs

Collect on delivery model

(The earliest form of logistics finance)

1. Transaction contract between **buyer** and **supplier**
2. Order placement by the **buyer** to the **supplier**
3. The **supplier** delivers goods to **3PL**
4. The **3PL** collects payment from the **buyer** on behalf of the **supplier**
5. The **3PL** delivers goods to the **buyer**
6. The **3PL** remits the payment to the **supplier**

Prepayment model

1. Transaction contract between **buyer** and **supplier**
2. The **supplier** delivers goods to **3PL**
3. The **3PL** stores the goods and prepays partial payment to the **supplier** on behalf of the buyer
4. The **buyer** pays the **3PL** for the goods, when the goods are received
5. The **3PL** remits the remaining balance to the **supplier**

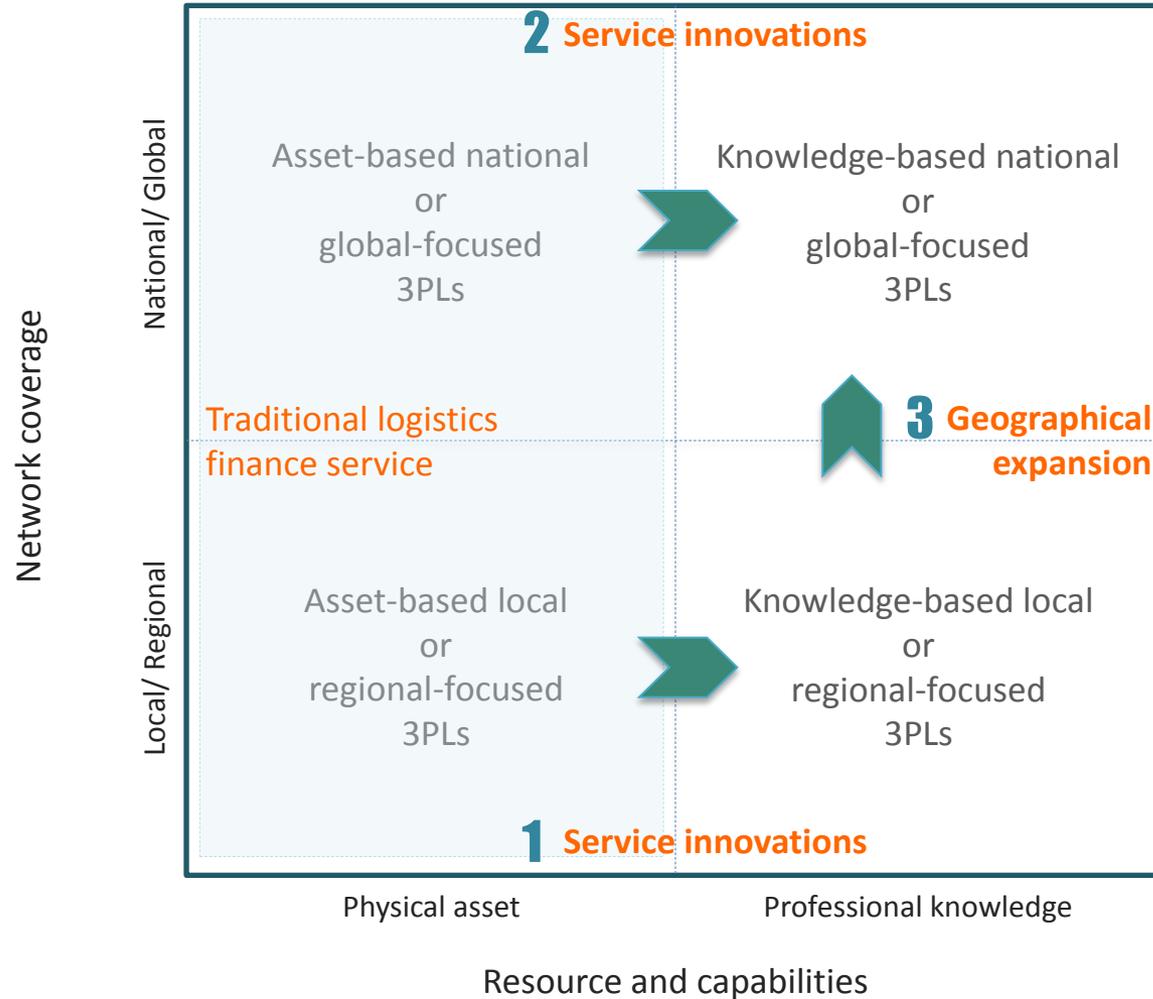
Finance, transportation, and warehouse model

1. **Supplier** stores raw materials/ final goods at **3PL's** warehouse
2. The **3PL** places warehouse receipts to the **supplier**, who can apply for financing service from **financial institution** with warehouse receipts
3. The **financial institution** requests the **3PL** for value evaluation
4. The **3PL** makes valuation feedback to the **financial institution**
5. The **financial institution** grants the loan to the **supplier**

Credit financing

1. **3PL** applies for credit financing service from **financial institution**
2. The **financial institution** processes credit evaluation and grants a certain amount of credit to the **3PL**
3. The **3PL** can use the credit to offer financing to customers

3 types of transformation of 3PLs in China



3 types of transformation of 3PLs in China



1

Transformation from asset-based local or regional-focused 3PLs to knowledge-based local or regional-focused 3PLs

- They climb the value ladder from providing simple logistics and financial service to offering knowledge-based logistics and financial solutions
- See also case 1



2

Transformation from asset-based national or global-focused 3PLs to knowledge-based national or global-focused 3PLs

- They strive hard to improve their capabilities to provide knowledge-based value-added services such as innovative supply chain finance solutions, so as to boost profitability and improve customer stickiness
- See also case 2

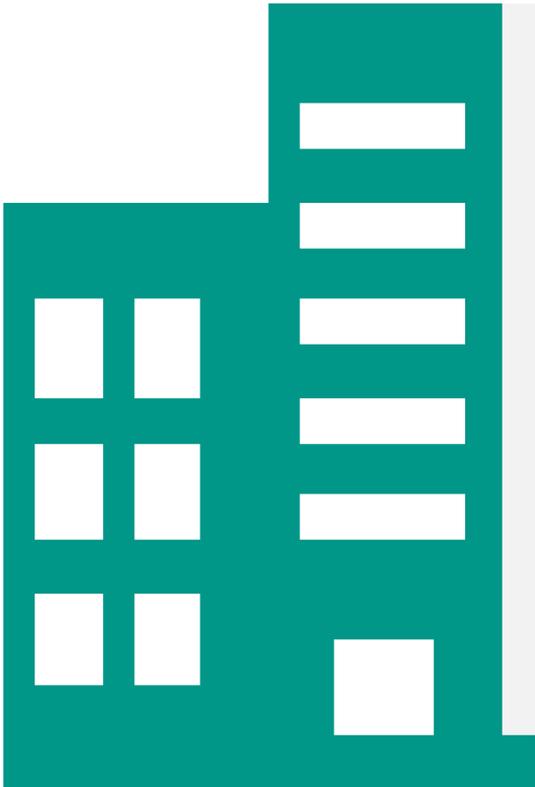


3

Transformation from knowledge-based local or regional-focused 3PLs to knowledge-based national or global-focused 3PLs

- They strive to expand the national or even the global market. Network expansion is important for both the 3PLs and their customers
- By integrating its professional knowledge with logistics finance, the 3PLs can greatly widen its service scope and boost customer stickiness and profitability
- The customers can benefit from the network expansion of the 3PLs to lower overall transaction cost
- See also case 3

Case 1: Company M's logistics finance service in bonded logistics park



Company M

- A leading logistics company in Shenzhen Futian Free Trade Zone
- With a total investment of HKD 450 million
- Specializes in providing bonded logistics warehousing, import/export agency, and logistics distribution service
- Operates a professional bonded logistics park for home electronics products with a total area of over 300,000 sqm
- Customers: Mitsubishi Heavy Industries, Konka Group, etc.

Company M's logistics finance service

- The company serves as the center of regional logistics operations and information management
- It collaborates with other parties such as 3PLs and the bank to optimize operations and facilitates the lending process.
- Through its own information and monitoring systems, Company M also helps mitigate potential risks in supply chain finance

Case 1: Company M's logistics finance service in bonded logistics park (Cont'd)



How it works

- Company M formed strategic cooperation with the China Construction Bank
 - Company M has inked a strategic cooperation with the China Construction Bank to provide the “Logistics Bank” service in the bonded logistics park
 - According to the strategic agreement, any company can pledge their stored items in the logistics park to obtain financing (with the guarantee provided by Company M)
- Company M offers 2 forms of logistics finance service
 - **The entrusted credit model**
 - The bank outsources activities such as collateral valuation, transportation, warehousing, monitoring, risk control and auctions to Company M. Company M develops different optimization programs for the debtors and outsources the service to the right 3PLs
 - Company M also oversees the activities of the debtors and the 3PLs in the logistics park
 - **The centralized credit model**
 - The bank offers a certain amount of credit to Company M after conducting a comprehensive review of the latter's operations, business performance, credit ration, and so forth. The two parties sign a credit agreement
 - Company M engages in the negotiations directly with the financing applicants in the logistics park, and according to the characteristics of their collateral, it selects the right 3PLs for service provisions. The entire process is monitored by Company M

Case 2: CMST Development Co., Ltd.

CMST Development Co., Ltd. (CMSTD)

- A nationwide integrated modern logistics service provider in China with a history of over 50 years

- In 1992, the CMSTD became **the first company in China to explore the “Materials Banking” business**, which is based on the pledge of warehouse receipts, and it actively engaged in talks with four major state-owned banks to develop the business. However, the service was never launched in the market due to unfavorable market conditions, regulatory challenges, and so forth
- In March 1999, the CMSTD Wuxi office unveiled its first warehouse receipt pledge business in collaboration with the Bank of Communications. The customer received a financing amount of RMB 70 million by pledging a total of 10,000 tons of aluminum imported from Russia. The deal was regarded as **the first example of warehouse receipt pledge business in China**

Case 2: CMSTD Development Co., Ltd. (Cont'd)

Today, there are

3 major forms of the
CMSTD's logistics
finance service

- **Import bill of lading model**
 - Upon receipt of the bill of lading, the CMSTD works to reconfigure processes such as freight forwarding, transportation, warehousing, distribution, processing and monitoring to provide different logistics finance solutions
- **Warehouse supervision model**
 - This model is developed upon the basis of traditional buyer credit business. The CMSTD provides supervisory service in its warehouse until downstream distributors repay the loans
- **Integrated supply chain finance model**
 - This model refers to the logistics finance model in which commercial banks offer credit to the supply chain enterprises, and the CMSTD takes charge of all logistics operations of the movable properties
 - The supervision of multiple supply chain processes by the CMSTD provides a good visibility of the ownership rights of goods and ensures product quality
 - The CMSTD also helps tackle the difficulties supply chain players encounter in the turnover of funds, as well as logistics operations

Case 3: Hongxin Logistics

Xiamen Hongxin International Logistics Co., Ltd. (Hongxin Logistics) is a professional 3PL with a strong presence in the provinces of Fujian and Guangxi



Leveraging technologies such as cloud computing and the Internet of Things, the company has established an integrated supply chain operations platform for the fast-moving consumer goods industry.



The platform provides a wide array of functions that can be grouped under four major areas, including logistics operations, settlement, information service, and solutions innovations.



Two important value-added services provided by Hongxin Logistics are the solutions innovations platform and supply chain financing service.



Hongxin Logistics also works hand-in-hand with commercial banks to provide inventory financing and warehousing receipt financing solutions.

Case 3: Hongxin Logistics' client - SCMC



SCMC is a subsidiary of a US-based beverage giant that is responsible for the supply chain management of non-carbonated products for the China market.

- Apart from operating its own bottling plants, SCMC also outsources part of its operations to other 3PLs
- In 2007, SCMC operated through a supply location network in 20 Chinese cities.
- The company centrally manages all supply chain activities of the bottling plants, such as raw materials procurement, logistics distribution, production planning, and sales

Case 3: Hongxin Logistics' client - SCMC (Cont'd)



Problems facing SCMC:

- SCMC centrally procures its refined sugar from large sugar mills in Guangxi. Refined sugar procurement **ties up a huge amount of SCMC's working capital**
- SCMC needs to deliver the refined sugar it centrally procured in Guangxi to different bottling plants in China. Generally, **long delivery lead time** is expected (10–20 days)
- At the same time, to control the product quality, every batch of refined sugar must be tested using a flocculation method and the test results will only be available 10 days after sampling. That means it will take at least 30–40 days from the payment date for the refined sugar to be ready to be used in production. SCMC thus has to bear **heavy inventory costs**
- Bottling plants have only **a limited raw materials storage capacity** —usually a 7-day refined sugar inventory is kept and the remainder needs to be stored in third-party warehouses, which results in extra handling and short-haul transportation cost. And, since sugar mills provide only a 30-day period for free storage, SCMC often needs to pick up the raw materials in a hasty manner. This makes it hard for the company to match its production plans; further, SCMC needs to bear extra costs due to frequent regional transfers of the raw materials

Case 3: Hongxin Logistics' financing services



Hongxin Logistics proposes an integrated solution for supply chain finance and logistics operations

- SCMC inks an annual framework “fixed delivery” purchase agreement with sugar mills and Hongxin Logistics, which ensures that sugar mills will deliver an agreed quantity of refined sugar every year, and the settlement prices will be determined every month upon delivery
- SCMC agrees to use Hongxin Logistics' supply chain financing service during its monthly procurement to obtain funds from the commercial bank
- On behalf of SCMC, Hongxin Logistics will provide raw material payment to the sugar mills, as well as manage inventory. Hongxin Logistics should also make sure that all procedures such as quality inspection, outbound warehouse flow, in-transit management, as well as retail distribution, comply with the requirements of SCMC
- SCMC will settle the payment with Hongxin Logistics upon receipt of the raw materials.
- The initiatives help SCMC trim inventory level, reduce unnecessary transportation fees, and improve cash flow

Case 3: Hongxin Logistics' financing services (Cont'd)



Results

- Hongxin Logistics' integrated solution removes the logistics bottlenecks for SCMC
 - In the past, each bottling plant needs to maintain a certain level of inventory. Transfers between bottling plants are common, resulting in high logistics cost.
 - Now, Hongxin Logistics develops a “regional distribution center + JIT delivery” solution— regional distribution centers are established for adjacent bottling plants to realize quick supply through JIT delivery. SCMC only needs to provide its production plan for the next few weeks to Hongxin Logistics.
 - In the new model, SCMC can receive the ordered quantities of refined sugar within 2–3 days after it places the delivery instructions to Hongxin Logistics. The inventory level of each bottling plant is also reduced drastically from 30–40 days to 2–3 days
- Supply chain efficiency improves significantly and debt ratio is lowered. Greater supply chain visibility also enhances product safety
- Assuming a monthly procurement volume of 20,000 tons, the new solution by Hongxin Logistics offers a substantial saving of RMB 2.43 million



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- 1 Overview [Please click [Here](#)]
- 2 Supply chain finance innovations in manufacturing industry [Please click [Here](#)]
- 3 Supply chain finance innovations in trade and distribution industry [Please click [Here](#)]
- 4 This series
- 5 Supply chain finance management in commercial banks
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Source

This report is based on the book “Supply Chain Finance”, written by Prof. Song Hua.



Song Hua is a Professor of supply chain management at the School of Business, Renmin University of China. He is also a market research and regulative expert at the Ministry of Commerce, the Assistant Secretary General of the Chinese Society for Management Modernization, and the Chairman of the Beijing Modern Institute of Enterprises Research. His main research interests include service supply chain, inter-firm relationships, and supply chain flexibility.

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