

## A Supply Chain Financial Service Management Model of Chinese Logistics Enterprises

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**Abstract**— The financing difficulty of small and medium-sized logistics enterprises has become one of the main factors that restrict the survival and development of these enterprises in China. The supply chain financial services is a new financing model tailored for small and medium sized enterprises, and it views the supply chain from the perspective of the banks, enterprises, sustainable development and the financing model of positive interaction. Aiming at the present situation of low service level and low profit level of small and medium-sized logistics enterprises in China, this paper analyzes various financing models in the supply chain finance and the function and role of logistics enterprises. We provide a solution for logistics enterprises to better participate in the supply chain finance, establish a new profit model and increase the profit of enterprises.

**Keywords**-Logistics enterprise; supply chain financial services; financing model; profit model.

### I. INTRODUCTION

Supply chain finance business [1] is an important financial innovation in commercial banks in recent years, expanding the business scope of commercial banks and profitability, but also for the supply chain of small and medium enterprises to provide a new financing mode and channel, but also for the third party logistics enterprises to provide a new business model. With the continuous development of China's reform and opening up, foreign banks enter into and promote the interest rate market in China, and the competition among domestic commercial banks, and how to improve the core competitiveness of commercial banks is an important issue. In the process of the transformation of commercial banks, the banks in the supply chain finance business in this emerging field of intense competition. Since 2006 Shenzhen Development Bank to carry out the supply chain finance business, CITIC Bank, industrial bank, Pudong Development Bank, China Merchants Bank, Minsheng Bank, Bank of communications and other major joint-stock banks [2-4] have joined, the four state-owned banks have also carried out similar business (see figure 1).

With the development of supply chain finance business development in China, the supply chain finance service is only just starting to take the domestic third party logistics enterprises as the center. The third party logistics enterprises gradually found that the strategic decision of supply chain finance is a block to be reclaimed the "virgin land" [5], the huge market space are gradually affecting the management of logistics enterprises. Some large third party logistics enterprises have increased the proportion of supply chain finance; some local logistics enterprises have begun to seek cooperation with financial institutions to develop this new market. Supply chain finance business is helpful to the logistics industry and the financial industry to find each other, improve the management level and competitiveness of the third party logistics enterprises, expand the business

model of the third party logistics enterprises and market space logistics enterprises in the supply chain financial services play a role in logistics supervision and risk control system. At the same time, supply chain financial services to the third party logistics enterprises to bring a huge risk, how to fully understand their business risks and effective management, is the third party logistics enterprises must solve the problem.

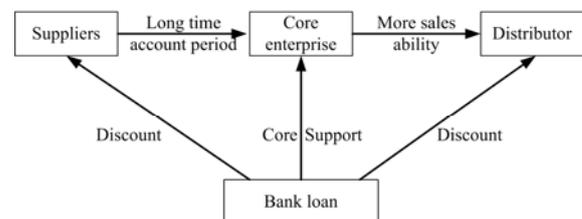


Figure.1 Relationship between suppliers and banks in supply chain finance business model

### II. THE SITUATION AND PROBLEMS OF SUPPLY CHAIN FINANCE IN CHINA

#### A. Analysis on the Aituation of Supply Chain Finance in China's Logistics Enterprises

In the developed country's logistics business, basic logistics operations such as warehousing, transportation, etc., the profit has been lower and lower, the profit source of logistics has shifted to a variety of value-added services. In recent years, the logistics financial service is becoming an important source of profit for the logistics enterprises. Whether it is the world's largest shipping company, Maersk, or the world's largest express logistics company UPS [6], the first source of profits have been the logistics financial services.

Large third-party logistics enterprises [7] in China, Sinotrans, reservoir, COSCO logistics has with deep development banks carry out close cooperation, work

together to build a "financial logistics" cross industry cooperation platform, actively participate in the supply chain finance practice, provide goods in transit transport, warehousing, regulatory and other some columns of value-added logistics services, greatly increasing the profit margins for banks and their customers, and expand market share. At present, most of the domestic and foreign banks have carried out the financial services for the supply chain finance. Foreign, such as the Development Bank of Mexico "productivity chain plan" [8], GE and Pacific asset financing company stock generation is accounted for by solving scheme, JP Morgan Chase Bank entities of supply chain and supply chain finance marriage; in China, has first to carry out supply chain finance development across the domestic, international and offshore three field throughout the financial services, "logistics bank" of Guangdong Development Bank, Shanghai Pudong Development Bank "to solve the enterprise supply chain financing scheme", Societe Generale "golden sesame" supplies chain, financial services and Minsheng Bank "characteristic trade financing" [9] and so on. In such a large background, some large domestic and foreign logistics enterprises have been actively engaged in the operation of supply chain finance. Supply chain finance the new financial service model not only brings good news to many domestic and small enterprises, but also relieves the pressure of shortage of funds, provides financing for enterprises. Meanwhile, it also points out the new direction of development for logistics enterprises, which can make full use of its own advantages in transportation, storage, and logistics etc.

#### *B. Problems in the Development of Logistics Enterprises in China*

Small and medium-sized logistics enterprises, the size of small, low operational standards, the credibility is not high. Logistics enterprises access threshold is very low, as long as a few cars, a few drivers can set up a so-called logistics company. It is in this premise, in the past ten years, China's domestic logistics enterprises to develop rapidly, the number of logistics enterprises is increasing, but with the rapid development of China's economy, the demand for logistics is also increasing, which makes our country become a logistics power, but not a logistics power. Most of the logistics enterprises only stay in the original distribution area, the scale is small, the foundation design is simple, the enterprise warehouse facilities is not perfect, not to say that the modern information technology and warehouse management system. The operation of the enterprise also lacks a certain standard, professional technical personnel shortage. These characteristics lead to the lack of core competitiveness of the market, the enterprise is difficult to stand out in the fierce competition in the market.

Enterprise's operating costs are high, the market competition is fierce, the low level of profitability. China's logistics industry has developed rapidly, the situation is good, but the high operating costs, low profit margins. Especially some transportation logistics enterprises, in order to maintain the competitive advantage, increase business volume, they even at the low freight rate repeatedly, the use

of overloaded transportation, which greatly increases the risk of transportation, but also brings a lot of security risks. Investigate its reason; on the one hand, by the raw materials, fuel, power prices and labor costs rise, the two is subject to the loan interest rate increases and the use efficiency of enterprise funds. Logistics costs are rising at the same time, the logistics market prices are still low operation. Take the road transport as an example, the first three quarters of 2011 [10], the highway integrated freight index remained low volatility, despite the soaring oil prices, but the small and medium enterprises based road transport market is highly competitive, the price is difficult to rise, so that the logistics companies profit margins continue to decline. In the case of the logistics enterprise's business volume and the total amount of operations, its profit growth is not synchronized to keep up with.

Single service means, lack of value-added services. Logistics enterprises rely on traditional such as transportation, warehousing, distribution and other business has been unable to meet the needs of its profitability objectives [11]. Therefore, to find the new profit source of enterprises, through the development of a series of logistics value-added services to increase the logistics business volume, expand the business scope, improve the way of enterprise profit space has become a major trend in the development of logistics enterprises. The development of supply chain finance provides opportunities for small and medium enterprises to carry out value-added services. Through active participation in the supply chain, logistics enterprises find their own accurate positioning, make full use of their own advantages in the logistics, to carry out the logistics value-added service, and increase the profit, which has become the new direction of logistics enterprise development.

### III. ANALYSIS ON FINANCING MODE OF SUPPLY CHAIN FINANCE

Logistics enterprises based on supply chain finance can effectively combine the commercial bank financial products, the core enterprise supply chain and the upstream and downstream enterprises to form a brand new financing model. From the perspective of logistics enterprises, supply chain finance use supply chain services to obtain financing funds for the flow of funds to provide effective protection, and reduce operational risks. From the perspective of commercial banks, supply chain finance is a new type of financial products offered by commercial banks, which is a new way of obtaining profits for commercial banks and logistics enterprises in the supply chain. With the combination of logistics and finance, the logistics enterprises use their own advantages, such as transportation, storage, and commercial banks to cooperate with each other, and expand the new business and get a new profit growth point.

In supply chain finance in the process, according to the position of the financing needs of the enterprises in the supply chain: can be divided into the supplier financing, such as inventory impawn financing, accounts receivable financing and factoring, etc; and the dealer financing, such as warehouse receipt pledge financing. The most common

supply chain finance pattern mainly has: accounts receivable financing, warehouse receipts pledge financing, chattel mortgage financing, confirming warehouse financing and financing storehouse, financing [12] and so on.

*A. Model Based on Accounts Receivable*

Based on the mode of accounts receivable refers to the logistics enterprises in the supply chain in the supply chain as the subject of the accounts receivable, pledge or transfer to commercial banks, commercial banks to provide short-term credit financial products, credit period principle is not more than accounts receivable age. Based on the combination of accounts receivable, the logistics enterprise is a debt enterprise, the enterprise is the debt enterprise, the bank is the main body of the debt relationship.

*B. Based on the Pattern of Warehouse Receipt Pledge*

Based on model of warehouse receipt pledge refers to the logistics enterprises will have their own goods stored in the third party warehouse, which the third party warehouse must be recognized by the Bank of the unit. And logistics enterprises will provide the third party warehouse receipts as subject matter for a mortgage or transfer to the commercial banks, commercial banks for warehouse to provide appropriate financial products.

*C. Pattern Based on Inventory Pledge*

Based on the mode of stock pledge is the logistics enterprise will own real estate as collateral to the bank, and to the third party custody, commercial banks to provide credit for this inventory pledge financial products [13]. Where required to provide the real estate and the third party custodian must be commercial banks can have the relevant qualifications of the goods and units.

*D. Mode Based on the Confirming Warehouse*

Based on confirming warehouse model refers to the logistics enterprises to supplier warehouse pledge goods warehouse as the underlying collateral to the commercial banks, commercial banks therefore orders provide credit financial products. Which requires the supplier to be committed to the collection of the pledged goods, and the goods must be stored in the bank designated third party warehouse unit.

*E. Mode of Financing Warehouse*

Based on the mode of financing warehouse is a kind of innovative financial products, which integrates logistics and finance. Its main operation mode is the logistics enterprises will be the subject of goods as collateral or transfer to the bank, the bank according to the actual situation of the goods in a certain proportion to the delivery of the goods, until the delivery of the goods will be paid to the bank, the bank to the logistics enterprise loans.

From the above various financing mode of operation process, in the accounts receivable financing, almost no need to participate in logistics enterprises, logistics companies are difficult to find their own role in this financing model [14]. In the chattel mortgage, pledge of warehouse receipts,

confirming warehouse financing mode, logistics enterprises mainly the pledged goods carried out in the library or in transit transport monitoring and real-time monitoring, for corporate loans issued warrants, to control the inventory level, also on the financing of enterprises product quality, sales, and corporate operations ready to report to the bank, to further reduce the risk of bank credit.

IV. DIFFICULTIES AND SOLVING METHODS IN THE IMPLEMENTATION OF SUPPLY CHAIN FINANCE MANAGEMENT IN CHINA'S LOGISTICS ENTERPRISES

*A. Difficulties*

At present, difficulties and solutions are shown in Figure 2 when China's logistics enterprises implement the supply chain of the financial.

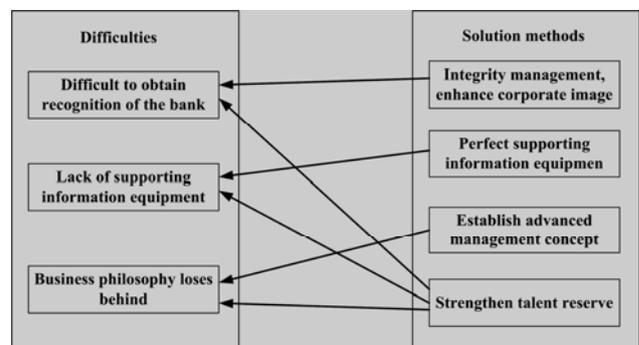


Figure.2 Difficulties and solutions China's logistics enterprises face

Difficult to obtain recognition of the bank. At present, many domestic and foreign enterprises have obtained a new profit growth point through the supply chain finance business of commercial banks, such as Sinotrans Limited, China Ocean Shipping Group [15], China material storage and Transportation Corporation and other large logistics enterprises. In China, a lot of logistics enterprises have obtained a huge profit through participating in the supply chain finance. But cannot be overlooked is that in addition to these large central enterprises, the small and medium-sized private logistics enterprises are difficult to participate in the supply chain finance, but also cannot get a new profit growth point. The root cause is that the financial strength of large central enterprises is very strong, the operation of the enterprise is long, the talent is abundant, and the commercial banks have lower risk than the supply chain financial products. These two reasons directly lead to more need for small and medium-sized logistics enterprises are often difficult to obtain bank approval, so as to obtain the supply chain financial services, it is difficult to obtain a new profit growth point.

Lack of supporting information equipment. Because of supply chain finance is a new operation mode, most logistics enterprises in China have not been updated in time, and cannot adapt to the logistics enterprise management in the supply chain financial model [16]. Some enterprises even rely on the most primitive manual processing way, not only the work quantity is huge, but also the higher error rate. The

lack of information equipment also directly leads to the low level of the bank to the logistics enterprises; it is difficult for the logistics enterprises to provide the supply chain to adapt to the supply chain financial products.

Business philosophy loses behind. Most logistics enterprises in China still cannot get rid of the management concept of the traditional logistics enterprises, logistics enterprises are not willing to use the supply chain financing mode to obtain capital flow, more willing to use the traditional mode of enterprise's own capital flow, often delayed business opportunities, cannot achieve profit growth. Therefore, the logistics enterprises based on supply chain finance not only need to update the hardware equipment such as logistics enterprises, but also need to update the management idea and so on. Only effectively set up the supply chain financial thought, the logistics enterprises in the whole supply chain, combined with the bank's financial derivatives, reasonable business management, to the enterprise to do strong, to achieve new profit growth point.

#### B. Solution Methods

As the logistics enterprise based on supply chain management has great advantages in the development of the financial model, the analysis of the logistics enterprises in our country to implement the supply chain financial difficulties, based on these difficulties, four solutions.

Integrity management, enhance corporate image. Because of the supply chain finance based logistics enterprises need to obtain the trust and affirmation of commercial banks in order to keep the supply chain finance products, so it is very important to be honest. The supply chain financial products of the logistics enterprises, we must put the integrity of the business in the first place, pay attention to the logistics enterprise image building, the establishment of brand awareness, as far as possible for the bank's trust. And the supply chain financial products of the bank which has acquired the logistics enterprises, but also must maintain consistent style, in order to achieve sustainable development. Because of the logistics enterprises in the supply chain finance field, once the credit is due to the termination of cooperation with the bank, the direct impact is the capital chain of the enterprise, which affects the profit of the enterprise, and even leads to the enterprise bankruptcy, bankruptcy and other adverse consequences.

Perfect supporting information equipment. Supply chain financial management of logistics enterprises in the information equipment requirements are relatively high, the mortgage or transfer of the bill, the purchase price of goods in place, the storage status of the goods are required to update the relevant supporting information equipment. The manual operation of the traditional logistics enterprises cannot meet the high requirements of the efficiency and accuracy of the logistics enterprises, while the continuous modernization of logistics enterprises also means to reduce the manual operation and improve the supporting information equipment is a necessary condition for the development of supply chain finance.

Establish advanced management concept. Management concept for logistics enterprises is very important, it not only

directly determines the direction of enterprise management, but also to the enterprise employees have a subtle role, so that employees can set up the concept of supply chain finance. To establish supply chain finance management business philosophy mainly from three aspects: in the material incentive, the use of positive and negative two aspects of incentives, in the system, improve the supply chain financial management rules and regulations system construction; in the spirit of incentive, to guide employees to establish the concept of supply chain management, guarantee the full understanding of the advantages of supply chain finance management.

Strengthen talent reserve. Talent resource is an important factor in the management and development of modern enterprise, and the reserve of logistics talents is a symbol of the development level of a logistics enterprise. In order to be able to adapt to the operation mode of supply chain finance, logistics enterprises must strengthen the training and introduction of their own logistics talents. Only in this way can we solve the problem of the development of the logistics enterprises in the supply chain, the enterprise can achieve long-term sustainable development.

#### V. CONCLUSION

From the development of logistics enterprises in the supply chain logistics, the competition between peers, the cost of enterprise operations and capital flow is constantly improving; it is difficult to develop a so-called third profit source. However, the concept of supply chain finance has brought new opportunities and new profit sources for the development of logistics enterprises. Financial supply chain in supply chain of small and medium-sized enterprises to provide financing convenience, so as to set up between the bank and the enterprise financing of the new bridge, to achieve a win-win objective, supply chain finance is a new financing mode for small and medium enterprises, supply chain financial services cannot provide financial support for small and medium-sized logistics enterprises, but this model expands the business scope of small and medium-sized logistics enterprises, is conducive to further enhance the competitiveness of enterprises, and for its direct participation in financing to lay a good foundation. Logistics enterprises should seize this golden opportunity, accurate positioning yourself, active participation, integration of supply chain finance, in supply chain finance in the process give full play to the own the professional advantages, actively looking for better opportunities to develop their business, to open up the market, thus increasing the level of profitability. Supply chain finance provides a good opportunity for the development of logistics enterprises; logistics enterprises should seize the opportunity to develop their own.

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