

# Research Review of Supply Chain Finance at Home and Abroad

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**ABSTRACT.** In recent years, the development of supply chain finance has received more and more attention, but the theoretical research of domestic supply chains is far behind practice compared with foreign countries, which has reduced the guiding role of the theory to a certain extent. This article summarizes domestic and foreign supply chain finance research, and analyzes the diversity of supply chain finance research on this basis, seeking its shortcomings, in order to provide some materials for the academic research on the development of supply chain finance.

## 1. INTRODUCTION

In both developed and developing countries, small and medium-sized enterprises (SMEs) play a crucial role in national economic development and social stability. Since the reform and opening up, China's SMEs have been developing vigorously, from small to large and from weak to strong, which have played a unique and important role in increasing employment, stabilizing growth and promoting innovation. As of the end of 2018, the number of SMEs in our country has exceeded 3000. And the number of individual industrial and commercial households exceeds 70 million, contributing more than 50% of the country's tax revenue, more than 60% of GDP, more than 70% of technological innovation achievements, and more than 80% of labor employment. SMEs has become an important part of the whole national economic growth in China and a driving force. Compared with large enterprises, small and medium-sized enterprises exceed large enterprises in the proportion of total industrial output or value added. Although SMEs play an important and positive role in the stability and development of China's national economy, the amount of financing they receive does not correspond to their contribution to China's economic construction and development. The financing difficulty of small and medium-sized enterprises in China is serious, which has become the biggest shackle restricting the survival and development of s SMEs.

From the perspective of practice at home and abroad, supply chain finance can effectively alleviate the problem of information asymmetry, change the financing mode of SMEs, support SMEs financing, and become an innovative mode for SMEs to obtain funds. Supply chain finance refers to the financing business in which the bank determines the future cash flow generated by the enterprise's trade behavior as the direct repayment source according to the real trade background on the supply chain of specific products and the credit level of the leading enterprises in the supply chain, and cooperates with the bank's short-term financial products and closed loan operations in a single or quota credit way [1]. Supply chain finance is based on the development of supply chain theory. It emphasizes that commercial Banks provide all-round financial services to single enterprises in the industrial chain or multiple upstream and downstream enterprises, so as to promote the stable and healthy operation of supply chain core enterprises and upstream and downstream supporting enterprises in terms of supply, production and sales. Through the combination of financial capital and the resources of the industrial economy, the purpose of achieving a mutually beneficial and win-win and common development of the supply chain industry ecological development of banks, SMEs and third-party logistics enterprises is finally achieved.

This paper attempts to sort out, review and summarize the previous literature, and puts forward the prospect of the future development, hoping to provide material for the academia, so that theoretical research and practice promote each other.

## **2. Research on the Connotation of Supply Chain Finance**

### **2.1 Foreign studies**

Allen and Gregory (2004) [2] put forward some new ideas and ideas to solve the problem of insufficient funds for SMEs in their research. Although this idea is only a perceptual framework and assumption, it has also become the bud of the concept of supply chain financing. Walters (2004) [3] proposed that supply chain finance is an innovative value chain management mode that integrates the superior resources of all participants in the supply chain and creates common value for all participants in the supply chain. Michael (2007) [4] mainly believes that the core enterprise is the main participant of supply chain finance. This financing method is to integrate the information flow and capital flow in the supply chain with the core enterprise as the center, carry out cost analysis and financial management, so as to reduce the transaction cost of each participant in the supply chain to obtain bank credit loan financing. Pfohl, Gomm (2009) [5] through the research on the related articles of financial supply chain, a financial framework of supply chain is established. Based on the theory of information asymmetry, a mathematical model of the framework is established.

### **2.2 Domestic research**

Although supply chain finance started relatively late in China, the relevant theoretical research is later than the practical exploration, but domestic scholars also have many different views on its definition. Hu Yuefei et al. (2009) [6] proposed that supply chain finance is a new risk control variable added by Banks. Combined with the new credit loan model of trade self-compensation, it can provide credit funds and financial products support for all participants in the supply chain. Liu Yanlin and Song Hua (2011) [7] constructed the framework of supply chain finance and discussed the three elements of participants, management characteristics and financial functions. Yang Yang Yi et al. (2019) [8] proposed that supply chain finance refers to a kind of financial business that provides real estate transactions between members of the supply chain as a premise and guarantee. Financial institutions provide financial services and products to members of the supply chain. Mode, financial institutions reduce the information asymmetry of small and medium-sized enterprises and make up their credit through the information advantages of core enterprises, thereby providing capital to upstream and downstream member companies in the supply chain.

## **3. Research on Supply Chain Finance and Financing Constraint**

### **3.1 Foreign studies**

Since the emergence of supply chain finance, many scholars have paid attention to it. Based on its root cause, foreign scholars have done a lot of discussion and research to solve the financing constraints of small and medium-sized enterprises. Leona klapper (2005) [9] mainly studies the financing mode of inventory pledge in supply chain finance. After summarizing the situation of this mode in western countries, it is clarified that the financing mode of inventory pledge can effectively reduce the financial cost of the whole supply chain and ease the financing constraints of SMEs. Mickael cornelli (2008) [10] and other scholars pointed out that due to the limitation of environment and its own factors, SMEs will have certain cash flow pressure. SMEs can use inventory and other commercial crystals as collateral to finance commercial banks, which can effectively alleviate the cash flow pressure faced by enterprises. Ramona (2014) [11] found that for newly established enterprises, angel investment, venture capital funds, government support plans and seed funds have more choices than bank loans, while other public tools to promote SME

financing include direct loans, small and micro loans, export guarantee contracts and supporting venture capital by co-financing or tax credit.

### **3.2 Domestic research**

Most of the researches on the relationship between the two are from the qualitative point of view. Lin Yifu and sun Xifang (2005) [12] found that under the traditional financing mode, due to the irregular financial management and opaque information of small and medium-sized enterprises, there is information asymmetry between financial institutions and enterprises, while small and medium-sized enterprises often lack sufficient guarantee or mortgage, leading to the difficulty of financing. Li Guoqing (2010) [13] firstly introduced the composition of supply chain and various modes of supply chain finance, and analyzed from the perspective of commercial banks, obtained that supply chain finance can reduce the degree of information asymmetry and transaction costs between banks and enterprises, and put forward suggestions for the continuous innovation and development of Supply Chain Finance in banks in the future. Yu Jianmei (2011) [14] theoretically analyzes the problems of high financing cost and discrimination by credit standards caused by the lack of guarantee for SMEs in China, and argued that supply chain finance, by virtue of enterprise credit, brings small and medium-sized enterprises into business scope, which solves the dilemma of SMEs' lack of financing collateral and guarantee to a certain extent, and is an important way to solve the financing problems of small and medium-sized enterprises. Zhang Weibin and Liu Ke (2012) [15] used cash flow sensitivity model to conduct quantitative analysis on the relationship between supply chain finance and financing constraints of SMEs, selected three national macroeconomic indicators, such as short-term loan amount, to represent supply chain finance, and concluded that there are some financing constraints for small and medium-sized enterprises in China, which can be effectively solved by supply chain finance. Lv Jinsong (2015) [16] found that small and medium-sized enterprises often need to bear the expenses of financial consultant, commitment, guarantee, asset evaluation and so on due to insufficient assets and financial irregularities in the financing process, resulting in a substantial increase in financing costs. At the same time, in recent years, more and more domestic scholars choose to establish indicators of supply chain finance, and measure whether it can alleviate financing constraints through empirical analysis. Hu Haiqing et al. (2014) [17] conducted an investigation on the cooperation behavior of supply chain enterprises, and made an exploratory factor analysis by using the structural equation model. It was found that strengthening the cooperation between small and medium-sized enterprises and the core enterprises of the supply chain could alleviate the supply chain financing constraints. Xue Wenguang and Zhang Yingming (2015) [18] conducted an empirical study based on the FHP model, and concluded that the development of supply chain finance can alleviate the financing of SMEs. Zhu Qiuhua, Yang Yi, et al. (2019) [19] further explored the impact of Supply Chain Finance on SMEs' financing constraints under different information disclosure quality based on the study of information disclosure quality and supply chain finance that can alleviate SMEs' financing constraints. It is found that high-quality information disclosure, supply chain finance can reduce the degree of information asymmetry, and then ease the financing constraints of small and medium-sized enterprises; in the case of high-quality information disclosure, supply chain finance has a strong degree of easing the financing constraints of small and medium-sized enterprises.

### **4. Conclusion and Prospect**

From the above research status of supply chain finance at home and abroad, it can be seen that scholars at home and abroad have a consensus on the connotation of supply chain finance and the alleviation of financing constraints of SMEs by supply chain finance. In the future, supply chain finance will develop in the direction of artificial intelligence, blockchain and other new technology. How to use modern financial technology to guide the theory of supply chain finance in China and solve the financing dilemma of supply chain finance will be a new research field and direction.

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