Research on Financing of Small and Medium-sized Enterprises in the Context of Supply Chain Finance

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Abstract: As the new force of high-quality economic development in China, SMEs have been difficult to get rid of the dilemma of difficult and expensive financing, while supply chain finance can provide financing credit enhancement and help alleviate SMEs' financing problems by integrating logistics, capital flow, information flow and other information, and provide new ideas for SMEs' financing. Therefore, this paper will start from the current situation and problems of SME financing, emphasize the advantages of supply chain finance in SME financing, and propose countermeasures and suggestions to alleviate SME financing problems based on the perspective of supply chain finance, so as to promote the healthy development of SMEs.

Keywords: Supply chain finance; Financing; Small and Medium-sized Enterprises

1. Introduction

At the National Two Sessions in 2022, the signal of "fast, accurate and stable" was put forward at the national level to innovate the supply chain financial model, injecting vitality into small and medium-sized enterprises. However, due to the outbreak of the COVID-19, its own scale and credit status, financial institutions' profitability and other factors, financing difficulties, high financing costs and other difficulties continue to intensify, which restricts the sustainable and healthy development of small and medium-sized enterprises, and is not conducive to economic growth. By integrating capital flow, information flow, logistics, etc., supply chain finance connects core enterprises and SMEs in the supply chain, reduces the consideration of lending risks of banks and other financial institutions, provides new ideas and new ways to ease the financing difficulties of SMEs, and achieves win-win cooperation between SMEs and commercial banks.Li Y. et al. (2019) summarized the domestic and foreign supply chain finance literature and pointed out the future development of the advantages of solving the financing difficulties of SMEs in the context of "mass entrepreneurship and innovation" [1]. Xue X.D. (2021) demonstrated the effect of supply chain finance in solving SME financing problems from the perspective of supply chain financing mechanism analysis, game theory analysis and empirical research, and believed that enterprises with different factors have different financing difficulties in different regions [2]. Zhou Y.J. (2022) started with the financing mode of supply chain finance under the background of big data, analyzed the difficulties of SMEs in their own and commercial banks and proposed countermeasures [3]. Sun H. (2022) proposed "blockchain+supply chain finance" to better solve the financing problem of SMEs based on the limited utility of supply chain finance for SMEs [4]. Based on the above, this paper will take SMEs as the object, analyze the current situation and problems of SME financing, emphasize the advantages of SME financing from the perspective of supply chain finance, and draw countermeasures and suggestions for supply chain finance to alleviate SME financing problems.

2. Current situation and problems of SME financing

2.1. Financing of SME credit market and stock market

The bank credit market and stock market are the main ways of financing for small and medium-sized enterprises. In recent years, the scale of these financing has grown steadily. From 2016

to 2018, the bank loans of China's inclusive small and micro enterprises increased steadily, and the financing scale decreased in 2019. With the continuous improvement of national policies and the increase of financial support, the loan amount of China's inclusive SMEs will continue to expand in 2020 and 2021, showing a growth trend. This shows that the bank credit financing capacity of small and medium-sized enterprises has been enhanced, but bank loans are generally inclined to large enterprises. The stock market financing mainly includes the New Third Board, SME Board and Growth Enterprise Board. Here we mainly analyze the New Third Board. The number of SMEs listed in 2016-2021 shows a downward trend. By the end of 2021, the issuance amount of the new third board for SMEs was 25.967 billion yuan, and the stock turnover in 2021 was 214.816 billion yuan. The overall transaction amount increased significantly year on year. However, due to the large number of SMEs and harsh listing conditions in the stock market, the financing coverage for SMEs was low. Therefore, on the whole, China's SMEs have good financing capacity in the bank credit market and stock market, but there are still financing problems.

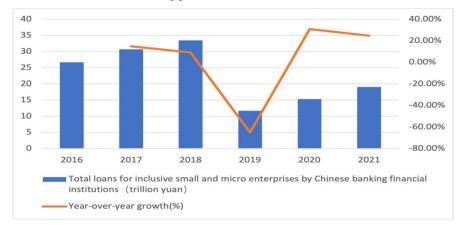


Figure 1: Loans and growth of inclusive small and micro enterprises of China's banking financial institutions from 2016 to 2021



Figure 2: Number of SMEs listed on the New Third Board of China in 2016-2021 and year-on-year

2.2. Problems in SME Financing

(1) Single financing channel. Internal financing and external financing are the financing sources of SMEs. Internal financing is the retained surplus of enterprise profits. The main indicator depends on the profit data of enterprises. However, due to the lack of good tax bearing capacity of SMEs, the profit level and profitability are low. External financing refers to loans, private funds or public financing from financial institutions. Due to small scale and insufficient credit, small and medium-sized enterprises almost rely on self raised funds from family members at the initial stage. Only when they continue to grow and have certain credit can they raise funds from financial institutions and other external sources. At the same time, SMEs have a high threshold for listing, and it is difficult to finance through stocks. They can only finance through indirect financing methods such as financing from financial institutions. However, many enterprises can not meet the borrowing requirements. In addition, the rapid development of the Internet, the emergence of micro loan companies, online lending platforms, etc.,

has caused moral hazard in lending, which has caused the financing difficulties of SMEs [5].

- (2) High financing cost. Due to small scale, insufficient credit and low reputation of SMEs, compared with large enterprises with large demand for loans, large scale and good operating conditions, they usually attach more conditions to loans for SMEs, such as revolving credit agreements, payment of valuable collateral, etc. to control credit risk, and risk compensation with higher interest rates, The expected application funds of SMEs are higher than the actual financing funds, and the actual financing cost is far higher than the target cost, which is not conducive to the financing of SMEs.
- (3) Difficult to obtain funds. When SMEs apply for loans from financial institutions, it is difficult to determine the accuracy and integration of the data, and banks allocate less energy to understand enterprise information. They tend to large enterprises with standardized operations, high profitability, and high credit value, and have a low willingness to borrow from SMEs. Therefore, SMEs are difficult to obtain funds in financial institutions.
- (4) Difficult credit loans and unbalanced debt structure. At present, the bank loans to SMEs are mainly mortgage loans, and the loan structure is unreasonable. In addition, in order to reduce risks, financial institutions often provide short-term loans rather than long-term loans to SMEs, which results in the long-term unreasonable debt structure of SMEs, the long-term investment of SMEs is blocked, and is not conducive to the long-term development of SMEs [6].

3. Advantages of Supply Chain Finance in SME Financing

3.1. Improve information asymmetry in financing market

One of the reasons for the financing difficulties of SMEs is the information asymmetry between SMEs and the capital market. The access threshold of direct financing market is high, the information disclosure is strict, and the financing cost is high. It is difficult for SMEs to achieve direct financing. They can only use free funds, private loans, and bank loans, but they are not conducive to solving the financing difficulties of SMEs, However, supply chain finance has changed the one-to-one loan model between commercial banks and SMEs in the traditional financing model. Commercial banks no longer directly evaluate the operation, financial status, credit rating and other financial indicators of SMEs, but evaluate the operation, financial status and credit rating of core enterprises, evaluate relevant transactions, and then decide whether to provide supply chain financial financing services to upstream and downstream SMEs. At the same time, most SMEs have situations such as improper management, opaque data disclosure, and low authenticity. Supply chain finance not only relies on SMEs' own financial information to judge enterprise credit, but also based on the supply chain finance to obtain and study the overall SME information. It can obtain real information, reduce the degree of information asymmetry in the financing market, and solve the financing difficulties of SMEs.

3.2. Reduce the financing cost of upstream and downstream SMEs

Through the long-term cooperation between SMEs in the upstream and downstream chains, the cooperative relationship between enterprises at each node is basically stable. Supply chain finance can provide financing services for a single member enterprise through strong correlation among enterprises. Commercial banks review the real transaction status of upstream and downstream SMEs through the online supply chain financial platform, learn about the real financial status, operating status, etc., and take core enterprises as guarantee credit to reduce the negotiation As for contract signing costs, commercial banks can use online platforms to keep track of transactions and sales information between enterprises at any time to reduce supervision costs. Therefore, based on core enterprises and online supply chain financial platforms, information collection costs, supervision costs, default costs, etc. can be effectively reduced, thereby greatly reducing the financing costs of SMEs [7].

3.3. Improve SME financing and credit enhancement

Some small and medium-sized enterprises have problems of low credit and insufficient collateral. Supply chain finance can improve the credit level of small and medium-sized enterprises by means of credit guarantee of core enterprises, help solve the problem of small and medium-sized enterprises' credit increase through enterprises with high overall relevance, and create a joint "spillover" effect by forming a stable cooperative relationship for the supply of core enterprises, so as to improve the possibility and credit level of small and medium-sized enterprises in bank lending.

3.4. Add credit constraints

Supply chain finance matches SMEs with core enterprises. If SMEs fail to repay in time, they not only need to bear the loss of their own credit and reputation, but also affect the credit and credibility of core enterprises and the whole supply chain, realizing effective credit constraints and incentives for SMEs. At the same time, supply chain finance will also realize the closed operation of "three streams in one", limiting funds and goods in the contractual mode, reflecting the operation of the supply chain financial model system and strengthening credit constraints.

4. Countermeasures for SME Financing under Supply Chain Finance

4.1. Accelerate the transmission of financial information in the supply chain

- (1) Strengthen the application of science and technology and enable supply chain finance. The deep application of cloud computing, big data, the Internet of Things, blockchain, artificial intelligence and other scientific and technological means can promote the development of supply chain financial services from offline to online. The transformation of financial technology and multi technology integration and innovation have improved risk control, customer acquisition, service improvement and other capabilities in all aspects. The supply chain financial platform and intelligence have been continuously improved, and the supply chain transaction process has been fully transparent, visual and traceable. At the same time, for commercial banks, facing a large number of small and medium-sized enterprises with incomplete business processes and information monitoring, they effectively integrated the use of supply chain finance and technology to promote the improvement of work efficiency and financing efficiency, while reducing the financing costs and negotiation and supervision costs of small and medium-sized enterprises, which is also conducive to detailed tracking and supervision of commercial banks.
- (2) Optimize the information transmission process of the supply chain financial model. In order to realize the transparency and openness of information transmission, improve the speed and efficiency of information transmission in the supply chain financial model, core enterprises, commercial banks, third-party logistics enterprises, etc. in the supply chain financial system need to share information, so as to realize the undistorted, fast and convenient information transmission, discuss and communicate with each other during the construction and implementation of information assessment and risk prediction, and promote the relevance, transparency and openness of the information transmission process, It is convenient for commercial banks and other financial institutions to implement dynamic real-time monitoring and transmission of SMEs' operation information, loan capital flow, credit level, financial information, etc., share the same database, implement interconnection and mutual sharing on the supply chain financial nodes, follow up the latest news, and promote the construction of the supply chain financial system.

4.2. Create a market environment suitable for the development of supply chain finance

- (1) The government tailors support policies for small and medium-sized enterprises. The supply chain finance is in the primary stage, and the government needs to provide policy support to better support the financing development of SMEs. In terms of monetary policy, targeted interest rate and reserve ratio cuts are conducive to reducing the burden on SMEs; In terms of fiscal policy, the government reduces the tax burden of SMEs, reduces tax rates, improves the operating performance and profitability indicators of SMEs, and improves the credit rating of SMEs, so that the nodes of supply chain finance can achieve overall common development and effectively alleviate financing difficulties.
- (2) Give play to the important role of core enterprises. In the supply chain financial system, the core enterprise, as the core node of the chain and the cornerstone of stability, has the effect of both prosperity and loss. Under the same supply chain, all enterprises cooperate with each other to facilitate information sharing, resource allocation optimization and profit maximization. In the selection of core enterprises, it is necessary to consider many factors, such as enterprise capital, credit qualification, market competition, links between upstream and downstream enterprises, and trade volume, so as to enhance the competitive vitality of all members of the supply chain. At the same time, the information related to the core enterprises is transparent and open, which is conducive to the screening and inspection of commercial banks, reducing the loan risk caused by information asymmetry, and

achieving a win-win situation for banks and enterprises.

4.3. Improve the financial infrastructure of the supply chain to promote financing

By further improving the supply chain financial supporting service system, improving the information disclosure mechanism, realizing the supply chain financial information sharing platform, increasing the collection of relevant SME enterprise information, defining the scope of relevant government data collection, strengthening information sharing among regions, encouraging upstream and downstream SMEs to provide true and transparent information data, facilitating the investment of commercial banks in financing, and promoting the financing of SMEs, solve the financing difficulties of SMEs.

5. Conclusion

Small and medium-sized enterprises play an important role in China's economic development and are the internal driving force to stimulate the vitality of the real economy. Due to its own nature, banks and other financial institutions, policy implementation and other factors, SMEs have financing problems. Therefore, to help SMEs solve their financing difficulties through supply chain finance, it is necessary to constantly innovate new models of supply chain finance, improve the infrastructure and information transmission mechanism of supply chain finance, give play to the advantages of supply chain finance, and create a good, orderly and stable financial market for the development of SMEs, We will promote rapid economic development.

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