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Analysis on the Development of Supply Chain Finance Business of Chinese Commercial Banks

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ABSTRACT
Supply chain finance is a new financing model. Its innovative significance is to help all kinds of enterprises better obtain the services of financial institutions. Usually, core enterprises have strong bargaining power in the supply chain. Vulnerable small and medium-sized enterprises generally produce a large number of accounts receivable and prepayments while trading with core enterprises. Therefore, the supply chain finance business launched by Chinese commercial banks is an innovative financial product different from the traditional credit business. It is flexible and takes into account the business characteristics of different enterprises with various types and status. Various domestic supply chain finance models have been launched continuously, and the corresponding product technology has also been developed to varying degrees.
Taking the development of the supply chain finance business of Chinese commercial banks as the research object, this paper analyzes the risk factors and countermeasures in its development through the methods of literature analysis and chart analysis. Finally, the author draws the conclusion that the supply chain finance business of Chinese commercial banks can be further developed by deepening the application of financial technology in the commercial bank supply chain finance business, innovating the business model, expanding the business scope, and implementing commercial bank supply chain finance business risk prevention.

Keywords: *Banking, Supply chain, Small and medium-sized enterprises, Financial services*

1. INTRODUCTION

At present, the scale of the global supply chain finance business is growing, and the scale of China's supply chain finance market also shows an increasing trend. From 2019 to 2020, the growth rate of the scale of the global supply chain finance business exceeded 15%. The business scale in China is close to 25 trillion. With policy support and technological development, supply chain finance has broad prospects. The 2020 Politburo meeting and the release of the notice on promoting the coordinated resumption of work and production of the industrial chain reflect that supply chain finance can provide strong support for epidemic prevention and economic development. At present, scholars believe that supply chain finance has a significant positive impact on supply chain effectiveness. At the same time, the factors that affect the adoption of supply chain finance model will also have a significant positive impact on the effectiveness of supply chain. As an innovation of banking financial business, supply chain finance brings considerable profits to commercial banks. Therefore, this can reduce the financing problems of small and micro enterprises to a certain extent.

Hence taking the supply chain finance business of commercial banks as the research object is necessary for this paper. By analyzing the details of supply chain finance business, this paper finds the current problems in all links of supply chain finance, and then puts forward corresponding solutions to these problems and risks. Thus bringing enlightenment to all the enterprises in the supply chain system in improving their risk control abilities, so as to help participants control the external risks.

2. CURRENT SITUATION OF SUPPLY CHAIN FINANCE BUSINESS DEVELOPMENT OF COMMERCIAL BANKS

Supply chain finance is a new business created by commercial banks on the basis of full integration of capital and information. Jiang (2020) proposed that the supply chain finance of commercial banks is attracting more and more private enterprises to join. Banks have obtained the guarantee of core enterprise qualification credit, and can use the credit model based on self-compensating trade financing. This provides financial solutions for its upstream and downstream SMEs (small and medium enterprises) to further complete various processes[1]. Especially after the impact of external factors such as COVID-19 and the continuous innovation of financial instruments, banking business innovation is becoming more and more common. Jin (2020) found that commercial banks in Jiangsu mainly serve the financial needs of FMCG (fast moving consumer goods) industry in the industry selection of supply chain finance business. Because consumers consume fast when using FMCG, the use time is short, and the replacement is frequent and fast. When purchasing, consumers prefer to choose a more convenient access channel with a low time cost. This determines that the substitutability of FMCG commodities is extremely strong. Therefore, the customer base of supply chain finance business is large and covers a wide range[2].

The development characteristics of supply chain finance business of different banks are different. Some regional banks improve and innovate the supply chain finance business according to the local industrial characteristics. Some banks set up supply chain finance brands based on local competitive advantages. Zhu (2017) believes that the development of supply chain finance of large banks has significant scale advantages and industry status. They can launch supply chain finance products such as network supply chain, network logistics and network capital flow[3]. This will provide comprehensive value-added services of supply chain management such as accounts receivable management and inventory management.

3. LIMITATIONS OF SUPPLY CHAIN FINANCE BUSINESS DEVELOPMENT OF COMMERCIAL BANKS

The supply chain finance business of commercial banks is an important supporting force for China's economic development. However, there are many limitations.

3.1 Shortcomings of the accounts receivable financing model

Gelsomino (2016) believes that for trading enterprises, the rupture of funds is likely to lead to a bankruptcy risk. In the traditional development of Finance and trade, commercial banks do not focus on business finance and trade finance. In particular, some urban commercial banks fail to make up for the shortcomings of the traditional logistics finance model in the environment of Internet big data[4].

Taking the financing mode of accounts receivable as an example, the borrower takes inventory and accounts receivable as the most basic form of guarantee. Loans are made by collecting accounts receivable or realizing inventory. In order to raise funds, the seller's company shall transfer the accounts receivable to financial institutions according to the accounts receivable under certain conditions. The demand side of bond lending is the supplier, and the debtor is the core enterprise. If the supplier cannot repay, the core enterprise will have to bear the bad debt loss. As shown in Figure 1, the core enterprises first sign purchase contracts with upstream buyers to form accounts receivable. Then, upstream suppliers apply for loans from financial institutions. At this time, the core enterprise needs to submit supporting materials.

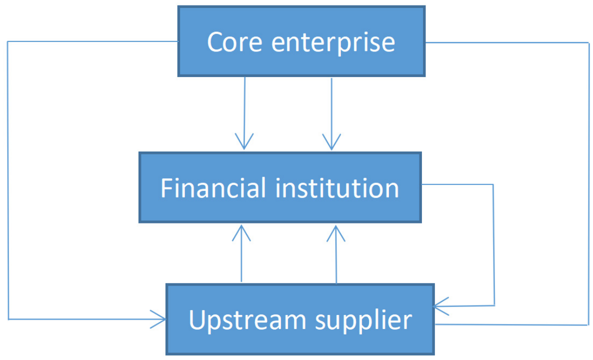

Figure 1 Supply chain finance accounts receivable financing model.

3.2 Inefficiency of the accounts receivable financing model

However, Gao (2016) shows that the efficiency of the accounts receivable financing model is not high, mainly due to the high cost of information exchange of core enterprises in the supply chain. Many financial institutions fail to face up to the fact that credit funds flow. At the same time, supply chain enterprises have not adjusted the operating income structure under the situation of low interest rate. Large commercial banks do not actively break through various boundaries in accounts receivable financing products to obtain digital payment information of small and medium-sized service enterprises. In particular, small and medium-sized banks have not popularized multi-functional applets to replace the traditional e-banking app. These restrict banks from efficiently managing accounts receivable financing products[5]. Zhu (2017) points out that the open application program interface is not considered in the product design of accounts receivable financing mode. This will not attract technology start-ups to obtain new ideas for technological change. Therefore, all kinds of small-scale enterprises in the supply chain finance business of commercial banks will not be able to actively integrate into the new core banking business system of B2B (business to business) and B2C (business to consumer) [6].

3.3 Complexity of the prepayment financing model

There are also many restrictive factors in prepayment financing products. The prepayment account financial model is based on the prepayment accounts. Among them, the first source of repayment is sales revenue. According to the procurement contract, core enterprises apply for loans from financial institutions. Financial institutions issue authorized invoices to core enterprises. Then, the two sides reach a supervision agreement on signing a warehousing contract between warehousing logistics and financial institutions. The core enterprise will receive the goods after the payment according to the delivery instructions of the financial institution. The specific process is shown in figure 2.

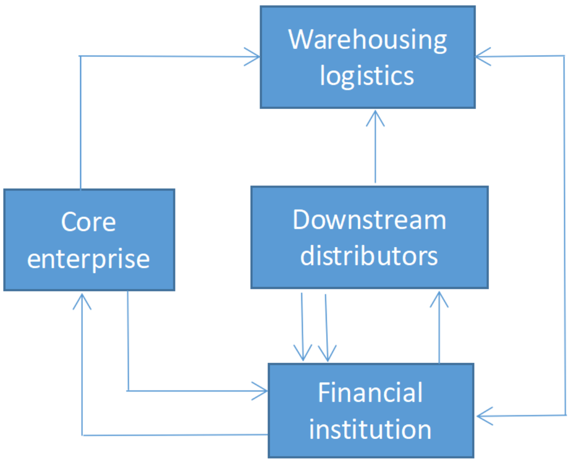

Figure 2 Supply chain finance prepayment financing model.

However, Lei (2017) shows that with the expansion of prepayment scale, most commercial banks do not adopt emerging technologies. In the environment of increasing economic recession pressure and stricter financial supervision, banks do not increase the information database of prepayment financing products. Prepayment financing mode is characterized by breaking through path dependence, leveraging emerging technologies, standardizing multi-party cooperation and formulating process standards. However, most banks have not innovated their prepayment financing business. They do not consider the characteristics of different bank customers on the basis of practice and exploration. In particular, most banks do not take into account the complexity of prepayment financing of community e-commerce enterprises[7].

4. RISKS IN THE DEVELOPMENT OF SUPPLY CHAIN FINANCE BUSINESS OF COMMERCIAL BANKS

The supply chain enterprises can obtain funds from banks by using accounts receivable pledge and inventory, and this avoids the disadvantage of insufficient encumbered assets. However, there are still many risk factors in the development of the supply chain finance business of commercial banks.

4.1 Information asymmetry risk

Abdel (2020) focused on the potential risk of supply chain finance business. This paper finds that there is information asymmetry in the financial business based on upstream and downstream companies. At the same time, the payment business based on value-added services of logistics companies has technical risks in application scenarios[8]. Zhu (2021) believes that there are many misunderstandings in the innovation of the bank supply chain finance business. For example, the e-commerce platform based on transaction and financial warehouse puts forward the "cloud warehouse model". This integrated supply chain finance innovation model has great risks. Among them, the distribution system of financial services and new products ignores the actual capital turnover of small and medium-sized enterprises. Therefore, it cannot promote the development of the real economy[9]. It can be seen that whether industrial chain companies in bank supply chain finance business can contribute to the stable transformation of China's economic structure has attracted great attention. At the same time, whether the information communication between banks and industrial chain companies is sufficient is also the focus of scholars.

4.2 Technical risk

Chen (2021) proposed that some banks excessively simplify the sub-product process of supply chain financing according to the business process of supply chain financing. For example, in accounts receivable financing products, banks blindly implement the process transformation of the information system and ignore the hidden technical risks[10]. Ma (2021) believes that commercial banks do not pay attention to the complex competition and cooperation between supply chain finance participants. In particular, banks have not built the reputation mechanism, profit distribution mechanism and market pricing mechanism. This will bring greater risks. The more risk sources, the greater the potential risk. Therefore, in the development of supply chain finance, risk prevention must become the primary task[11]. Wang (2019) believes that the development of financial technology can promote the development of the financial market in the whole supply chain. There is a lack of a new means to build an ecological financial system Their outdated database technology limits the innovation of financial products[12].

4.3 Business development activities risk

Wu (2020) believes that in the supply chain finance business of commercial banks, the characteristics of wide coverage and a large number of customers in the retail industry are the most prominent. The scope and quantity of distribution retailers at all levels should match the customers. The wide range of dealers reduces the homogeneity of financial customers in the supply chain and reduces the risk. The number of dealers ensures the base number of customers selected by the bank's supply chain finance. This not only ensures the driving force of banking business development, but also ensures the quality of customers and reduces risks[13]. MA (2021) believes that although the supply chain finance has developed significantly in recent years, its participants are still mainly large commercial banks. At present, supply chain enterprises are completely blocked by commercial banks. The role of supply chain finance still needs to be further developed[11].

4.4 Institutional risk

Liu (2021) combed the main risk factors faced by developing supply chain finance business This paper expounds the main paths for commercial banks to develop supply chain finance business. Taking accounts receivable financing as an example, the author discusses how various risk factors reduce the financial efficiency of the supply chain. The article also focuses on the relationship between credit system institutional risk and marketing efficiency[14]. Cui (2020) believes that there are many risks in the innovation and development of the banking business, so the current situation is not optimistic. This paper analyzes the development status of supply chain finance. The author found that some core enterprises did not formulate a clear customer information system in order to reduce the management cost of dealers. This makes it impossible for city commercial banks to obtain diversified information from core enterprises, so as to amplify the risk[15]. Chen (2021) summarized four types of risk factors from the development of supply chain finance under the trend of a multi-level dealer system. This includes that commercial banks still adopt the traditional credit process and parity standard, still adopt the traditional customer evaluation standard, do not establish a bank enterprise information interaction platform, and do not establish a mature risk management mode[16].

5. SUGGESTIONS ON THE DEVELOPMENT OF SUPPLY CHAIN FINANCE BUSINESS OF COMMERCIAL BANKS

Due to the policy support and the huge financing demand of small and medium-sized enterprises, supply chain finance has developed rapidly. It has become a new direction of business transformation for commercial banks. The innovation of the supply chain finance business of commercial banks will help to promote the continuous improvement of China's financial market. However, from the above analysis, there are still many urgent problems to be solved in the development of supply chain finance. China's commercial banks have not yet cooperated with many parties and established risk management methods. Therefore, there are still many risks in the operation of supply chain finance. This paper suggests that we should start with the characteristics and development requirements of supply chain finance, formulate effective risk prevention measures, and deepen the application of financial technology. The risk prevention measures will effectively improve the management level of the monetary policy of commercial banks.

Firstly, apply big data to the core enterprise evaluation of commercial bank supply chain finance business. It is suggested that banks use models and machine algorithms to calculate the risk changes of core enterprises in the whole process of big data. This will help to analyze the risk degree of enterprise economic activities and solve the problem of information asymmetry. At the same time, banks can use big data staff to prevent moral hazards. This will reduce the risk caused by staff concealment, fraud and other operational behaviors.

Secondly, analyze the details of the supply chain finance business. This will help avoid the non-conforming transfer of materials in the supply chain, so as to greatly reduce the potential risks. A series of information processing technologies in the financial field, such as intelligent communication equipment and the Internet of things, are gradually combined with financial business. Commercial banks should rely on technological advantages to innovate products and services and continue to support the rapid development of small and medium-sized enterprises. This will promote the healthy development of the supply chain finance business.

6. CONCLUSION

To conclude, there are still some risks in the supply chain of commercial banks in China, such as information asymmetry, insufficient technology level, and inadequate management models. Some urban commercial banks have failed to make up for the shortcomings of traditional logistics and financial models in the Internet big data environment. Under this premise, we can innovate the supply chain business of commercial banks by improving the management model, use big data analysis methods to evaluate the core enterprises of commercial banks' supply chain business, and apply the modern technology for technological innovation to optimise and upgrade the series of supply chains.

Some shortcomings of this paper include the lack of in-depth analysis of the dilemma of the combination of financial technology and supply chain finance of small and medium-sized banks. At the same time, the article lacks a discussion on how to cultivate corresponding professionals. Looking forward to the future, the research needs to focus on how to diversify the economic benefits of banks. It can enable commercial banks to effectively develop customers, improve the product research and development capabilities, meet the needs of customers and markets, be more competitive and efficient, and promote the management transformation. Besides, expanding the market can also drive the revenue growth of the entire intermediary business.

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