Research on Financial Financing Mode of SME Supply Chain based on B2B E-commerce Platform

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Abstract. The integration of supply chain finance and Internet technology has opened up a new model of financial service operation in the era of network economy—B2B e-commerce platform Internet supply chain financial model, which provides an effective way to solve the financing difficulties of SMEs. This paper combines the operational flow and mechanism of the supply chain financial model of B2B e-commerce platform to study and analyze its advantages, and points out its problems, and puts forward reasonable suggestions for the B2B e-commerce platform supply chain financial financing parties to develop Internet supply chain finance. Provide a reference for improving business, resource allocation efficiency, and ensuring stable security.

Keywords: B2B e-commerce platform; Internet supply chain finance; SME financing model.

1. Introduction

According to the "2017 China B2B E-commerce Market Data Monitoring Report" released by the E-Commerce Research Center, the B2B industry is huge, accounting for 70% of the Chinese e-commerce market, and still maintains rapid growth. In 2017, the scale of China's B2B e-commerce transactions was 20.5 trillion yuan, an increase of 22.75% \cite{1}. Domestic policies have further deepened the transformation effect of the “Internet Plus” strategy in all walks of life, and supply-side structural reforms and consumption upgrades have promoted the steady development of the B2B model. The emerging B2B e-commerce industry has begun to pay attention to the development of refinement and regionalization, and has continuously expanded the service content of the whole industry, and has intensified the layout of the supply chain finance sector. This trend has also solved the financing threshold and the financing cost burden for SMEs. The issue of financing difficulties provides an opportunity. With the development of the Internet economy, many small and medium-sized enterprises have joined the e-commerce B2B model, and most B2B e-commerce platforms provide Internet supply chain financial services. Compared with traditional supply chain finance, B2B e-commerce platform Internet supply chain finance has a comparative advantage in SME customer loan review and capital lending treatment. Through online resources to complete financial financing, the financing opportunities of SMEs are greatly increased. It also makes the financing difficult. Therefore, SMEs should look for convenient resources available in the era of Internet economy, find the most effective way, actively use the supply chain financing resources provided by B2B e-commerce platform and alternative financing channels appearing in the market under other current systems to solve self-financing problems.

2. Internet Supply Chain Financial Financing based on B2B E-Commerce Platform

The B2B e-commerce platform is an online platform for communicating and transmitting data messages between enterprises and enterprises. The B2B e-commerce platform mainly has the following four modes: one is the vertical mode. Under this model, the company forms a supply link with its upstream supply companies through the B2B platform and forms a sales contact with its downstream distribution companies. The second is the integrated model. Mainly based on the third-party integrated B2B e-commerce platform, it can bring together similar exchange processes in all industries to the B2B e-commerce platform, providing self-negotiating trading opportunities for
different enterprise buyers and suppliers. The third is the self-built mode. Stronger entities will set up subsidiaries of the B2B e-commerce platform to establish an industry-based online trading platform that serves their own product supply chain. The fourth is the association mode. It refers to the cross-industry B2B platform built by the industry to integrate the vertical B2B e-commerce form and the joint B2B e-commerce form in order to improve the popularity and accuracy of its online trading platform [2]. There are two main ways for B2B e-commerce platform supply chain financing: one way is that the enterprise applying for financing supply chain needs to make real purchase and sale transactions on the platform under the premise of becoming a B2B e-commerce platform member. On this basis, the platform cooperates with financial institutions such as banks. The e-commerce platform provides data information for loans issued by financial institutions such as banks. The bank’s credit based on e-commerce platform is distributed to SMEs in the supply chain with e-commerce platform as the core enterprise. Loans, e-commerce platforms play a guarantor role here. Another mode is that the e-commerce platform uses its own funds to integrate the user information deposited by the platform, thereby providing the supply chain financing method directly to the SMEs on the platform.

3. Internet Financing Chain Financing Process based on B2B Platform

In the era of supply chain finance 2.0, online supply chain finance, to obtain online supply chain financing, relatively complex, as shown in Figure 1, as shown in Figure 1, first, commercial banks and B2B e-commerce companies sign a cooperation agreement to realize information sharing and realize electronic credit rating through real historical transaction records between enterprises on the platform. Second, financing companies submit online credit applications online. The bank reviews the application materials and combines the credit information provided by the enterprise on the B2B platform to conduct online credit to the enterprise and give a certain credit loan amount. Fourth, financing companies conduct online transactions on the B2B platform to generate electronic orders. Fifth, the B2B platform delivers electronic orders. The bank reviews the authenticity of the electronic orders transmitted on the e-commerce platform, and issues loans within the credit line according to a certain percentage of the order payment. Sixth, after financing the SMEs, they will organize the production and deliver the goods on time. After the buyer checks and signs, the order is completed. The buyer’s core enterprise will transfer the purchase price to a special bank account and repay the loan. This process is relatively cumbersome, and the efficiency of financing is relatively high and time is long.

Fig. 1 Schematic diagram of the 2.0-era online supply chain financial electronic order financing model
In the era of supply chain finance 3.0, B2B e-commerce supply chain financing procedures are much simpler, and the efficiency and speed are much faster. China's large-scale e-commerce companies such as Alibaba, Dunhuang, Jingdong and Treasure Island have carried out traditional platform service business, and actively carried out B2B platform supply chain financing services, and developed different types of supply chain financing operation typical models according to their own characteristics. Taking Alibaba as an example, Alibaba ranked first in the market share of China's B2B e-commerce platform in 2017, with a market share of 36.7%. "2015 Alibaba B2B User Data Analysis Report" said that Alibaba serves hundreds of millions of SME buyers worldwide, including 1 million domestic suppliers, 25,000 foreign suppliers, 10 million domestic buyers, and 100 million foreign purchases. Business [3]. Alibaba. com's 1688.com foreign trade platform alibb.com is both Alibaba B2B core business platform. Alibaba has become a leading B2B company, and B2B Internet supply chain finance is also ahead of domestic companies. Alibaba B2B Internet Supply Chain Finance, the general process of B2B Internet supply chain finance in the supply chain finance 3.0 era, compared to the traditional supply chain 2.0 era online supply chain financial electronic order financing model process, to be simpler and more efficient. More. There are two types of Alibaba's Internet supply chain products. One is to cooperate with banks to make loans with bank funds; the other is to use their own funds for loans. The first type of platform, through cooperation with banks, uses its own data collection and processing advantages to conduct credit risk assessment for SMEs on the platform, and guarantees its own credit to help suppliers obtain credit from banks and other financial institutions. as shown in picture 2. The second category is that the platform uses loans with its own funds, such as Taobao Small Loan and Ali Small Loan. In this case, the flow chart is basically the same as Figure 2, except that Process 1 and Process 2 are not needed.

Fig. 2 Schematic diagram of the financial supply order financing mode of the Internet supply chain in the 3.0 era

4. B2B E-commerce Platform Supply Chain Financial Financing Advantage

From the perspective of B2B platform supply chain financing services, the platform utilizes the advantages of data collection and processing, conducts credit risk assessment for SMEs on the platform, guarantees by its own credit, helps SMEs obtain credit from banks, or through their own micro-credits. The company directly credits small and medium-sized enterprises, which greatly simplifies the bank's credit risk assessment audit procedures for SMEs, improves loan efficiency, saves operating and time costs, and accelerates capital turnover. Its advantages are manifested in the following aspects:

First of all, from the perspective of financing threshold, if SMEs apply for loans directly from banks, because of their weak strength and poor ability to resist risks, banks will set a high threshold in order to control credit risks, while SMEs will raise funds through B2B supply chain. The main focus of the bank's review is to use its own credit as a guarantee to help small and medium-sized enterprises obtain credit from banks. As a core enterprise's B2B e-commerce platform, its reputation
and the authenticity of the supply chain and the stability of the source of repayment are reviewed. Relatively speaking, the threshold is very low.

Secondly, from the perspective of financing procedures and efficiency, online supply chain financing, based on the advanced Internet technology environment, through the integration of the precipitation data, more effective access to corporate information, advanced electronic processing technology more effectively streamlined the approval and lending process has improved loan efficiency and corporate capital turnover. For example, on the Ali platform, the ant small loan lending time takes only 1 second.

Thirdly, from the perspective of financing costs, the financing costs of offline supply chain financing are mainly loan interest and business handling fees. Interest is determined by the benchmark interest rate rising by 10%~20%, and the business handling fee is 1%~3% of the loan amount. Adding up to 11%~23% of the cost, online supply chain financing, because of efficiency, save a lot of time and operating costs, compared to traditional credit, offline supply chain financing, the cost is small, the year the interest rate is between 10% and 18%, and there is generally no business fee [4].

5. The Main Problems of B2B E-Commerce Platform Supply Chain Financial Financing

5.1 Limitation of Platform Enterprise Loan Capital

The main problem with Internet supply chain finance is the limitation of capital. According to the "Guiding Opinions on the Pilot Program of Small Loan Companies" jointly issued by the Central Bank and the China Banking Regulatory Commission, microfinance companies may not absorb public deposits, and the balance of funds received from banking financial institutions shall not exceed 50% of the net capital, the funds that microfinance companies can lend are 150% of their net assets [5]. Although the small loan company can greatly improve efficiency and reduce the risk of risk transmission, it is difficult to spread due to the restriction of funds, so it is necessary to effectively solve the capital limit of small loan companies.

5.2 It has Certain Risks

Firstly, there are technical risks in Internet supply chain financing. Online supply chain financial services need to interface the bank's supply chain financing system with the company's resource logistics management system. Because the systems of different enterprises are difficult to be compatible with each other, it affects the efficiency of supply chain financing. Moreover, most of the information in the transaction process will be transmitted on the Internet. Therefore, the confidentiality and security of the electronic information system are very important. If the system is subjected to malicious network attacks, it will bring huge losses to the enterprise and the bank.

Secondly, Internet supply chain financing has the transmission effect of financing risks. Supply chain financing shifts risk from small and medium-sized enterprises to core enterprises, and core enterprises have the greatest risks in the supply chain. If the core enterprise's ability to resist and manage risks declines, other companies in the supply chain will be affected. Banks and other financial institutions will reduce the credit line. SMEs on the platform will be affected, and pressure from the shortage of funds will be faced.

5.3 Short Financing Period

SMEs' Internet supply chain financing has a short financing period. For small enterprises, they can only meet short-term financing needs and cannot meet long-term financing needs. Although the Internet supply chain financing model is superior to the traditional supply chain financing model in terms of efficiency and cost, it is still short-term financing in the financing period, which has limitations for SMEs with long-term financing needs.
6. B2B Internet Supply Chain Financial Financing Advice

6.1 Effectively Solve the Problem of Financial Restrictions

First of all, small loan companies can cooperate with financial institutions such as banks to obtain external financing through asset transfer and transfer of assets such as creditor's rights. The second small loan company can adopt the method of asset securitization to finance, and the basic assets are the credits formed by small and micro enterprises and individual industrial and commercial households on the platform. Small loan companies can purchase capital assets in a loop, recycle funds, and constantly change the pool of funds. Third, the problem of financial restrictions can be effectively solved through P2P. Compared with banks, P2P platform has the ability to process and integrate information and approval efficiency, high innovation speed, and low financing threshold. At the same time, P2P platform is close to the market, and the source risk diversification can meet the needs of small loan companies.

6.2 Improve Risk Resilience

To resist the transmission effect of technology risks and financing risks, from the perspective of small and medium-sized enterprises, SMEs should improve their ability to withstand risks, and use Internet resources to seek financing channels and solve financial pressures. The risk is to avoid the joint risk of the core business risks. From the bank's point of view, while developing supply chain financing business, banks should increase investment in technology operations and ensure that online supply chain financing services have a stable and secure network platform. Banks must develop an effective risk warning plan while accurately designing the electronic approval process for online application loans. Finally, for e-commerce platform enterprises, in response to the increased investment of resources in the Internet system, in order to provide customers with more reliable and secure supply chain financing services, they should also regulate their own behaviors, conduct standardized business operations and risk prevention and control measures. To make the company's own technical security system and risk control management system more perfect [6].

6.3 Innovative Financing Mode to Extend Financing Period

Internet supply chain financing can only solve the short-term capital needs of SMEs. For the long-term capital needs of SMEs, we must understand the dynamics of capital markets and grasp the feasible financing channels according to the situation. At the same time, banks should also integrate resources, explore the financing needs of SMEs, and innovate financing models. Under reasonable risk conditions, innovations can meet the financing needs of some SMEs for long-term financing needs.

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References

[1]. Ai Media Consulting "2017 China B2B E-commerce Market Data Monitoring Report" [EB/OL] on http://www.iimedia.cn/60608.html.

[2]. Xu Xu: Research on B2B Platform Financing of Supply Chain SMEs Based on Game Theory (Thesis, Dalian Maritime University, China 2018). p.15-18.

[3]. 2015 Alibaba B2B User Data Analysis Report [EB/OL].WS Network Economic Service Platform on http://www.100ec.cn/detail--6317855.html.
[4]. Dong Xiaomeng: Research on Internet-based SME Supply Chain Financing Model (Thesis, Zhejiang University, China 2016). p.23-29.

[5]. Guidance on the pilot of microfinance companies [EB/OL]. Central Government Network of the People's Republic of China on http://www.gov.cn/gzdt/2008-05/08/content_965058.htm.

[6]. Jiang Xiaodan: Study on the use of Internet supply chain financing for small and medium-sized enterprises (Thesis, Capital University of Economics and Business, China 2016). p.37-41.