

Research on Supply Chain, Financing of Small and Micro Enterprises under Digital Finance

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Abstract: After more than 2 decades of development, China's supply chain (SCM) finance has gone through different stages, such as leading by financial institutions, cooperation between financial institutions and core enterprises of the SCM, industrial Internet model and standardized development. While making remarkable achievements, there are also problems in many aspects. With the continuous improvement of China's information technology, SCM finance has emerged as an innovative carrier of China Unicom's real economy and finance. In the future, the competition in the world economy will no longer be between a single enterprise and a single enterprise, but between the SCM system and the SCM system. Although SCM finance has been widely recognized and valued by the global industry, it also encounters major challenges and obstacles. This study will discuss whether digital finance will improve the financing inertia of enterprises or optimize the financing mode of enterprises, and study the SCM financing of small and micro enterprises under digital finance. Based on the background of the financing dilemma of private small and micro enterprises and the emergence of SCM finance, this paper analyzes the concept of SCM finance, analyzes the role of the financing mode of SCM finance in ease up the financing dilemma of private small and micro enterprises, and suggests that relevant governments should further strengthen the ecological construction of digital finance, so as to realize the original intention of the healthy development of small and micro enterprises.

1. Introduction

In recent years, SCM finance has become an important field in the development of global economy, showing huge growth potential both globally and in China[1]. On October 18, 2021, during the 34th collective study of the Political Bureau of the CPC Central Committee on promoting the healthy development of China's digital economy, General Secretary Jin Ping emphasized the importance of digital finance to China's socialist market economy, and it is necessary to vigorously promote the development of digital finance in order to alleviate the problems of Chinese enterprises, especially small and medium-sized enterprises. However, due to the data model characteristics of digital finance, in addition to the market risks, credit risks and legal risks of traditional finance, the borrowers and lenders of the fund platform also have to face Internet-specific risks such as big data application risks, industry risks and platform risks[2]. How to effectively ensure the safe and stable operation of China's industrial chain, activate the efficiency of small and micro enterprises, stabilize employment and expand domestic demand has risen to the national strategic height. While SCM finance has been widely recognized and valued by the global industry, it has also encountered major challenges and obstacles[3]. In this sense, the economic contradiction caused by the inversion of economic structure and financial structure has constrained the efficiency of China's financial resource allocation and hindered the progress of China's high-quality economic development, which is also the original intention of China's supply side reform. Under the background of the gradual consolidation of the Internet financial market, the digital financial financing channels of small and micro private enterprises are facing new challenges[4]. To sum up, this study will discuss whether digital finance will improve corporate financing inertia or optimize corporate financing mode, and study the SCM financing of small and

micro enterprises under digital finance.

2. SCM Finance

2.1 Development of SCM Finance

SCM finance is a comprehensive financing scheme serving the transactions between enterprises at SCM nodes. The essence of SCM finance is to help enterprises activate current assets, namely accounts receivable, prepayments and inventories[5]. Starting from the SCM industry as a whole, using financial technology, integrating data elements such as logistics, capital flow, information flow, etc., under the background of real transactions, build a finance supply system and risk assessment index system that integrate the core enterprises that dominate the SCM with upstream and downstream enterprises, providing systematic financial solutions, and quickly respond to the comprehensive needs of enterprises in the industry chain such as settlement, financing, financial management, etc, reduce enterprise costs and enhance the value of all parties in the industrial chain[6]. After reading the related documents, we can find that the domestic SCM finance research started relatively late, starting with the exploration of logistics finance. It not only provides trade financing services for enterprises in all links of the SCM, but also provides new loan financing services for weak enterprises in the SCM. It is a self-paying trade financing method based on the core customers and with the real trade background as the premise. With the continuous improvement of China's informatization level, SCM finance has sprung up as an innovative carrier of Unicom's real economy and finance. In the future, the competition of the world economy is no longer the competition between single enterprises, but the competition between SCM systems[7]. For SCM enterprises in the digital economy era, data, as a factor of production in the new era, has become increasingly important. Develop industry led SCM finance. With the increasing emphasis on enterprise industry chain, SCM finance has prominent advantages in financing effect of small and medium-sized private enterprises. In fact, the business gene of SCM finance naturally has the conditions for dynamic risk management. The smart contract scheme based on blockchain technology has been rapidly sought after. The data on the chain can not be tampered with, and the smart contract can realize the intelligent control of capital flow. The above-mentioned technologies have attracted the attention of various banks, and a series of researches have been carried out on their application. SCM finance started early in China, but its development was slow and its service groups were narrow. In particular, China's economy has entered into a new normal. With the deepening of supply-side reform, the financial reform is imminent, and the government is taking steps to ease the congestion.

2.2 Financing Mode of SCM Finance

The financing constraints and financing performance of SCM are also very concerned by domestic scholars[8]. SCM finance from the perspective of asset rights mainly refers to that financial institutions transfer the ownership of the underlying assets of SCM finance to customers through ABS and other asset securitization means. In this process, financial institutions actually play the role of matchmaking platform for docking capital end and asset end. In recent years, with the rapid development of information technology, such as cloud computing, Internet of Things, data, blockchain and other financial technologies, scholars have paid extensive attention to the new supply chain financial model based on big data and blockchain[9]. Based on the analysis of the role of SCM finance private small and micro enterprise financing, three traditional financing methods of SCM finance are accounts receivable financing, inventory financing (financing in warehouse) and advance payment financing (financing in confirmed warehouse).

All three financing modes have common operating characteristics:

(1)Self-repayment of repayment source, (2)Orientation of credit purpose,(3)Closure of financing operation,(4)Take post-loan management as the core of risk control.

For a long time, due to the maturity of financial products, rigid exchange and pooling have led to high and stable yield, which makes investors at the capital end have natural expectations and

misunderstandings about the products provided by financial institutions. However, financial institutions have always made a large number of products and customers risk mismatches due to the lack of technology in the qualification review of capital suppliers. Combined with intelligent question answering robot technology based on big data AI, it assists financial institutions to communicate with customers, and achieves a series of work such as information push, risk prompt, communication retention, etc. The innovation of financing mode refers to the new financing scheme put forward by enterprises through their internal organizational behavior to scientifically adjust their financing structure, so as to balance the financing amount and financial burden. If the financing pressure is greater or the capital demand is more urgent, there will be fewer financing channels to choose from, and the space for financing mode innovation will be smaller, as shown in Tabel 1.

Tabel 1 The Logical Mechanism of Financing Mode Innovation

Model	Organization behavior	Decision results
Traditional financing mode	Maximum financing limit > Debt tolerance limit	Increased operational risk in the later period
Innovation of financing mode	Maximum financing limit ≤ Debt tolerance limit	Balance of business risk in the period

According to the financing contract theory, financing contracts are often imperfect due to the interference of limited rationality or opportunism of individuals or organizations. Therefore, under the premise of asymmetric information of financing contracts, there must be a game process between the financing parties. The three traditional financing methods of SCM finance are shown in Figure 1.

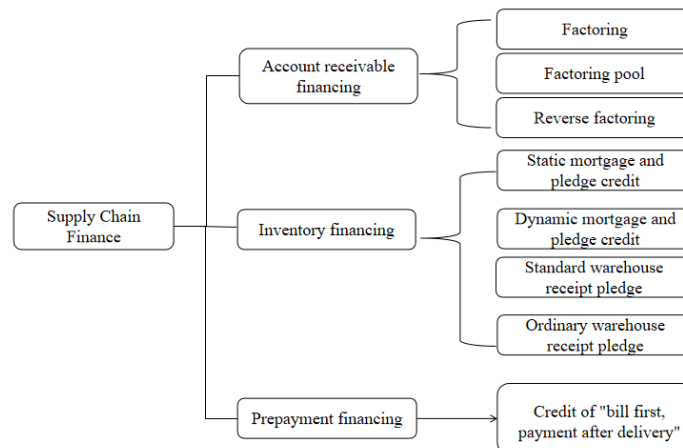


Fig.1 Three Traditional Financing Methods of SCM Finance

3. Analysis of Digital Financial Financing Environment of Small and Micro Private Enterprises

3.1 Status and Development Environment of Small and Micro Private Enterprises

In addition to the increase in income and assets of small enterprises, small and micro enterprises have stable operating conditions, and their ability to absorb employment has been enhanced. Small and micro private enterprises play an important role in taxation, employment and corporate social responsibility[10]. At present, the number of small and micro enterprises in China is more than twice that of the United States, but there is still much room for growth in terms of the ratio of population to enterprises. Under the promotion of the State Administration of Taxation and the china banking regulatory commission (CBRC), financial institutions have implemented a series of preferential financial credit measures to help small and micro enterprises finance, established an information sharing mechanism between financial institutions and tax authorities, specifically providing relevant credit products for small and micro enterprises that pay taxes on time, and provided a “Internet+Finance” financing model of networked credit through targeted preferential measures for small and micro enterprises by financial institutions.

For many years, the government has been paying attention to financing of private small and

micro enterprises is difficult and expensive, and has made great efforts to establish a long-term mechanism of “dare to lend, be willing to lend and be able to lend”; Adhere to the first repayment source, reduce the excessive dependence on mortgage guarantee; Relying on the credit of the core enterprises in the industrial chain, the real transaction background and the closed loop of logistics, information flow and capital flow, we will provide order financing and accounts receivable and payable financing for upstream and downstream enterprises without mortgage guarantee. Among them, SCM finance was named by China Banking and Insurance Regulatory Commission once again and was determined as the reform direction of serving the real economy.

While the credit environment is improving, the Internet economy is developing rapidly, and digital finance risks and convenience are at the same time. Although the ecological environment of digital finance, especially Internet finance, has improved, there are still problems of concentration and small scale in the field of investment and financing. Some enterprises also questioned the development of digital finance financing platform due to negative news such as cash withdrawal difficulties, self financing, fraud, naked loans, illegal fund-raising, fraud, etc.

3.2 Feasible Means to Alleviate the Financing Difficulties of Private Small and Micro Enterprises

The long-term and sustainable development of any economic and industrial operation system cannot be separated from a fair and just environment. Without a good institutional environment as a guarantee, any economic operation mode will be restricted and challenged, as will the sound development of SCM finance[11]. Supporting private small and micro enterprises has become a “key task” for commercial banks by government regulatory authorities. Developing SCM finance can help commercial banks achieve the following upgrades and feed back private small and micro enterprises. By controlling the structure, process and elements of the SCM, we can also combine financing with various businesses such as investment and wealth management, insurance, forward transactions, consumer finance, financial leasing, equity and fixed asset financing, etc., and carry out customized development to a certain extent for customers in different industries, links and scenarios, requiring commercial banks to design personalized products to meet the different needs of enterprises according to their financing needs, with the help of new technologies such as Internet and big data.

It is necessary to promote the healthy development of local small and micro enterprises, ease their financing constraints, promote their financing mode innovation space, strengthen the digital financial infrastructure, and further improve the local financial ecological environment. To fully release the role of digital finance in promoting the innovative space of financing mode of non-state-owned small and micro enterprises, local governments need to increase financial resources investment, constantly improve the allocation of local financial resources, and provide more high-quality and efficient financing channels for small and micro enterprises, so as to enhance their innovative space of financing mode, improve the digital financial policy system, and further optimize the local financial governance system. Financial technology empowers, changes the ecological organization mode of SCM finance, and promotes SCM finance to better serve private small and micro enterprises.

In the blockchain+ SCM financial ecological organization model, blockchain technology alone is not enough to meet the demand for financial risk control in the SCM, and the addition of other financial technologies is essential. To strengthen the financing capacity of small and micro enterprises and further improve the efficiency of enterprise financing management, in order to fully alleviate the financing constraints of small and micro enterprises, we must strengthen their own financing capacity. At the same time, small and micro enterprises also need to start from the organizational level, promote the digital transformation process of the organization, and then build a “soft” financing capability of small and micro enterprises with a digital, efficient and intelligent organizational management system to break the financing obstacles caused by information asymmetry.

4. Conclusion

At present, SCM finance is in a stage of development with good overall situation and broad prospects, and also a stage that requires strong foundation and innovative development. Digital finance can indirectly promote the innovation of financing mode of small and micro enterprises by easing financing constraints. With the support of domestic SCM financial policies, SCM finance will become an important financing means to solve the financing difficulties, expensive financing and improve enterprise performance of small and micro enterprises. It is of great significance to explore the influencing factors of SCM finance and the mechanism of its impact on industry performance. The research on the influencing factors of SCM finance is not only very important to increase the opportunities and possibilities for SMEs to obtain funds through SCM finance, but also has certain guiding significance for the healthy development of SCM finance in China. From the perspective of SCM, SCM finance can optimize enterprise inventory and enhance the cooperation between SCM participants, thereby improving enterprise performance. Financial infrastructure is the cornerstone of the development of SCM finance. The development of SCM finance cannot be separated from the construction of financial infrastructure. Here, infrastructure refers not only to the construction of hard technology or systems, but also to the construction of the underlying elements of SCM finance. On the other hand, we should strengthen the system design and planning of digital governance, which should be reflected not only in the management of networks, systems, platforms and other systems, but also in the construction of governance standards, management systems, laws and regulations.

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