

Research on Empowering Small and Medium-sized Enterprises' Financing through Supply Chain Finance

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Abstract. The problems of difficult financing and high costs have become major obstacles restricting the healthy and sustainable development of small and medium-sized enterprises (SMEs) in China. As an emerging financing model that integrates production and finance, supply chain finance can alleviate this prominent issue to a certain extent by integrating the information flow, logistics, and capital flow of upstream and downstream enterprises in the supply chain. This paper deeply analyzes the financing difficulties faced by SMEs and proposes the adoption of supply chain finance to add impetus to their financing. Meanwhile, it also puts forward specific suggestions on how to better promote SMEs to utilize supply chain finance, aiming to effectively solve the financing problems of SMEs.

Keywords: Supply chain finance; small and medium-sized enterprises; financing.

1. Introduction

In recent years, the number of small and medium-sized enterprises (SMEs) in China has been continuously increasing, and their role in the national economy has become increasingly important. As of July 2024, the number of small, medium, and micro enterprises in China has exceeded 53 million, playing a pivotal role in the national economy, contributing more than 60% of GDP, over 70% of technological innovation achievements, more than 80% of urban employment, and accounting for over 90% of the total number of enterprises. This indicates that SMEs play an important role in the China's economic operations and have enormous development potential. However, SMEs currently face significant constraints on their further growth due to limited financing channels, high costs, and information asymmetry. They are not only an important engine of economic growth and a key source of innovation vitality but also the most vulnerable link in the market ecosystem. So, can the precise irrigation of financial resources truly benefit these SMEs? The application of supply chain finance helps SMEs broaden financing channels, address information asymmetry issues, and reduce transaction costs. This is of significant importance for solving the financing difficulties of SMEs and promoting their innovation and development [1].

2. Financing Difficulties Faced by SMEs

2.1. Limited Financing Channels

The financing channels of SMEs can generally be divided into two categories: internal financing and external financing. Specifically, internal financing mainly refers to the profits accumulated from a company's own business operations, while external financing includes various forms such as bank loans, equity financing, and debt financing. The amount of internal financing depends primarily on accumulated profits, which in turn are closely related to a company's profitability. However, since SMEs generally have limited profitability, their profit margins are often relatively low. As a result, when SMEs seek financing through bonds or equity, they often encounter difficulties due to limited creditworthiness. In this situation, bank loans become their primary external financing channel. Yet, bank loans are subject to many constraints, such as insufficient collateral and low credit ratings, which often put SMEs at a disadvantage in commercial activities, as banks tend to prefer providing financing to large enterprises. Additionally, SMEs usually lack highly liquid assets for collateral, and the market



acceptance and liquidity of their guarantees are relatively low. This makes banks more cautious when assessing loan risks, thereby affecting their willingness to extend loans to SMEs.

2.2. High Financing Costs

In financing activities, in addition to paying regular loan interest, SMEs must also bear additional interest costs due to risk premiums stemming from their relatively small scale and higher default risks. This additional cost typically ranges between 4% and 10%. Due to limited scale and relatively weak asset bases, SMEs often struggle to provide sufficient collateral required by banks or to find reputable guarantors with adequate guarantee capabilities. These challenges result in many SMEs encountering setbacks when applying for bank loans, making it difficult to obtain the necessary financial support and increasing their financing costs. Furthermore, guarantee companies charge a service fee of 2% of the total loan amount when providing financial services to SMEs. To mitigate financial risks, they also impose a series of credit protection measures, such as requiring compensatory balances or entering into loan agreements, which undoubtedly further increase the actual financing burden on SMEs. Facing urgent funding needs, SMEs often prefer short-term loans that can be quickly accessed to address immediate problems. Such short-term loans usually have higher interest rates, raising the financing costs for SMEs. When access to bank loans is restricted, SMEs are forced to seek other financing channels, with private capital borrowing becoming an important option. The loan interest rates from private capital are often much higher than those of bank loans, significantly increasing SMEs' financing costs and further intensifying their operational pressures.

2.3. Information Asymmetry

China's regulatory system for SMEs is still not well-developed, which results in SMEs not being required to disclose financial statements. Consequently, most SMEs lack professional financial management personnel and a complete financial system, leading to deficiencies in the recording and consolidation of financial information. To obtain financing, some SMEs may deliberately conceal or manipulate financial report contents. Additionally, there are differences in the formats and standards of financial statements across various industries, making it difficult for financial institutions to accurately assess the debt-servicing ability of SMEs. At the same time, China's credit evaluation system does not fully consider differences in enterprise types and sizes, using a uniform credit rating standard to evaluate SMEs, which causes distortions in credit assessment results. Due to the lack of a credit evaluation system tailored to the characteristics of SMEs, they find it more difficult than large enterprises to obtain credit assessments, and thus cannot monitor their credit risk in real time. This incompleteness of information exacerbates the asymmetry of information between banks and enterprises, leading to difficulties for SMEs in obtaining financing [2,3].

3. Overview of Supply Chain Finance

3.1. Definition of Concept

Supply chain finance is defined as a systematic financial solution. It is based on a holistic perspective of the supply chain and industry chain and quickly responds to the comprehensive needs of enterprises within the industry chain in areas such as settlement, financing, and financial management, grounded in real transaction scenarios. Supply chain finance provides various service models, such as accounts receivable financing, order financing, and prepayment financing, which can accurately meet the liquidity needs of different participants at different stages of development. Compared with traditional financing models, supply chain finance demonstrates more refined risk management, broader coverage, lower financing costs, and higher flexibility.

3.2. Financing Model

During the procurement phase, a prepayment financing model is employed. In order for SMEs to obtain necessary materials from core enterprises, they must meet the prepayment conditions before

they can collect the goods, which results in the generation of prepayments. If the core enterprise delays delivery, downstream SMEs may experience tight cash flow. In this case, they can use the right to receive goods or goods in transit as collateral to apply for loans from financial institutions, with the core enterprise providing corresponding guarantees. This model requires the involvement of third-party logistics companies for supervision, and financial institutions need to closely monitor the flow of goods and changes in market value.

During the production stage, the inventory pledge financing model is applied. SMEs designate their inventory as collateral assets and use it as a basis to apply for financing from banks to obtain financial support. The core enterprise continues to assume the guarantee responsibility in this process, helping SMEs successfully secure loans. Once the loan is approved, the financial institution will designate a third-party logistics company to supervise the pledged inventory and continuously monitor fluctuations in its market value. Subsequently, SMEs use the raised funds for production and operations. After the loan is repaid, the third-party logistics company responsible for supervision will return the pledged inventory to the borrowing enterprise.

During the product sales stage, the accounts receivable financing model is used. SMEs often adopt a credit sales strategy, which generates accounts receivable. When the collection period is extended, they may face the risk of a broken cash flow. Under this financing model, the financial institution reviews the actual transaction records between the SME and the core enterprise to verify the authenticity of the accounts receivable. Once confirmed, the core enterprise provides counter-guarantees, and the ownership of the accounts receivable is transferred to the financial institution. The SME then obtains a loan based on this arrangement to alleviate issues with its liquidity.

4. How Supply Chain Finance Alleviates Financing Difficulties Faced by SMEs

4.1. Supply Chain Finance Can Expand Financing Channels for SMEs

Supply chain finance optimizes and integrates credit resources and cash flows across upstream and downstream segments of the supply chain, treating the core enterprise and its surrounding SMEs as a coordinated whole, thereby providing broader and more flexible financing strategies. The credit enhancement effect of core enterprises enables upstream and downstream SMEs to obtain financing support based on genuine trade backgrounds, effectively overcoming issues such as the lack of collateral and complex credit evaluations that are common in traditional financing models. Under supply chain finance, a series of innovative financing methods has been introduced: accounts receivable financing can effectively address short-term capital flow issues, while inventory financing can alleviate inventory pressure. These financing methods greatly expand SMEs' access to capital, offering greater flexibility in financing. At the same time, in order to meet diversified financing needs, personalized solutions are proposed to help SMEs accurately select the most suitable financing method based on their business conditions and financing objectives. Expanding financing channels also enhances the precision and personalization of supply chain finance.

4.2. Supply Chain Finance Can Reduce Financing Costs for SMEs

Supply chain finance often focuses on core enterprises with strong capabilities and excellent credit histories. These core enterprises, leveraging their own credit, provide financing guarantees for SMEs within the supply chain. With the support of the core enterprises' credit, financial institutions lower the financing thresholds for SMEs, thereby reducing financing costs. By deeply integrating modern information technology, supply chain finance comprehensively collects and analyzes data across the supply chain from aspects such as orders, transaction history, and inventory status. Through detailed analysis of this data, financial institutions can gain a deeper understanding of SMEs' operational conditions and potential credit risks, reducing information asymmetry. This effective transmission of information has a positive impact on lowering financing costs. At the same time, supply chain finance optimizes financing structures and approval processes. Compared with traditional financing methods that require cumbersome approval procedures and preparation of documents, supply chain finance

eliminates information flow barriers by integrating the entire supply chain, simplifying the financing procedures for enterprises, and reducing intermediary costs in the financing process. This simplification not only greatly improves work efficiency but also reduces the administrative burden on enterprises, significantly lowering their financing costs.

4.3. Supply Chain Finance Can Reduce Information Asymmetry Between Banks and Enterprises

When financing SMEs, due to the general lack of standardized financial information, the financial data submitted to banks may not be fully reliable, causing banks to reject loan applications for risk control reasons, thereby exacerbating the financing difficulties of SMEs. In contrast, under the supply chain finance framework, core enterprises are usually large in scale and enjoy high credit standing with financial institutions, making it easier for them to gain the trust and cooperation of these institutions. Core enterprises can leverage their advantageous position to help SMEs obtain financing. To ensure the efficient operation of the supply chain, they continuously monitor and assess the business conditions of downstream SMEs. By cooperating with core enterprises, banks and other financial institutions can achieve time-efficient, high-yield, and risk-controlled maximization of returns. In the supply chain finance model, banks and other financial institutions can assess loan risks based on the overall situation of the entire supply chain. All enterprises associated with SMEs in the supply chain help financial institutions accelerate the risk assessment process, thereby facilitating SMEs to obtain financial support. This model not only helps SMEs earn more trust from financial institutions but also strongly supports the accuracy and reliability of loan approval information, deepens financial institutions' understanding of SMEs, and effectively alleviates the problem of information asymmetry between banks and enterprises [4,5].

5. Countermeasures and Suggestions for Empowering SME Financing through Supply Chain Finance

5.1. Optimizing the External Financing Environment

5.1.1. Improve relevant laws and regulations

The primary task is to establish and improve the legal and regulatory framework for supply chain finance, clearly defining the rights and obligations of all responsible entities in the supply chain. This includes reinforcing specific legal arrangements in areas such as collateral guarantees, accounts receivable financing, and prepayment financing, as well as commodity supervision, to ensure clear guidance and preemptively mitigate potential risks.

5.1.2. Increase policy support

Given that supply chain finance in China is still in its growth stage, the government urgently needs to strengthen policy support for SME financing. For example, special funds can be established to support financial institutions in research and innovation related to supply chain finance, or policy measures such as tax incentives and loan interest subsidies can be provided to SMEs participating in supply chain finance.

5.1.3. Build an information sharing platform

The core of supply chain finance relies on authentic and trustworthy transaction data rather than solely on credit. Therefore, it is particularly important to develop an information sharing platform that spans national and provincial levels and crosses multiple industry sectors. This platform aims to meet the diverse business needs of enterprises at all levels and further improve the accuracy, richness, and transparency of information.

5.1.4. Establish a credit evaluation system

Supply chain finance goes beyond the limitations of enterprise size and collateral or pledged assets, focusing instead on creditworthiness. Accordingly, it is necessary to design and implement a credit evaluation system and ensure that it can provide timely assessments and adjustments based on the latest transaction dynamics, effectively mitigating potential risks caused by information delays.

5.1.5. Strengthen risk supervision

Financial institutions providing supply chain finance services need not only to accurately quantify the amount and value of existing returns but also to thoroughly assess the nature, scope, and severity of potential risks in each service link. In key processes such as credit approval, fund allocation, and recovery, efforts should be made to keep all potential adverse factors at a controllably low level.

5.2. Optimizing the Internal Financing Environment

5.2.1. Broad recruitment of talent

Considering that managers of SMEs find it difficult to participate fully in all aspects of the company, SMEs should widely recruit professionals in finance, law, management, and accounting to integrate internal resources and operations. This helps identify and resolve internal issues within the enterprise, facilitating more effective integration into supply chain finance.

5.2.2. Strengthening risk management

SMEs should emphasize enhancing risk management and control systems, improving the effectiveness of information monitoring, and strengthening risk early warning mechanisms. By accurately identifying potential operational, legal, and credit risks, SMEs can comprehensively assess the various risk factors involved in supply chain finance to ensure smooth and effective coordination across all segments of the supply chain, thereby securing stable enterprise operations.

5.2.3. Improving the accuracy of financial information

SMEs should actively disclose financial information to financial institutions and investors frequently and with high quality, actively maintaining relationships within supply chain finance. Companies should establish rigorous financial operation standards, clearly define the responsibilities and authority for each financial activity, ensuring compliance and efficiency in financial operations while enhancing the authenticity and transparency of financial information.

5.2.4. Enhancing credit rating

Enterprises need to adhere to the fundamental principle of honest business operations, establish a reliable corporate image, and focus on cultivating credit awareness, creating a strong credit culture. During deeper cooperation with financial institutions, companies should maintain excellent credit records, ensure timely repayment of loans, and avoid negative behaviors such as overdue payments [6].

6. Summary

In summary, supply chain finance plays an important role in addressing the financing difficulties faced by SMEs and is one of the key ways to promote current economic development. However, SMEs still need to pay attention to potential risks when utilizing supply chain finance and make full use of resources such as government support and industry collaboration to achieve sustainable development. To help supply chain finance better serve SMEs, all parties should work together, starting with optimizing the internal and external financing environment for SMEs based on supply chain finance, promoting the vigorous development of supply chain finance, thereby relieving the financing pressure on SMEs, creating more opportunities for innovative development, and achieving long-term mutual benefits.

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