

# Discussion on the Financing Path of New Productive Forces Enterprises Assisted by Commercial Banks in China - Based on the Perspective of Supply Chain Finance Business

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## Abstract

Currently, China is in a critical stage of economic momentum transformation and industrial structure optimization and upgrading. Developing new productive forces is an inherent requirement for achieving high-quality economic development. As the core part of the financial system, commercial banks play an indispensable role in promoting this transformation process. The growth of new productive forces relies heavily on research and development investment and financial support, therefore, strengthening the supply chain financial services of commercial banks has become a crucial strategy. This article aims to analyze the potential of commercial banks to support the development of new productive forces through their supply chain finance services, identify potential obstacles, and propose corresponding solutions.

**Keywords:** financing path, new productive forces enterprise, commercial bank, supply chain finance

## 1. Introduction

In September 2023, during a survey in Heilongjiang, the Chinese President first proposed the concept of "new productive forces" and pointed out the need to actively promote the development of strategic emerging industries such as new energy, new materials, advanced manufacturing, and electronic information, while cultivating future oriented industries to accelerate the formation of new forms of productivity and enhance development momentum. [3] This new form of productivity is driven by breakthrough innovation, completely changing the traditional economic growth model and the way productivity advances. All research and development activities require strong financial support from financial institutions, and improving new productive forces also requires a significant amount of capital investment. However, in the actual operation process, due to various factors, especially difficulties in obtaining financing, this new production mode that plays a key role in technological innovation is difficult to fully develop. As an innovative form of financial service, supply chain finance combines the advantages of supply chain management and finance to provide flexible and efficient financing solutions for enterprises, helping them manage their financial resources more effectively, improve the efficiency of fund utilization, and open up an important financing path for the innovative development of enterprises. For private enterprises, small and medium-sized enterprises, and high-tech enterprises, supply chain finance can better promote their growth and development, and has become an important supporting force for these types of enterprises in pursuing new productive forces.

As a core component of the financial system, commercial banks play a crucial role in credit resource allocation and play an indispensable role in promoting the development of supply chain finance. On September 23, 2020, the "Opinions on Standardizing the Development of Supply Chain Finance to Support the Stable Circulation and Optimization Upgrading of the Supply Chain Industry Chain" was jointly released by eight departments including the People's Bank of China. The document advocates enhancing the application scenarios and ecosystem construction of supply chain finance, improving its online and digital level, to ensure the transparency of industrial chain information, the safety of capital flow, and the stability of production and sales activities, thereby laying a solid foundation for improving the competitiveness and expansion ability of the entire industrial chain. Subsequently, on September 29, 2022, the China Banking and Insurance Regulatory Commission and the People's Bank of China jointly issued the "Guiding Opinions on Promoting the Healthy Development of Movable Property and Rights Financing Business", which specifically pointed out that financial institutions should be encouraged to provide more diversified financing channels for enterprises through accounts receivable pledge and factoring.

Faced with the trend of vigorously promoting the growth of new productive forces by the country, how to seize this development opportunity, use supply chain financial services to alleviate the funding bottleneck problems faced by enterprises, accelerate financing speed, enhance their risk resistance ability, and encourage them to actively participate in projects that can significantly improve the level of new productive forces but are accompanied by high uncertainty has become a widely concerned research topic in the current academic community.

## **2. Feasibility of Commercial Bank Supply Chain Finance Assisting New Productive Forces Enterprises in Financing**

### *2.1 Embedding Into Supply Chain Scenarios, Consolidating Enterprise Connections, and Enhancing Innovation Performance*

In the past, financial institutions had difficulty providing customized services to meet the personalized needs of enterprises in specific scenarios. With the development of digital technology, especially the application of advanced technologies such as blockchain and the IoT, banks are able to closely cooperate with enterprise service providers, warehousing and logistics, and port terminals, thus deeply integrating into supply chain management and providing customers with comprehensive service solutions. This new financing model can organically connect various transaction activities of enterprises, achieving effective integration between core enterprise reputation, physical value of goods, and transaction data. By establishing cooperative relationships with core enterprises and their service providers, banks promote resource sharing and mutual support, jointly building a mutually beneficial cooperation network and strengthening the connection between core enterprises and their upstream and downstream partners. This process greatly promotes the flow and optimized allocation of innovative elements such as technology, knowledge, and capital within the supply chain system, which helps to enhance the innovation capability of enterprises and lay a solid foundation for their long-term development.

### *2.2 Utilize Data Advantages to Compensate for Traditional Credit Deficiencies and Provide Comprehensive Financing Solutions*

Commercial banks have significant advantages in data processing and can provide precise guidance and support for supply chain finance. In the loan approval process, banks no longer rely solely on the credit status of core enterprises, but alleviate the problem of information asymmetry between enterprises through data analysis. Using digital means for credit evaluation can help make up for the shortcomings of traditional collateral credit methods, thereby effectively solving the problems of financing difficulties and high costs faced by small and medium-sized enterprises. By deeply participating in the specific operational environment of the supply chain, banks can more accurately identify and understand the unique needs of enterprises in the supply chain, and provide a comprehensive and personalized financing plan, rather than just limited to standardized products. This service model, which is oriented towards meeting the actual needs of enterprises, is not only conducive to promoting the injection of funds for technological innovation projects, accelerating the pace of technology research and development and application of results, but also promotes the development of industrial structure towards a more optimized direction, injecting momentum into the growth of emerging productive forces[11].

### *2.3 The Open and Shared Mode Helps to Reduce Costs and Increase Efficiency, Accelerating the Formation of New Productive Forces*

By strengthening their financial services and technological innovation capabilities, commercial banks have effectively integrated resources and shared capabilities with major players in the supply chain, such as core enterprises, industrial Internet platforms, and various service providers, thus building a service system with wider coverage and deeper service levels. With this open cooperation model, banks can better meet the needs of numerous small and medium-sized enterprises in the upstream and downstream of the supply chain in terms of fund management, logistics support, and information flow, effectively alleviating the financing difficulties faced by these enterprises, while promoting the improvement of their operational efficiency and cost control, thereby promoting the healthy development and continuous innovation of the entire supply chain ecosystem, accelerating the formation and development of new quality productive forces.

## **3. The Constraining Factors of Commercial Banks' Supply Chain Finance Support for New Productive Forces Enterprises**

### *3.1 Insufficient Understanding of New Productive Forces Leads to an Incomplete Evaluation System*

In the daily cooperation between banks and enterprises, financial institutions often tend to support traditional industries that are already well understood. In contrast, the support for emerging industries and their related enterprises appears insufficient, mainly due to the short cooperation time between the two parties, resulting in

banks lacking sufficient understanding of these enterprises representing new productive forces. These types of enterprises usually adopt a light asset operation model, with a long development cycle. In the initial stage, they often experience losses and have a long duration. At the same time, their asset structure is mainly composed of intangible assets, with relatively few tangible assets. Therefore, the core value composition of such enterprises presents significant differentiation characteristics, mainly reflected in intangible asset dimensions such as human capital quality, patent technology reserves, R&D achievement conversion rate, market reputation, and institutional investor confidence. These elements are usually quantified based on the "technology value evaluation system". However, the evaluation paradigm of traditional commercial banks still adheres to the "asset value evaluation logic", overly relying on quantitative indicators such as financial statement data and physical asset guarantees, and using mechanical analysis of the company's three major accounting statements to determine its market valuation. This evaluation method systematically underestimates the intellectual capital value of technology enterprises, making it difficult for the valuation system based on tangible assets to objectively reflect the actual value creation ability of innovative growth enterprises, and objectively raising the financing access threshold for such entities.

### *3.2 Lack of Effective Innovation in Supply Chain Products and Rigid Financial Service Processes*

When designing financial products, commercial banks usually prioritize the possibility of technological implementation and the need for internal risk management, but often overlook the urgent need for diversified and customized financial services from emerging productive enterprises. If banks fail to fully reflect their understanding of the operational characteristics, industry features, and development stages of these enterprises in the process of innovative financial services, the financing solutions provided may only be superficial and difficult to meet actual needs. The so-called "new" products of banks are actually difficult to gain widespread recognition and efficient application from new productive forces enterprises. In addition, the solidification of banking service processes greatly limits the timeliness and accuracy of financing services, and even in the case of a wide variety of supply chain financial products, these enterprises still find it difficult to feel the tailored financial service experience[1].

### *3.3 The Effectiveness of Risk Management Needs to be Strengthened, and the Regulatory Framework Needs to be Optimized and Updated*

New productive forces enterprises generally face significant market uncertainty risk factors, including hindered R&D breakthroughs, financing agreement defaults, and shrinking terminal demand. These types of enterprises in the start-up stage usually have limited financing scale, lack of fixed asset collateral, and significant variables in key indicators such as the feasibility of their business model, product market penetration rate, and future debt repayment ability. If banks lack precise risk identification and quantitative assessment techniques, they will bear excessive risk exposure in the process of business intervention, which will significantly inhibit the driving force of credit injection. When banks continue to use credit risk control models based on traditional industries, their risk management architecture is difficult to dynamically adapt to the characteristics of innovative enterprises, resulting in credit approval mechanism that cannot achieve effective risk dynamic monitoring and cannot meet the specific financing service needs of emerging industries.

The supply chain finance business has typical characteristics such as diverse participants, extended transaction chains, and high-frequency capital flows, which significantly increase the difficulty of implementing financial regulation. Commercial banks need to establish a rapid response mechanism for dynamic changes in the supply chain while ensuring compliance with existing regulatory norms. As banks continue to introduce supply chain finance solutions tailored to innovative enterprises, existing regulatory paradigms may lag in adaptability, resulting in compliance management gaps and constraining business expansion space. Ensuring that regulatory authorities perform their respective duties and collaborate effectively is crucial for promoting the healthy development of new productive forces supported by commercial banks through supply chain finance services.

### *3.4 The Lack of Professional Talents Hinders the Emergence of "New Services"*

Supply chain finance can promote the development of new productive forces by promoting specialized division of labor among enterprises and expanding the value chain to the high-end. This process requires strong talent support. Both experts specializing in supply chain finance and applied talents with a deep understanding of new productive forces are currently in short supply. Specifically, financial institutions expect their employees to not only be proficient in supply chain management and financial knowledge, but also possess certain information technology capabilities and unique insights into the development trends of new productive forces. However, the current recruitment situation shows that such comprehensive talents are very scarce. This can be seen from the frequent emphasis in job advertisements by many banks on the requirement that "those with multidisciplinary backgrounds in economics, finance, and information technology are preferred". Therefore, exploring a talent training model that

not only conforms to the operation mechanism of supply chain finance but also meets the needs of new productive forces enterprises remains one of the urgent problems that commercial banks need to solve.

#### **4. Exploring the Path of Commercial Bank Supply Chain Finance Supporting new productive forces Enterprise**

##### *4.1 Transforming Credit Concepts, Integrating Basic Information, and Establishing a "technology flow" Evaluation System*

The valuation of new productive forces enterprises differs from traditional methods that focus on financial condition and cash flow analysis. This evaluation focuses more on the consideration of the technological level and commercialization potential of intellectual property. When evaluating such enterprises, banks need to have a deep technical understanding, industry insight, and trend forecasting ability. They not only need to examine their historical performance, physical assets, and current profitability, but also need to focus on their future growth potential, unique value of technology, and long-term returns. Therefore, it is necessary to establish a value evaluation system and method that is different from conventional enterprises, in order to promote innovation in credit business models. In order to enhance the matching degree of new productive forces in financial services, we should gradually guide the transformation of customer identification methods from "asset flow" to "technology flow", and promote the credit mechanism to shift from the traditional model that focuses on "assets and collateral" to a new model that places more emphasis on "intellectual property and talent" [2].

Financial institutions should make full use of various data resources, including credit records and scientific research and development information, to establish an evaluation system that mainly considers factors such as intellectual property ownership, R&D investment level, core team composition, technology path selection, and achievement value evaluation. [2] This system can more accurately reflect the technological innovation capability and future development potential of enterprises, providing a more scientific basis for credit rating evaluation and credit limit calculation. In addition, banks can also draw on the enterprise innovation credit system implemented by the Torch Center of the Ministry of Science and Technology to build a comprehensive evaluation model for enterprise innovation capabilities, thereby providing more accurate support and services for new productive forces enterprises.

##### *4.2 Continuously Innovating Supply Chain Products, Introducing Automated Processes, and Improving Financial Service Efficiency*

In order to better serve new productive forces enterprises, commercial banks should strive for innovation in financial products and services, and provide customized financial service solutions for customers. Banks should systematically integrate internal resources based on the characteristics of the new productive forces, build a financial service system that runs through the entire industry chain, and provide one-stop solutions covering liquidity support, payment settlement, and asset management for upstream and downstream enterprises. By deploying new business models such as cloud chain finance and bidirectional factoring, innovative enterprises can effectively alleviate their capital turnover pressure and promote the collaborative evolution of industrial clusters. At the same time, it is necessary to innovate and design structural financing tools such as intellectual property securitization to help innovative entities realize the value of technological assets and provide capital support for their continuous investment in research and development innovation. Based on the characteristics of different industries and the specific needs of enterprises, banks need to strengthen their innovation capabilities, accurately depict customer demand profiles, and design differentiated and distinctive credit products to meet customers' personalized needs. For example, for technology-based enterprises in their early stages, providing "joint investing and lending" services in equity financing such as angel investment or venture capital; For those growing enterprises, they can receive support for working capital and funding assistance for technological transformation projects through methods such as "loans for SRDI enterprises".

Commercial banks should adopt process automation technology to digitize and standardize the credit approval process, in order to shorten the operating cycle, better adapt to the research and development speed of new productive forces enterprises, and ensure the provision of efficient and timely financial services. For example, by building an online credit application platform, such enterprises can submit the required documents in real time. Banks use intelligent approval systems to quickly complete credit assessment and approval work. Such intelligent systems should have the ability to self learn and iteratively upgrade, continuously optimize their review mechanisms, and improve decision-making accuracy and processing efficiency. At the same time, it is necessary to strengthen the security measures of the system, protect the security of information exchange through advanced encryption technology and protection measures, and ensure that credit business operations comply with relevant regulatory requirements.

#### *4.3 Improve the Internal Control Mechanism of Banks, Strengthen Risk Management, and Establish a Collaborative Supervision Mechanism Among Various Departments*

Internal control is one of the key links in supply chain finance management for commercial banks, especially when facing various new risks and challenges arising from new productive forces. In order to adapt to the constantly changing financial market environment and customer demand characteristics, banks should establish a comprehensive risk control system to improve the quality and efficiency of their supply chain financial services. This system needs to strengthen the supervision of employee operational behavior, financial service processes, and supply chain financing decisions by improving internal rules and regulations. At the same time, it is important to remain highly sensitive to external factors, especially closely monitoring the operational status of upstream and downstream enterprises in the supply chain. Through this approach, it can promote more standardized business operations, thereby effectively reducing the potential threats caused by operational errors. On the other hand, it is necessary to conduct in-depth research on the specific situation of the market in order to prevent credit defaults, policy changes, or changes in laws and regulations from having adverse effects on banks. In addition, assessment tools that can quantify risk levels should be developed, and relevant management systems should be adjusted and improved accordingly. Reasonable and effective warning mechanisms and emergency response plans should be designed to ensure that any unexpected situations can be quickly responded to and appropriate measures taken to minimize potential economic losses.

In order to enhance the effectiveness of financial regulation, it is necessary to promote close collaboration among different regulatory agencies, jointly formulate relevant policies and standards, and build an information exchange platform, so as to achieve comprehensive coverage of commercial bank supply chain financial services, eliminate regulatory loopholes and duplicate regulatory phenomena. A dynamic regulatory system that can adapt to the innovative development of supply chain finance in commercial banks should be established simultaneously. On the basis of ensuring that risks are within a controllable range, banks should be encouraged to develop new supply chain business models to support the development of new productive forces enterprises. Regulatory agencies need to adjust their regulatory strategies and methods in a timely manner based on the specific market environment and business innovation, in order to enhance the flexibility and effectiveness of regulatory work. For the new supply chain finance products and services launched by banks, it is recommended to first regulate them through pilot methods and gradually expand their application scope after accumulating certain practical experience.

#### *4.4 Building a Professional Talent Team to Enhance the Professional Skills and Sense of Responsibility of Business Personnel*

The service and management efficiency in the field of supply chain finance largely depends on the professional skills, sense of responsibility, and professional ethics of bank employees. Whether it is ensuring the effective implementation of management systems or providing financing support to customers, high requirements are placed on the comprehensive quality of employees. In the current era of constantly developing emerging productive forces, commercial banks should focus on strengthening the construction of employee teams based on job requirements and actual work situations.

Firstly, regular professional training activities should be held for all employees, covering risk identification, prevention and control, and response strategies in supply chain finance. In addition, regular learning of the latest macroeconomic policies and financial market trends should be organized, and active exchanges should be made with government departments and research institutions on the development trends of emerging productive forces, encouraging employees to conduct on-site inspections and learning in emerging industries and enterprises. Secondly, to strengthen professional ethics education and corporate culture construction, it is necessary to continuously enhance employees' sense of responsibility, ensure that they can strictly abide by professional ethics and social norms in providing supply chain financial services to emerging productive forces enterprises, and effectively reduce operational risks.

### **5. Conclusion**

Currently, China is in an important stage of updating economic momentum and optimizing industrial structure. Developing new productive forces is an inherent requirement for achieving high-quality economic development. As the core link of the financial system, commercial banks play an extremely crucial role in promoting this process. To accelerate the growth of new productive forces, a significant amount of research and development investment and financial support are required. Therefore, enhancing the capabilities of commercial banks in supply chain financial services has become one of the crucial strategic directions. However, influenced by traditional credit models, commercial banks still have shortcomings in evaluation mechanisms, product innovation, risk management, and talent reserves. In the future, reforms must be carried out from the above four aspects,

transforming business concepts, in order to effectively meet the financial service needs of new productive forces enterprises and promote the healthy and rapid development of the economy and society.

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