

# Research on Countermeasures of Manufacturing Industry Chain Cluster Based on Industry Chain Finance Support

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**Abstract:** Manufacturing industry cannot be separated from finance. Industry chain finance plays a very important role in the development of the manufacturing industry chain. Under the influence of the new crown epidemic, the country has made important arrangements for the construction of the industrial chain. How to play the role of the real economy and build a solid manufacturing industry chain is of great significance to promoting my country's economic transformation and development. The article takes the impact of industry chain finance on manufacturing as an entry point, and puts forward relevant policy recommendations.

## 1. Introduction

In recent years, China's economic growth has contributed more than 30% to the world's economic growth. "Made in China" has been deeply embedded in the global industrial chain division of labor, and its status has become increasingly important. At present, my country's economy is faced with multiple dilemmas such as a slowdown in economic growth and insufficient potential for development. The industrial economy, especially the real industry, is facing severe challenges. Facing this situation, the effects of traditional fiscal and monetary policy tools on the economy have gradually weakened. Whether it is the transformation and upgrading of traditional industries and structural adjustment, or the exploration of market cultivation and development models of emerging industries, they are all seeking new paths for industrial development. This shows that the problems facing the Chinese economy are not short-term and cyclical, but from long-term and structural pressure. The impact of the epidemic has accelerated the trend of localization, regionalization, and decentralization of the global industrial chain and supply chain. Restructuring of the global industrial chain is inevitable, which will have a greater impact on my country's economy. Therefore, innovating financial means, promoting the upgrading of the manufacturing industry chain, and then promoting economic transformation and reform have become the key to solving my country's economic problems.

## 2. Industry chain finance and industry chain cluster

### 2.1 Industry Chain Finance

The development of industrial economy has shifted from competition between enterprises to competition between industrial chains. In this context, many scholars have conducted in-depth analysis of industry chain finance from the aspects of industry chain finance development model, the practice of financial institutions participating in industry chain finance development, and specific industry and regional industry chain finance development models.

#### 2.1.1 About the concept of industry chain finance

The earliest concepts of "industry chain finance" were Stemmler and Seuring. He pointed out that industry chain finance is based on the control and optimization of logistics to optimize the financial flow. Industrial chain finance refers to financial institutions connecting enterprises in the core position of the industry with their upstream and downstream small and medium-sized supply

enterprises by expanding services to core enterprises, from raw material procurement to manufacturing intermediate products and final products, and finally to Together, consumers will provide financial services for enterprises in the entire industrial chain in an all-round way, and realize a financial service model that adds value. Its biggest feature is to implement credit bundling between the core enterprises of the industrial chain and the SMEs on the chain, to transfer the financial risks of the SMEs to the core enterprises, and to solve the financing difficulties of the SMEs. Through the development of industry chain finance, upstream and downstream small and medium-sized enterprises can obtain more financial financing through real transactions with core companies, and solve the financing difficulties that have long troubled the development of enterprises. At the same time, due to the transfer of risks, SMEs can increase their credit rating through the industrial chain and significantly reduce financing costs.

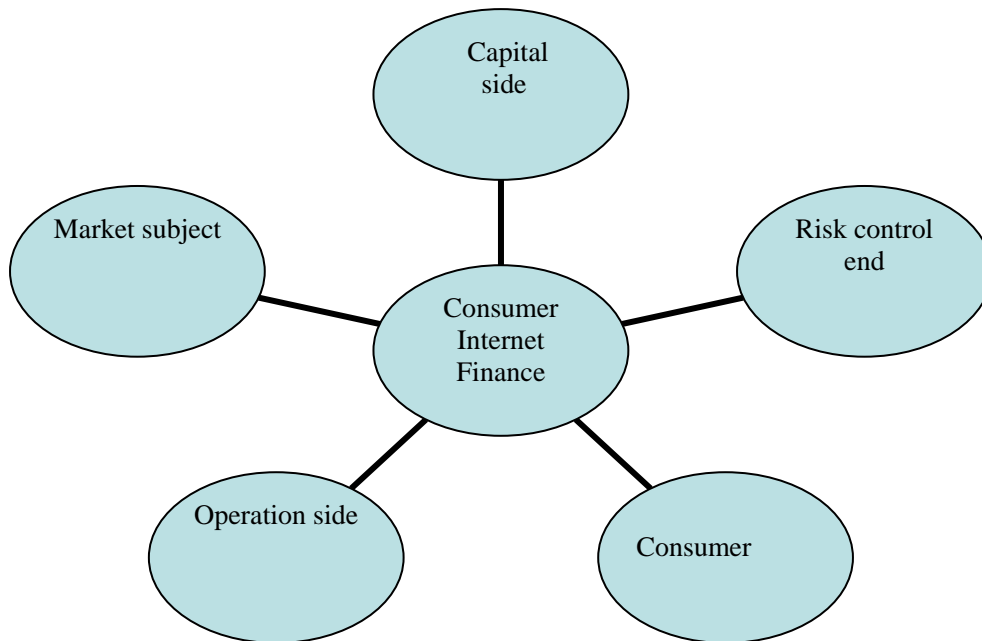


Figure 1. Schematic diagram of industry chain finance (taking consumer industry chain finance as an example)

### 2.1.2 Research on industry chain finance

The above mainly includes research on the financial concept and financial model of the industrial chain. The research on concepts mainly focuses on the analysis of the concept and role of industry chain finance. Scholars propose that industrial chain finance is a service in which financial institutions rely on the core enterprises of the industrial chain and design personalized and standardized financial service products for each link of the industrial chain to provide comprehensive solutions for all enterprises in the entire industrial chain. Mode. More scholars from the perspective of industrial chain finance to provide services through financial institutions, that is, by connecting enterprises in the core position of the industry, as well as suppliers and sellers into a collection, the service is extended to the procurement of raw materials in the industrial chain, the middle of production Products and final products, and then to the final consumer, so as to provide financial services for the entire set of industrial chains, and then realize the continuous value-added of the industrial chain. Regarding the mode of industry chain finance, scholars classify according to the comparative analysis of traditional and Internet finance, and also classify according to the components of industry chain finance development. Some scholars also analyzed specific industry chain finance cases.

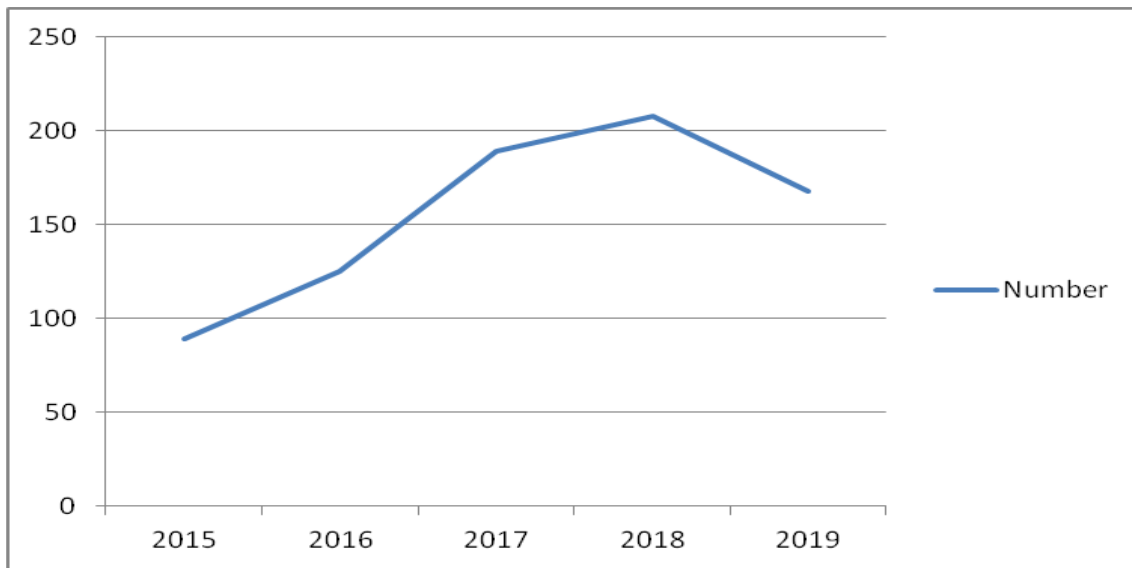


Figure 2. Research Trends of Industry Chain Finance from 2015 to 2019 (Number)

### 2.1.3 On the practice of financial institutions participating in industry chain finance

Scholars who study from the perspective of commercial banks mostly start from the industry chain financial development model, operating mechanism and development strategy. For example, after introducing the significance of banks' development of industry chain finance, Zhu Lei put forward opinions such as adjusting business philosophy, strengthening management system construction, and building financing information service platforms. From the perspective of commercial banks, Zhang Lu redefined the concept of industry chain finance, analyzed the industry chain finance to drive up the scale of commercial bank customers, and analyzed the problems in depth. In addition to commercial banks, some scholars analyzed the participation of core companies and other financial institutions in industry chain finance.

## 2.2 Manufacturing Industry Chain

From the point of view of manufacturing, the time a product is really in the manufacturing link only occupies a small part. Most of the time is in the circulation process of procurement, storage, operation and sales. The operation of the industrial chain relies more on logistics Services and the efficiency of the logistics industry affect the efficiency of the entire industrial chain. Manufacturing companies outsource logistics that they are not good at to powerful logistics companies, which can not only reduce investment in establishing distribution centers, purchase logistics distribution equipment, etc., but also obtain professional services, and can also concentrate their resources and resources on the core. China is the world's largest manufacturing country with an independent and complete industrial system. It is the only country in the world that has all the industrial categories of the UN industry classification. However, we must also see that there are many shortcomings and weaknesses in our economic system, and the overall coordination of economic and social development is still insufficient. The industrial chain and supply chain in many industries are not yet perfect, especially some core technologies and key technologies in the manufacturing industry, and some key technical links and key components in the production process, there are bottleneck constraints. As far as the problems in the safety of the industrial chain are concerned, there are mainly the following points.

In terms of industrial control, with the promulgation and implementation of a series of policies to promote industrial technological transformation and upgrade and development of artificial intelligence, industrial Internet, etc., industrial technological innovation has entered a new stage of shifting from tracking to tracking and running side by side, leading the way. The batch of enterprises entering the first phalanx in the international market has become a key support for the sustained and healthy development of the national economy and laid a solid foundation for the construction of a manufacturing power and a network power. At the same time, enterprises are

making full use of two markets and two resources at home and abroad, accelerating the acquisition of foreign companies with core technologies, and actively deploying R&D centers or innovative institutions overseas. In 2018, Chinese enterprises were active in foreign investment and mergers and acquisitions, and the proportion of overseas financing was high. There were 405 merger and acquisition projects completed and the actual total transaction value was US\$70.2 billion.

In terms of international competitiveness. China's product export structure gradually changed from low-end products to medium and high value-added products. However, from the perspective of the industry as a whole, the industrial concentration is still not high, the added value of products in some areas is low, the international market share of high-end products is low, and the brand effect is not strong. From the perspective of innovation, innovation resources are repeatedly dispersed, and the phenomenon of repeated waste of allocation of innovation resources is serious. The "island phenomenon" in the innovation process is very common. The technical integration system of deep integration of production, education and research is not perfect. Most manufacturing enterprises are still in the "manufacturing-processing-assembly" low-tech content and low value-added link in the division of labor in the international industrial chain. There is still a large gap between technological innovation capabilities and developed countries, and some key core technologies and equipment mainly rely on imports.

### **3. Background of industry chain finance to support the development of manufacturing industry cluster**

#### **3.1 The need for national policy adjustment**

Since the reform and opening up, China has established an industrial system with complete categories, complete systems, large scale and high technical level. However, problems such as lack of key core technologies, low added value of products, inferior industrial structure, and high pressure on resources and environment bear prominent problems. , Generally at the low-end level. Improving industry basic capabilities and industry chain level is a necessary condition to support high-quality development. At the fifth meeting of the Central Committee of Finance and Economics, General Secretary Xi Jinping emphasized that it is necessary to give full play to the institutional advantages of concentrating on major affairs and the ultra-large-scale market advantage, so as to lay a solid foundation for the advancement of the industrial base and the modernization of the industrial chain. On May 14, the Standing Committee of the Political Bureau of the CPC Central Committee held a meeting to study the deployment of normal epidemic prevention and control work, and to study the improvement of the stability and competitiveness of the supply chain of the industrial chain. The meeting pointed out that it is necessary to implement industrial foundation reconstruction and industrial chain upgrading projects, consolidate the advantages of traditional industries, strengthen the leading position of advantageous industries, pay close attention to the layout of strategic emerging industries and future industries, and upgrade the advanced industrial base and modernization of the industrial chain. Focus on key industrial chains, leading enterprises, and major investment projects to promote upstream and downstream, production, supply and marketing, and large and medium-sized enterprises to resume production in collaboration, and jointly maintain the safety and stability of the international industrial chain supply chain. This is not only a temporary strategy of the Party Central Committee to deal with the impact of the epidemic situation, but also a long-term requirement for a smooth response to changes in the external environment in a longer period of time.

#### **3.2 The impact and impact of the new crown epidemic**

The spread of the epidemic in the world has exacerbated the trend of reshaping the industrial chain, and the security of the industrial chain has become an important factor that countries must consider when formulating industrial policies. Facing the challenge of reshaping the global industrial chain, my country should take precautions to maintain the stability and competitiveness of my country's industrial chain supply chain. Specifically, on the one hand, the production and

operation activities of my country's foreign trade enterprises have been affected, and many enterprises have fallen into the dilemma of order reduction or even no order, and it is difficult to deliver products with existing orders. On the other hand, the risk of interruption of overseas industrial chains and supply chains, which are closely related to the development of my country's manufacturing industry, has increased, and there are more and more cases of interruption of the supply chain of Chinese enterprises. Looking further, the spread of the epidemic around the world has not only made the world aware of the risks and challenges faced by people's lives and health and public health, but also aware of the stability and stability of the world's economic system in the face of crises and shocks, especially in the context of globalization. The global industrial chain and supply chain operation safety are facing risks and challenges. Faced with the situation that the global industrial chain and supply chain may accelerate reconstruction, we must strengthen our own economic system and industrial system construction, further improve and improve my country's industrial chain and supply chain, and enhance our ability to prevent risks and respond to crises.

### 3.3 Reshaping the global industrial chain brings challenges

Direct investment from relevant countries has decreased relatively. The essence of the return of the manufacturing industry in the relevant countries is the contraction of industrial capital. The main reason for the contraction of industrial capital is that its virtual economy is seriously disconnected from the real economy, and economic risks are highly accumulated. Under the current global division of labor, if trade logistics remain smooth and there are no human-induced supply chain security problems, globalization is the industry division of labor that can best complement each other. In recent years, the cost of factors such as land and labor has risen in my country, but the comprehensive industrial supporting capacity is very strong, and the structure of comparative advantage has undergone profound changes. The reshaping of the global industrial chain will, in the short term, transform high-tech products originally supplied nearby into imports, which will undoubtedly increase the difficulty and cost of supply. Both industry cultivation and technology update require a certain amount of time. In the past, my country has mainly adopted the technological development path of introduction, digestion, absorption and re-innovation, but it is increasingly facing two challenges. From a domestic perspective, basic innovation and original innovation are relatively lagging behind, and bottlenecks have occurred in soft environments such as the scientific and educational foundation of innovation. From a foreign point of view, the countries concerned have promoted the return or transfer of manufacturing, and the policy of technological blockade against my country has objectively increased the difficulty of introducing, digesting, absorbing, and re-innovating the traditional technology development path.

Table 1. Background environment of my country's manufacturing industry chain upgrade

The need for national policy adjustment	Speech by General Secretary Xi Jinping at the Fifth Meeting of the Central Finance Committee
	Speech by General Secretary Xi Jinping at the meeting of the Standing Committee of the Political Bureau of the CPC Central Committee on May 14
Shocked and affected by the new crown epidemic	The production and operation activities of my country's foreign trade enterprises are affected
	Risk of interruption of overseas industrial chain and supply chain
Global industry chain remodeling brings challenges	Basic innovation and original innovation lag behind
	Relevant countries promote the return or transfer of manufacturing

## 4. Countermeasures and suggestions for financial support for the manufacturing industry chain

### 4.1 Strengthen the support of industry chain finance to the manufacturing industry chain.

Internet finance has inherent advantages in reducing information asymmetry, eliminating time and space limitations, lowering the barriers to entry for financiers in the market, and improving the

profitability of investors' assets. The development of Internet finance helps to alleviate the long-term financial repression problem in China and helps Relieving China's long-standing financing difficulties and expensive financing issues will also help promote the construction of China's social credit system. Relying on the advantages to develop industry chain finance, by advancing the advantages and avoiding the shortcomings, we will promote the overtaking of the Chinese economy in the process of transition. Vigorously promote local governments and core enterprises to increase credit for small and micro supporting enterprises, so as to meet the financing conditions, and enhance the enthusiasm of bank financing. Strengthen policy guidance, set up a special service department for small and micro enterprises, and promote innovation in financing methods. Through the pilot reform of industrial integration, the deep integration of financial capital and industrial capital will be achieved to fundamentally solve the problem of corporate financing.

#### **4.2 Optimize and adjust the spatial structure of my country's manufacturing industry chain.**

Coordinate and optimize the domestic and international layout of the manufacturing industry chain, build a high-quality regional advanced manufacturing cluster around Beijing-Tianjin-Hebei, the Yangtze River Delta, the Pearl River Delta, and key cities in the central and western regions to enhance the resilience and anti-risk capabilities of the industrial chain. Increase investment in the western region to achieve balanced regional economic development. In the "market failure" regional economic balanced development, better play the role of the government and transform the challenge of reshaping the global industrial chain into the development of the western region, the rise of the central region, and the revitalization of the northeast. This opportunity has made China's regional economic development more balanced and its internal demand greatly increased. Further optimize the distribution mechanism, make greater efforts to regulate excessive income, standardize disorderly income, protect legal income, and boost domestic demand in a targeted manner. Take the state-owned and private large-scale industrial groups as the leader, create innovative industrial clusters, promote integrated innovation of upstream and downstream enterprises in the industrial chain with integrated innovation, strengthen the market introduction of domestic high-tech products with large-scale procurement, and promote the common development of small and medium-sized enterprises in the industrial chain. At a higher level, we will make overall plans for the development of scientific and technological innovation and technology training, science education and humanities education, and reform and improve the education training system and scientific research system.

#### **4.3 Overcoming the negative impact of the epidemic on the manufacturing industry chain**

Maintaining the stability and competitiveness of my country's industrial chain supply chain is one of the central government's response strategies to the impact and impact of the epidemic on China's economy. It is necessary to profoundly analyze the trends in the adjustment of the world economy and industrial layout structure after the epidemic, to study and formulate a mid-to-long-term development plan to comprehensively upgrade the level of China's modern manufacturing industry, and make great efforts to improve the modern production capacity and modern technology level of China's manufacturing industry, and promote the manufacturing industry. To seize the opportunity of major adjustments in the global industrial chain of the manufacturing industry after the epidemic, use big data and other technical means to strengthen information collection and analysis. Relevant departments should step up the collection, sorting, and analysis of the actual situation of China's industrial chain and supply chain development, especially to identify the weak links in the industrial chain and supply chain in the development of high-end industries, and enhance the overall strength of China's manufacturing industry and advanced manufacturing. Give full play to the huge role of my country's ultra-large-scale market, further improve the foreign investment environment, and attract more overseas high-end manufacturing and key component production enterprises to land. Consolidate and improve my country's advantage of having an independent and complete industrial system, and further optimize the development layout of the entire industry chain. Through more powerful and effective fiscal, taxation, financial, and technical support policies, we should guide and support market players to

make reasonable industrial chain layouts according to the needs of industrial development.

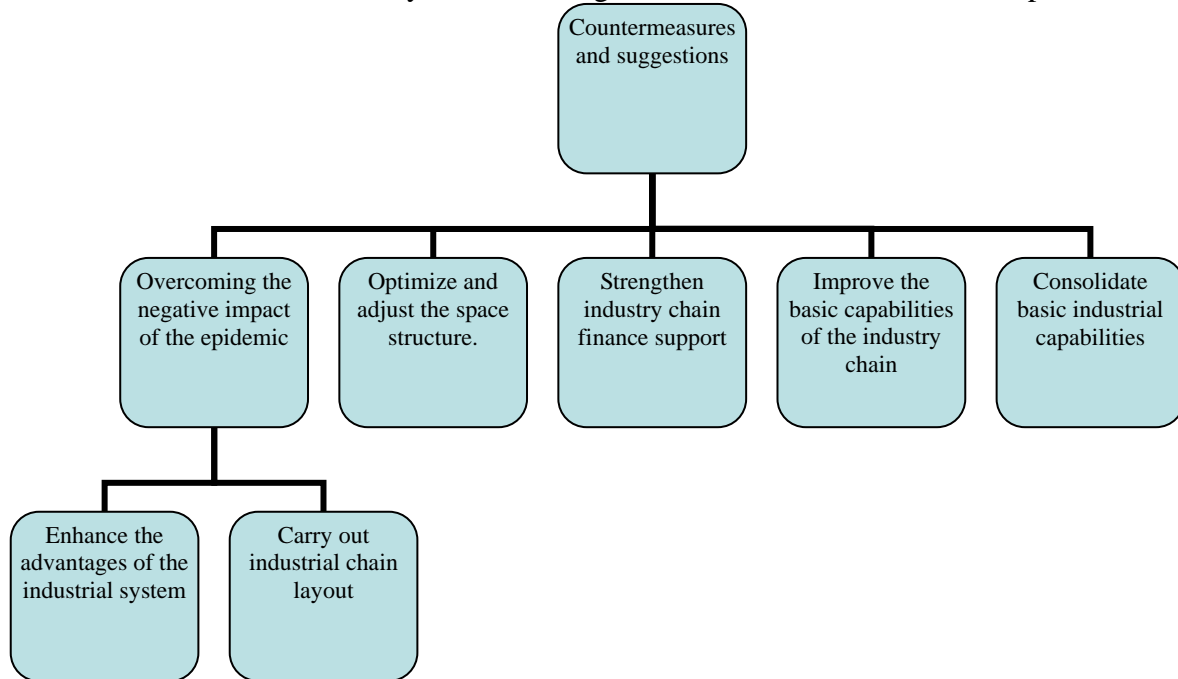


Figure 3. Suggestions for improving my country's manufacturing industry chain based on industry chain finance

#### 4.4 Focus on improving the basic capabilities of the industrial chain and the control capabilities of key links in the industrial chain

It is necessary to accelerate the implementation of the industrial basic capacity reengineering project and break through the shortcomings that restrict the safety of the industrial chain as soon as possible. Combining product creation, champion enterprise cultivation and industry chain ecological construction, a unique competitive advantage that cannot be easily replaced is formed. Efforts should be made to improve the openness, inclusiveness and modernization of the industry chain, and to promote manufacturing quality, efficiency and power changes in manufacturing with intelligent manufacturing. Further deepen the integration and development of manufacturing and service industries, in the process of transition from production-oriented manufacturing to service-oriented manufacturing, to achieve the extension to the high-end value chain. Provide more powerful and professional services for foreign and private enterprises, reduce business transaction costs, and enhance industrial competitiveness. According to the idea of strengthening strengths and weakening weaknesses, find key technologies in the industrial chain cluster, make good use of global patent database data, and achieve targeted investment promotion.

#### 4.5 Consolidate basic industrial capabilities

The industrial basic capability covers the underlying technology, parts and materials, infrastructure, quality standards, policy environment, talent team and other factors. It is an important support and source of power for industrial development, which directly determines the level of the industrial chain. Implement industrial basic reengineering projects, focusing on increasing investment in basic components, key materials, industrial software, inspection and testing platforms, and new infrastructure, and further mobilizing domestic industrial forces to support manufacturing digitalization, networking. With enterprises and entrepreneurs as the main body, cultivate industrial ecological leading enterprises and core parts enterprises, and strengthen the control of the entire industrial chain, key links and core technologies. It is necessary to actively create a good environment conducive to entrepreneurial innovation and entrepreneurship, mobilize entrepreneurs' enthusiasm for entrepreneurship, and support real economy enterprises to become bigger and stronger. Increase support for small and medium-sized enterprises, encourage small and medium-sized enterprises to participate in the research and development of key industrial common

technologies, and continue to enhance their innovation capabilities. Promote the joint development of the industrial chain, create an innovative ecosystem of "political, industrial, academic, and research funding" that closely cooperates to solve key common technical issues across industries and fields.

## 5. Conclusion

As far as the current domestic and international development environment and the actual situation of my country's industrial development are concerned, the industry chain and industry chain finance are interrelated. To improve the stability and competitiveness of my country's industrial chain, we must pinpoint the key factors that affect the stability and competitiveness of my country's industrial chain. As a financial tool, industry chain finance plays an important role in enhancing the competitiveness of manufacturing industry chain finance. This is mainly reflected in two aspects. On the one hand, it is the need for national industrial policy adjustment, on the other hand, it is an important means to effectively hedge the impact of the new crown epidemic on the manufacturing industry chain. Therefore, it is necessary to make good use of industrial chain finance and strengthen its support to my country's manufacturing industry chain process reengineering, core competitiveness enhancement, and manufacturing industry chain optimization layout.

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