Research on the Impact of Financial Innovation on the Upgrading of Industrial Structure under the Background of "Double Cycle"

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Abstract

In order to deal with the highly uncertain situation at home and abroad, the CPC Central Committee proposed to "accelerate the formation of a new development pattern dominated by the domestic cycle and mutually promoted by the domestic and international cycles", and stressed the role of high-quality financial services. Based on the background of "double cycle", this paper analyzes the role of financial innovation in promoting the upgrading of industrial structure. Firstly, this paper analyzes the current situation of China's financial system innovation and industrial structure upgrading from the macro level. Secondly, it explores the impact path of financial innovation on the upgrading of industrial structure from four aspects: capital formation, credit catalysis, capital orientation and risk management. Finally, countermeasures and suggestions are put forward.

Keywords

Double Cycle; Financial Innovation; Industrial Structure.

1. Introduction

At the Entrepreneurs' Symposium held on July 21, 2020, the general secretary pointed out that under the current external environment of rising protectionism, sluggish world economy and shrinking global market, we must give full play to the advantages of domestic super large-scale market, add impetus to China's economic development and drive the recovery of the world economy by prospering the domestic economy and unblocking the domestic circulation. The new development pattern of "double cycle" is not a passive move under the global economic turbulence and COVID-19's spread. It is an active, long-term and strategic arrangement based on China's domestic economic development needs and the need for economic transformation at the new stage, helping to promote China's economic level and promote its development stage. The pursuit of economy should gradually move from "high speed" to "high quality". One of the core meanings of the new development pattern of "double circulation" is to optimize the national industrial structure, overcome the short board of China's scientific and technological innovation ability, constantly promote the upgrading of industrial structure and build a highend industrial supply chain in China's trade market. High quality financial innovation services can help China improve its independent innovation ability, overcome the development difficulties of emerging technologies such as life economy, intelligent economy, 5G communication network, big data, artificial intelligence and blockchain, and deeply integrate financial services and scientific and technological innovation, so as to provide technical support and financial services for the transformation and development of traditional industries and the generation of total factor productivity.

In recent years, scholars at home and abroad have conducted extensive research on the impact of financial innovation on industrial structure under the background of "double cycle", and achieved rich results.

Firstly, domestic scholars' research on China's "double cycle" development strategy mainly focuses on the background, significance and development strategies of different industries in different regions under the background of "double cycle". Bai Zhihong (2020) and Shen keyin (2020) respectively explored the path of Inclusive Finance to promote the innovative development of manufacturing, agriculture and entertainment industries under the background of "double cycle", and believed that digital inclusive finance would expand domestic demand through the mitigation mechanism of liquidity constraints, convenient trading mechanism, income growth mechanism, marginal cost reduction mechanism and inclusive network effect mechanism Enabling industry [1,2]. Li Tianyu (2021) deeply analyzed the internal logic of the "double cycle" development strategy and explored its realization path from the perspective of digital economy. On the one hand, he continued to create domestic demand increment and boost demand side reform and upgrading, on the other hand, he enabled the modern industrial system through technology and improved the economic supply capacity [3]. An Jin (2021) and Zhang Lun (2021) explored the opportunities and challenges brought by the "double cycle" strategy by taking the economically backward areas such as the western region and the northern region as the research objects. Under the new development pattern of "double circulation", through the policy improvement of "five in one" of government market society enterprise individual, we can fully cope with the impact of the fifth wave of "double consumption" industrial transfer, and form a new development pattern of great protection, great opening, high speed and high quality [4,5].

Secondly, many scholars at home and abroad have studied the role of financial innovation in promoting the upgrading of industrial structure, including the theoretical analysis of the impact mechanism and the empirical analysis based on the panel data of economic circles at home and abroad. Michetti (2013) believes that financial innovation should be based on industrial development. Financial innovation has spillover effect on regional industrial economic growth and can promote the upgrading of industrial structure [6]. Tsionas (2018), based on the data of developed countries, found that financial support and innovation have a long-term and stable role in promoting industrial development [7]. Li Yushan et al. (2019) believe that financial innovation can significantly improve the degree of industrial agglomeration and promote the growth of total factor productivity through transmission mechanisms such as technological innovation investment, transformation and spillover, so as to promote the optimization of industrial structure [8]. The research of Si Lijuan and Zhang Limin (2019) based on the panel data of China's provincial capital cities shows that the expansion of financial output and the optimization of industrial structure have a positive spatial spillover effect on economic development [9]. Wang Fayuan and Zheng Jun (2020) believe that industrial development has entered the era of industrial chain, and financial innovation can have a significant positive impact on the upgrading of industrial structure [10].

Empirical studies at home and abroad have theoretically analyzed the impact of financial innovation on industrial structure upgrading, and empirically analyzed the impact from the perspective of threshold effect and spatial spillover effect. However, few studies combined with the "double cycle" background to analyze the impact relationship between financial innovation and industrial structure upgrading under the new development pattern. Therefore, this paper analyzes the current situation of China's financial innovation and development and industrial structure upgrading, explores the action path of financial innovation affecting industrial structure upgrading under the new development pattern of "double cycle", and finally gives practical suggestions combined with the actual situation.

2. Analysis of Development Status

2.1. Current Situation of China's Financial Innovation System

Financial system reform is the focus of China's economic market-oriented reform, and financial innovation is an important link of financial system reform. In 1979, China officially launched the reform of the banking system, focusing on the classification and regulation of the business of banks. With the recognition of commercial banks, China has established a series of joint-stock banks and urban commercial banks, and the banking business has been further expanded. In 2014, China's first private bank was approved, and then a group of Internet banks also have the conditions to be established. This is an important breakthrough in China's banking system reform, which not only promotes the development of Inclusive Finance in China, but also contributes to the transformation and upgrading of China's industrial structure. Since 2018, China has successively launched more than 50 opening-up measures, completely abolished the restrictions on the proportion of foreign shares in banking, securities, funds, futures, life insurance and other fields, and the business scope of foreign financial institutions has been expanding.

In terms of capital market, since the establishment of China's stock market in the early 1990s, after many financial market-oriented reforms, China has formed a multi-level and functional capital market system. In the on-site market, China has the main board market composed of Shanghai and Shenzhen stock exchanges. By 2021, there were 4339 listed companies in China's domestic stock market, with a total market value of 85.38 trillion yuan, continuing to maintain the position of the world's second largest stock market. Listed companies basically cover the "leading enterprises" in 90 industries of the national economy.

In the OTC market, China has gradually established various equity trading markets, which reflect the regional nature to a certain extent. Up to now, the total transaction scale of China's OTC derivatives market has exceeded 3 trillion, and the OTC derivatives business, especially the OTC option business, has jumped to a new business growth point in China's securities and futures market.

In the choice of financial business and financial instruments, China has achieved financing optimization through financial innovation. In terms of financial business, it includes not only traditional financial businesses such as time deposits, trust deposits and housing savings deposits, but also innovative financial businesses such as securities portfolio business. Since 2017, China's asset securitization market has continued its rapid development momentum, with an issuance scale of more than 1 trillion yuan, a market stock of more than 2 trillion yuan, an endless stream of innovative varieties and more diversified participants. In terms of financial instruments, on the basis of traditional financial instruments, China has continuously developed diversified instruments such as repurchase agreements, large amount negotiable certificates of deposit, beneficiary bonds and equity certificates, and financial derivatives such as futures have also been introduced. According to the trading data of the National Futures Market in 2021 released by China Futures Association, by the end of 2021, there were 94 derivatives listed in China, including 70 futures varieties. In 2021, the cumulative trading volume of the National Futures market was about 7.514 billion, and the cumulative trading volume was about 581.20 trillion yuan, with a year-on-year increase of 22.13% and 32.84% respectively. In terms of financial supervision, in 2018, China's financial supervision system changed from the original "one bank, three meetings" to the framework of "one committee, one bank, two meetings", that is, the financial supervision system includes the financial stability and Development Commission of the State Council, the people's Bank of China, the China Banking and Insurance Regulatory Commission and the China Securities Regulatory Commission. Under the "one bank, three committees" system, there are problems such as unclear regulatory responsibilities, cross regulation and regulatory gaps. The "one committee, one bank, two

committees" system after the merger of CBRC and CIRC can play a positive role in unifying regulatory standards, reducing communication costs and eliminating regulatory arbitrage.

2.2. Current Situation of China's Industrial Structure Upgrading

In recent years, with the continuous promotion of China's reform and innovation and opening to the outside world, China's industrial structure has undergone essential changes. On the whole, the proportion of primary and tertiary industries in GDP fluctuates, and the fluctuation of secondary industry is relatively small. By 2020, the contribution rate of China's primary industry to GDP is 10.4%, the contribution rate of the secondary industry to GDP is 43.3%, and the contribution rate of the tertiary industry to GDP is 46.3%. With the outbreak of financial reform and innovation, China's tertiary industry has experienced structural adjustment and transformation, which further promoted the gradual evolution of China's industrial structure from resource and labor-intensive to capital and technology intensive.

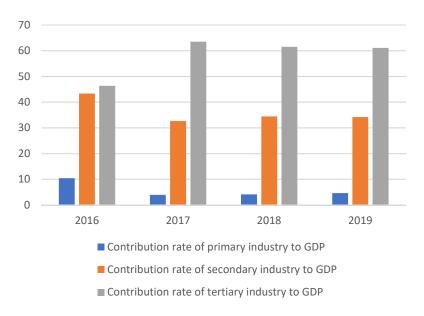


Figure 1. Contribution rate of three major industries to GDP

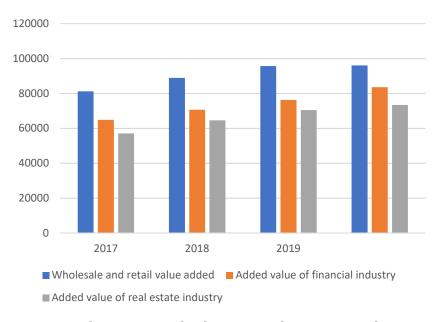


Figure 2. Contribution rate of industries in the tertiary industry to GDP

From the development trend of China's tertiary industry, the contribution of industries represented by finance, real estate, wholesale and retail to GDP has increased rapidly. As shown in Figure 2, wholesale and retail industry is the industry that contributes the most to GDP in the tertiary industry, but its added value tends to be stable. The added value of the financial industry is still increasing by a large margin. Since 2016, the added value of the real estate industry has also increased significantly. As a heavy asset model, the rapid development of the real estate industry is not only related to the reform of China's real estate market, but also closely related to the financial innovation represented by real estate mortgage loans.

In 2006, the financial reform and innovation represented by the split share structure reform once again promoted the reform of China's capital market, and the contribution of the financial industry to GDP increased year by year. In this process, with the development of Internet technology, financial services are constantly updated. On the whole, financial innovation reform will affect the supply and demand structure of industrial structures such as real estate industry and wholesale and retail industry by changing the original financial service system and product system, so as to promote the transformation and upgrading of macro industrial structure by breaking the initial equilibrium.

3. Action Path Analysis

Referring to Guo Song (2019) [11] and Liu Yuanyuan (2020) [12], this paper believes that the role of financial innovation in the upgrading of industrial structure is reflected in four aspects: capital formation, credit catalysis, capital orientation and risk management through the institutional side, consumer side, financing side, market side, technology side and policy side. See Figure 3 for details.

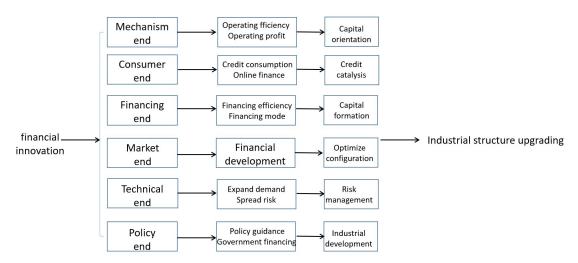


Figure 3. The action path of financial innovation on the upgrading of industrial structure

- (1) Mechanism end. Financial market innovation drives the improvement of business efficiency, operating profit growth and development ability of enterprises, that is, to improve the core competitiveness of enterprises, which will promote the increase of added value of the financial industry, form a benign and sustainable capital oriented circulation system, and promote the transformation and upgrading of industrial structure.
- (2) Consumer side. Financial innovation is reflected in the innovative financial products in the market and the Internet financial innovation model. In the context of business model innovation, product diversification and complex consumer demand, innovative financial

products and models help to break the original market balance and lead the new financial trend, so as to dredge the circular system of the credit consumer market, stimulate the improvement of consumption scale and promote the upgrading of consumption model. This will help stimulate the active adjustment of industrial structure from the consumer side and promote the transformation and upgrading of the original industrial structure.

- (3) Financing end. Traditional indirect financing represented by bank loans, bonds and bills plays a leading role in China's financing system, while the proportion of direct financing is relatively low. The innovation of financing methods can improve the financing mode of China's financial market and improve the financing efficiency, so as to reasonably guide the orientation of industrial capital, promote the formation of industrial capital, and open up the capital channel between different industries through innovative diversified financing tools and financing methods. This will help promote the rise of industrial capital scale and optimize the capital formation mechanism, so as to promote the upgrading of China's industrial structure.
- (4) Market side. Financial innovation is the driving force for the development of the financial market. Financial innovation at the macro, meso and micro levels will contribute to the growth of the transaction scale of the financial market and improve the supply and demand structure of the financial market, so as to improve the operation efficiency of the financial market and promote financial development. In this process, there will be structural changes in the products, transactions, services and supervision modes of the financial market. Therefore, the changes in the supply side of the financial market will bring changes in the financial needs of different industries, that is, through the integrated development of the supply and demand of the financial market, the allocation of resources will be optimized, so as to promote the upgrading of the industrial structure.
- (5) Technical side. Technological change is the first factor to promote economic growth. With the development of financial technology, the combination of new technologies and financial products and businesses has been expanding in the fields of operation, investment consulting, asset management, portfolio, supervision, risk control, customer service and so on. The combination of financial innovation and technology plays an increasingly prominent role in the financial system. The integrated development of science and technology and financial products and businesses helps to expand market demand, disperse risks, reduce costs, form new financial formats, and drive the transformation and upgrading of industrial structure.
- (6) Policy side. Industrial policy guidance and supporting support by means of financial innovation will help the supply side reform of industrial structure and drive the upgrading of industrial structure. In China's urbanization construction, through financial innovation, we will focus on supporting important pillar industries represented by energy conservation and environmental protection, new energy, new materials, high and new technology, medical treatment, elderly care, agriculture and emerging industries, which will help promote the innovative development of direct financing means and channels from the Perspective of policy guidance, and further promote the transformation and upgrading of industrial structure with the help of supply side reform.

4. Conclusions and Suggestions

Under the new development pattern of "double circulation", the maturity of the financial industry and financial reform and innovation complement each other. Financial innovation has become an important way to promote the upgrading of industrial structure and serve the real economy. This paper puts forward the following countermeasures and suggestions:

First, deepen the reform of the financial system to promote the upgrading and transformation of the industrial structure. In order to realize the innovation of the financial industry, we need to optimize the structure of the financial industry and improve the efficiency of financial

services. First, reform the internal system of state-owned banks, promote the development of small and medium-sized banks, increase the number of financial industry institutions, and enhance the overall competitiveness and market-oriented level of the financial industry on the basis of improving the financing efficiency of enterprises. At the same time, some non bank financial institutions such as insurance and securities also need to improve their institutional development.

Secondly, innovate the financial market and build a multi-level industrial structure system. In the process of the development of emerging industries, we can expand the industrial scale by means of financing such as stocks and bonds, provide green channels for direct financing for electronic information, biomedicine, emerging service industries and other industries in the industrial market, reduce the cost of industrial financing, and encourage them to be listed on the gem or SME board, To meet the role of the new financial market in promoting the transformation and upgrading of industrial structure.

Finally, innovate the financial system to strengthen the supervision of industrial structure. In the process of promoting the transformation and upgrading of industrial structure, it is necessary to formulate corresponding technology-oriented financial policies for financial innovation. Guide financial enterprises to use the efficiency of social capital allocation, and use scientific means to flow social capital into new industries with high scientific and technological content and strong driving ability, so as to promote the transformation and upgrading of industrial structure.

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References

- [1] Bai Zhihong. Research on the dynamic mechanism of digital inclusive finance supporting the expansion of rural domestic demand under the background of double cycle [J]. Business economics research, 2021, (08): 128-132.
- [2] Shen keyin. Macro form and strategic measures of high-quality development of sports industry under the new development pattern of "double cycle" [J]. Physical education research, 2021, 35 (02): 11-19.
- [3] Li Tianyu, Wang Xiaojuan. Digital economy empowers China's "double cycle" strategy: internal logic and realization path [J]. Economist, 2021, (05): 102-109.
- [4] An Jin, Zhang Xu, Han Yulian, Liu Jianing. Research on the promotion strategy of undertaking industrial transfer in the western region under the new development pattern of "double cycle" [J]. Research on financial theory, 2021, (03): 11-24.
- [5] Zhang Lun. Improve the modernization level of industrial chain and supply chain in Inner Mongolia and integrate into the new development pattern of "double cycle" [J]. Northern economy, 2021, (04): 15-17.
- [6] Michetti. Financial development and agglomeration [J].MPRA Paper No.48425,2013:1-4.
- [7] Tsionas. Financial development and economic growth: evidence from panel unit root and cointegration tests [J]. Journal of development Economics, 2004, 73 (01):55-74.
- [8] Li Yushan, Lu Yuanquan, Wang Tuo. How does financial support and technological innovation affect export complexity-- Empirical research based on China's high-tech industry [J]. Foreign economy and management, 2019,41 (08): 43-57.

- [9] Si Lijuan, Zhang Limin. The impact of financial agglomeration externality on economic growth -- An Empirical Analysis Based on the panel data of provincial capital cities [J]. Economic longitude and latitude, 2019, 36 (03): 150-156.
- [10] Wang Fayuan, Zheng Jun. The impact of scientific and technological innovation and financial development on industrial agglomeration -- an analysis of spatial Dobbin model based on the data of the Yangtze River economic belt [J]. Scientific and technological progress and countermeasures, 2020, 37 (13): 45-53.
- [11] Guo Song. Research on the path of financial innovation promoting the upgrading of China's industrial structure [J]. National circulation economy, 2019, (28): 108-109.
- [12] Liu Yuanyuan, Dong Shanshan. An empirical study on the impact of financial innovation on industrial structure upgrading [J]. China price, 2020, (08): 58-61.