

Research on the Influence Mechanism of Finance on the Growth of National Economy

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Abstract: *Through the construction of our country's non-competitive import - type financial input - output table, the analysis of the financial related industry is carried out on this basis. It is found that the Financial service activities has a small role in stimulating the demand of other sectors of the national economy, and the role of the supply promotion is obvious. Insurance, reinsurance and pension funding has a good driving effect on other departments, but also has a certain pull effect.*

Keywords: financial input-output table, complete consumption coefficient, total distribution coefficient

1. Introduction

In recent years, China's economic growth has slowed markedly, and it has begun to enter the "new normal" of medium and high-speed growth. As a pillar of China's economic development, the financial sector has changed with changes in economic models.

At the Fifth National Financial Work Conference held in July 2017, General Secretary Xi Jinping delivered an important speech, positioning the service entity economy as the "vocational duty" and purpose of finance. In-depth and comprehensive study of the impact of finance on the national economy, and then guide the healthy and stable development of China's financial industry, not only contributes to the stability and stability of China's real economy, but also the research results will have a clear sense of the times and the world.

2. Literature review and theoretical basis

Schumpeter (1954) and Robinson (1979) affirmed the positive relationship between finance and economic growth. Lai Juan (2013) established a multiple linear regression model between financial development and economic growth. The empirical conclusions show that the scale of financial development and the efficiency of financial development will have an impact on economic growth. Li Miaomiao et al. (2015) found that financial development can directly lead to economic growth, and indirectly promote economic development by acting on technological innovation. Peng Yuchao (2015) used panel data from 46 countries and found that the impact of financial structure market orientation on economic growth has an inverted "U" curve. As the proportion of financial markets continues to increase, the rate of economic growth will first increase and then fall. Wang Yibo et al. (2017) found that indirect finance is still an important driving force for China's economic growth by examining China's 2003-2013 data.

In summary, although there are many studies on financial development at this stage, there are still certain problems: First, in terms of sample data, research is mainly focused on the macro level. Second, in terms of research methods, scholars generally adopt traditional economic measurement methods.

Finally, existing research focuses on measures at the national level. In view of the above problems, this paper makes corresponding improvements: through the construction of the 2014 non-competitive import-oriented financial input-output table, the financial development is measured by the input and output data of the financial sub-sector, and the traditional measurement method is different because of the different indicators. The dilemma that leads to very different conclusions makes the research conclusion more valuable.

3. Model establishment

This paper uses the non-competitive import and export table provided by the European input-output database (WIOD). On this basis, referring to the current classification standard of national economy, it is adjusted to the input output table containing only 21 sectors.

The direct consumption coefficient indicates the direct consumption of the domestic products of the i department in the process of producing unit products by the j department, and the matrix is composed of A:

$$a_{ij} = \frac{z_{ij}}{x_j} \quad (i, j = 1, 2, \dots, n) \quad (1)$$

The complete consumption coefficient is the sum of the direct consumption of the i sector domestic products and all the indirect consumption in the process of the production unit's final product. It is recorded as the matrix of B:

$$b_{ij} = a_{ij} + b_{i1}a_{1j} + b_{i2}a_{2j} + \dots + b_{in}a_{nj} \quad (2)$$

$$B = A(I - A)^{-1} = (I - A)^{-1} - I \quad (3)$$

The direct distribution coefficient indicates the share allocated to the j department in the products produced by the i department, and the matrix formed by it is recorded as H:

$$h_{ij} = \frac{z_{ij}}{x_i} \quad (i, j = 1, 2, \dots, n) \quad (4)$$

The complete distribution coefficient is the sum of the direct distribution coefficient and all the indirect distribution coefficients, which is recorded as the matrix of which G is:

$$g_{ij} = h_{ij} + h_{i1}g_{1j} + h_{i2}g_{2j} + \dots + h_{in}g_{nj} \quad (5)$$

$$G = (I - H)^{-1} H = (I - H)^{-1} - I \quad (6)$$

4. Financial service activities related industry analysis

4.1 Analysis of related industry in Financial service activities sector

Observations show that Financial service activities consume a large amount of products from scientific research and technical services in the process of providing services, followed by financial service activities' own value services, then products from the manufacturing and real estate sectors. The proportion of the scientific research and technical services sector in the middle of the financial services activities has been ranked first in the middle of general financial services.

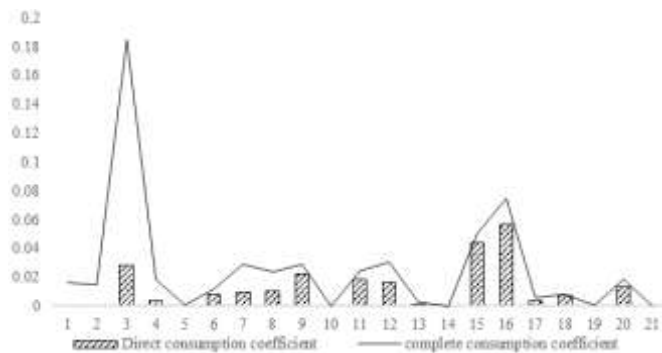


Figure 1: The direct consumption coefficient and the complete consumption coefficient of Financial service activities sector for all sectors of the national economy

Note: 1 represents the agriculture, forestry, animal husbandry, fishery sector, 2 represents the mining sector, 3 represents the manufacturing sector, 4 represents the power, heat, gas and water production and supply sectors, 5 represents water, environmental and public facilities management Industry, 6 for the construction sector, 7 for the wholesale and retail sector, 8 for the transportation, warehousing and postal sector, 9 for the accommodation and catering sector, 10 for the culture and entertainment industry, 11 for information transmission, software and information technology Service sector, 12 on behalf of financial service activities, 13 Insurance, reinsurance and pension funding, 14 represents the auxiliary activities of financial services and insurance activities, 15 represents the real estate sector, 16 represents the scientific research and technical services sector, 17 represents public management, society The Department of Safeguards and Social Organizations, 18 represents the education sector, 19 represents the health and social work sector, 20 represents the residential services and other service sectors, and 21 represents the extraterritorial organization and institutional activities.

From the point of view of the direct allocation coefficient, the general financial sector provides a large number of services to the manufacturing sector, once again in the construction sector, the wholesale and retail sectors, and the transportation, warehousing and postal sectors. The direct and indirect distribution coefficients of the water conservancy, environment and public facilities management sectors are zero year-round.

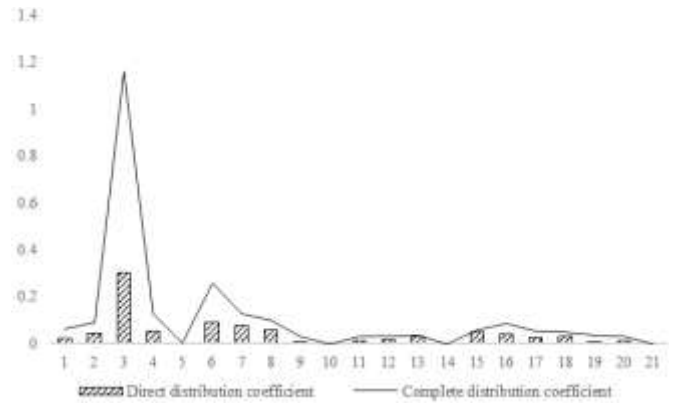


Figure 2: The direct distribution coefficient and the complete distribution coefficient of Financial service activities sector for all sectors of the national economy

4.2 Analysis of related industry in Insurance, reinsurance and pension funding sector

Insurance, reinsurance and pension funding relied heavily on the services provided by various financial departments in the process of providing services. This was mainly due to the significant increase in the direct consumption of Financial service activities by Insurance, reinsurance and pension funding, and the indirect consumption. obvious change. At the same time, it can be seen that, unlike the financial service activities, Insurance, reinsurance and pension are less expensive in the process of providing services to scientific research and technical services.

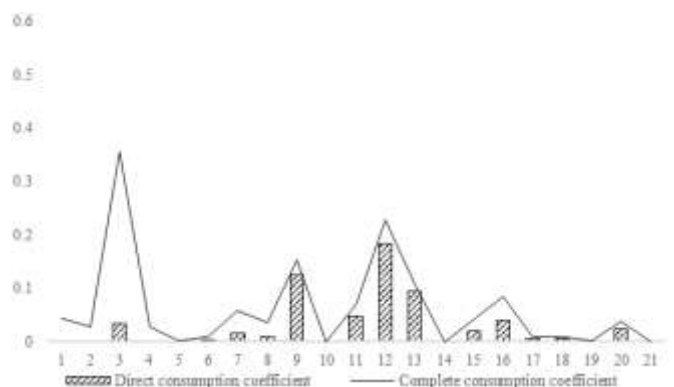


Figure 3: The direct consumption coefficient and the complete consumption coefficient of Insurance, reinsurance and pension funding sector for all sectors of the national economy

In addition to the manufacturing sector, Insurance, reinsurance and pension funding also provide a wealth of value services for the construction, wholesale and retail sectors, transportation, warehousing and postal sectors, Insurance, reinsurance and pension funding provide more indirect services to the construction sector and the wholesale and retail sectors.

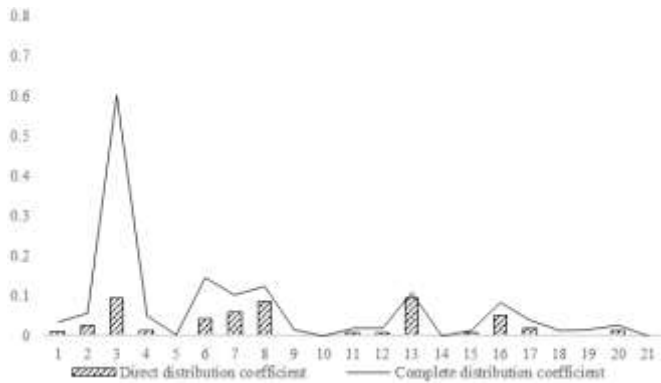


Figure 4: The direct distribution coefficient and the complete distribution coefficient of Insurance, reinsurance and pension funding sector for all sectors of the national economy

5. Conclusion and recommendations

In summary, the development of Financial service activities sector has less effect on the needs of other sectors of the national economy, while the role of supply-led facilitation is obvious. Increasing the services of Financial service activities sector can promote a substantial increase in the products of its downstream sectors. Insurance, reinsurance and pension funding sector has a good driving role for other sectors of the national economy and has a certain pulling effect. Therefore, increasing the service supply of Insurance, reinsurance and pension funding sector can not only promote the substantial increase of products in its downstream departments, but also increase the service supply of its departments, especially Financial service activities. Therefore, the following suggestions can be made regarding the impact of financial development on economic growth:

- 1) Rational use of the financial industry to promote the development of other sectors. Relevant departments should develop a broader financial support policy to make the services of the general financial services sector more smoothly flow to the construction, wholesale and retail industries, as well as the main downstream sectors of general financial services such as transportation, warehousing and postal services.
- 2) Promote the marketization reform of Insurance, reinsurance and pension. The government should actively play its regulatory role, promote the market-oriented reform of the insurance industry, improve insurance coverage, increase the variety of agriculture-related insurance, improve the agricultural insurance system, and improve the depth and density of rural insurance.

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