Regional Economic Research on Financial Agglomeration and Economic Growth

Jing Wu

Purification Equipment Research Institute of CSIC, Handan, 056000, China

Keywords: Financial agglomeration, economic growth, regional economy

Abstract: With the increasing frequency of financial activities and the rapid flow of global resources, the tentacles of the financial industry have touched every aspect of the economic development of countries all over the world. Under the background of the globalization of the world economy and the continuous advancement of information technology, the financial industry is constantly developing and growing, and the phenomenon of financial agglomeration is becoming more and more obvious, and many financial centers of different levels have been formed. The regional imbalance of China's financial agglomeration is very obvious, so it is necessary to increase its related theoretical research. This is of great guiding and strategic significance for the construction of the framework of spatial distribution analysis of financial resources. This paper studies the relationship between financial agglomeration and regional economy of economic growth, and it is easy to form financial agglomeration or financial contact center. Economists study this problem from the perspective of industrial economics, and get the formation reasons and mechanisms of financial contact center, etc. Recently, domestic researchers have also discussed financial agglomeration from the perspective of financial contact, which provides a new research perspective.

1. Introduction

Financial agglomeration and regional economic growth are neither a simple one-way action nor a simple interactive relationship, but a coupling relationship that affects each other through the interaction of various factors such as time, space, personnel and capital. With the increasing frequency of financial activities and the rapid flow of global resources, the tentacles of the financial industry have touched all aspects of economic development all over the world [1]. Under the background of the world economic globalization and the continuous promotion of informatization, the financial industry continues to grow, the phenomenon of financial agglomeration is becoming more and more obvious, and many financial centers at different levels have been formed. Financial agglomeration refers to the change process in which the financial industry grows and develops through the coordination, allocation and combination of financial resources and regional conditions [2]. This imbalance of financial development will not only affect the improvement of the development level of the overall financial industry, but also be detrimental to the coordinated development of Finance and finance and economy in the region. In addition, as a special form of industrial agglomeration, financial agglomeration will not only affect the core regional economies, but also affect the marginal regional economies [3]. In this global context, China also pays more and more attention to the development of the financial industry. From the single banking system with only deposit and loan function at the beginning, it has gradually developed into a modern financial system with complete functions including banking, insurance, securities and trust [4].

With the rapid growth of the financial industry, there are different levels of financial agglomeration areas in China, and a multi-level financial center system has taken shape. These two directions are the process of unity of opposites, and the "opposition" is that they are two kinds of resource flows in opposite directions; "Unity" shows that, in the case of industrial upgrading, financial resources spread echelon-shaped from the agglomeration area to the surrounding areas, while the low-end resources are "marginalized" and spill over to the surrounding areas, which in turn can strengthen the attraction of the agglomeration center area to the high-end resources to a

Copyright © (2022) Francis Academic Press, UK 205

certain extent [6]. The regional imbalance of China's financial agglomeration is very obvious, so it is necessary to increase its related theoretical research. This is of great guiding and strategic significance for the construction of the framework of spatial distribution analysis of financial resources. From the current situation of deepening financial reform in China, it is very necessary to improve and reform the spatial distribution pattern of regional finance in China [7]. However, there is a considerable gap in the mobilization of Anglo-Asian resources in the developed areas of the hot seam area when the research book A is hatched, and the research and research books are in full swing. Financial resources flow among different areas, and financial enterprises and financial instruments are concentrated or spread in space, and related research and research are carried out around the remote phenomenon [8].

2. Research on financial factors in regional economic growth

2.1. Regional economic growth and financial development

Promoting economic growth through financial function is the sum of financial structure established to a certain degree of development, that is, various financial arrangements constitute the whole financial system, which can provide financial services for economic development. The process of financial development is the process of deepening financial function. The relationship between finance and economic growth has always been a focus of many economists, and there have been many research results. Among them, the theory of financial development has formed its own system, established an overall framework for the financial operation of developing countries, and solved the problem of how financial development plays a role in economic development. Scholars believe that both the stock market and financial intermediaries can improve liquidity, reduce liquidity risk, and improve the efficiency of capital distribution, and the high return of capital will lead to high growth [9]. Measuring financial development from the perspective of function rather than the traditional institutional or structural perspective can more clearly understand the role of Finance in the economy and reveal the significance and essence of financial development. Whether it is based on the banking system or the market system, they are all financial arrangements, providing corresponding services for the economy and giving full play to their unique functions. There is a positive first-order relationship between financial development and economic growth. The deepening research work makes the most skeptics tend to believe that the development of financial markets and financial institutions is a key part of the growth process, and gradually begin to deny that the financial system is only an insignificant appendage, The traditional theory holds that the financial system is only to meet the financing needs of actual departments and cooperate with the independent development of these departments, so its role is passive. While the contemporary theory puts forward that financial development has a causal relationship with economic growth.

2.2. Regional Income Distribution Gap and Financial Development

In recent years, the literature on finance and growth has begun to pay attention to the relationship between finance and income distribution and regional economic disparities. These literatures can be roughly divided into three different theoretical hypotheses: one hypothesis holds that there is an inverted U-shaped relationship between financial development and income distribution. Another view is that financial development is conducive to improving the inequality of income distribution, and that in the process of financial development, the income and wealth level gap between the poor and the rich will keep converging. The third view is that financial development will aggravate the inequality of income distribution, and that with the deepening of the financial market, those who are already in office and high-income groups are the ones who are most likely to benefit from the deepening and development of the financial market, rather than the poor and low-income groups. As a result of the concentration and diffusion of financial resources, echelon structures such as core areas, subsidiary areas and marginal areas are usually formed. Under the condition of continuous accumulation of resources, the core area can be constantly "filled" and expanded, and the limited space is bound to push the inferior resources in the competition to the surrounding areas under the law of "survival of the fittest"; However, these resources often depend on the superior resources of the core area, so some resources located in the downstream of the industry may gather in the affiliated areas close to the core area, while other low-end and uncompetitive resources turn to the peripheral marginal areas. At the same time of this diffusion process, some advantageous resources in various regions also have the process of gathering to the core. As shown in Figure 1.

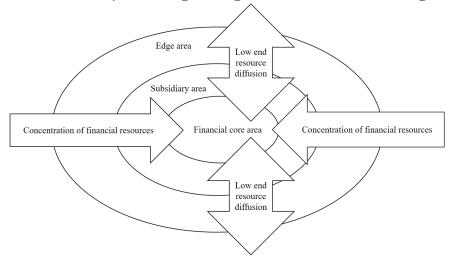


Figure 1 Concentration and diffusion of financial resources

The theory of financial development has its own system, which establishes an overall framework for the financial operation of developing countries and solves the problem of how financial development affects economic development. Because the function is more stable than other financial elements and reflects the long-term, integrity and objectivity, it provides an important research perspective for future generations to further analyze the relationship between regional finance and economy.

3. Empirical Research on the Effect of Financial Agglomeration on Regional Economic Growth

3.1. Indicators and data

We will separately select the indicators representing regional financial agglomeration and regional economic growth for dynamic relationship analysis. We think that the GDP of the financial industry can comprehensively reflect the overall development of the regional financial industry, so we choose the index that can represent the GDP of the financial industry in the region to represent the regional financial resource agglomeration, and use the proportion of this index to the total level of the national financial industry to represent the regional financial agglomeration level, and use CO to represent it; Select per capita GDP to represent the regional economic growth, and use E to represent it. The level of economic development will affect the origin and structure of the financial system. According to the traditional theory, the financial system is only to meet the financing needs of the actual departments, to cooperate with the independent development of these departments, and to hide its itch and be taught by the soul. Pien Rong's theory is that financial development has a causal relationship with economic growth. Entropy weight method is used to calculate the weights of Beijing economic growth subsystem, Shanghai economic growth subsystem, as shown in Table 1.

Primary index	Secondary index	Beijing Economic Growth weight	Shanghai economic growth weight	Economic growth weight of Hebei Province
	Regional GDP	0.1482	0.1420	0.1325
Economic scale index	Local fiscal revenue	0.2846	0.2645	0.2458
	Retail sales of social consumer goods	0.1534	0.1387	0.1784
EExternal environmental indicatorsconomic benefits indicators	Proportion of local fiscal revenue	0.0648	0.0364	0.0287
	Per capita utilization of foreign capital	0.0547	0.1745	0.1264
External environmental	Per capita of urban residents	0.1254	0.0756	0.0968
indicators	Total exports	0.0869	0.0374	0.1263

Table 1 Weight of regional economic growth subsystem

Financial and economic development is a typical representative of regional financial, economic and social development after China's reform and development. It has fully witnessed the development process of the new period and is a good sample to test China's regional financial agglomeration and regional economic growth in the new period.

3.2. Synergistic analysis

We standardized the initial value of the data of regional financial agglomeration level index and regional economic growth level index, and then drew a graph reflecting their synergy as shown in Figure 2.

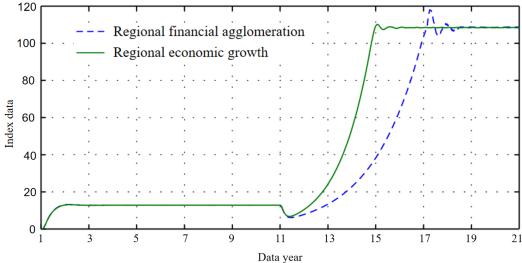


Figure 2 Synergy of regional financial agglomeration level and regional economic growth level

The data series of regional financial agglomeration and regional economic growth show the synergistic effect of trumpet-shaped characteristics, which shows that both regional financial agglomeration and regional economic growth showed a steady growth trend before 1985, and after 1985, the regional economy began to grow rapidly, and the level of financial agglomeration rose steadily in the same period. It shows that there is a certain characteristic synergy between regional financial agglomeration level and regional economic growth level. However, the internal cause and effect and dynamic mechanism of their interaction need to be further tested. Financial development theory is self-contained, which establishes an overall framework for financial operation in

developing countries and solves the problem of how financial development acts on economic development. Compared with other financial elements, the function is more stable, long-term, holistic and objective, which provides an important research perspective for future generations to further analyze the relationship between regional finance and economy. Agglomeration enables financial institutions to obtain economies of scale, and has lower information acquisition cost and company supervision cost, which is conducive to the screening of credit investment projects in advance and the company operation supervision after the event. Financial agglomeration can transform savings funds into credit capital more smoothly and efficiently by optimizing the allocation of financial resources, improving the level of corporate governance and carrying out risk control, thus improving financial efficiency. At present, financial geography is paying more and more attention to the concrete analysis and geographical expression of a micro-financial subject, helping people to know more clearly the geographical distribution and flow evolution of micro-financial subjects, aiming at properly explaining the agglomeration process of service industry and financial center.

4. Conclusions

The study of financial resources can also be summarized in the form of financial resources agglomeration and various forms of financial resources, which can also be reflected in the form of financial resources agglomeration and various forms of financial resources. From the results of empirical analysis, we find that for all samples, there is a high positive correlation between financial agglomeration and regional financial growth. In other words, financial agglomeration promotes regional financial growth to a certain extent; However, from the perspective of classified samples, there is no highly positive correlation between financial agglomeration and regional financial growth. From the perspective of space, the excessive concentration of space in the financial industry brings uneconomical agglomeration, which promotes the beginning of a new round of agglomeration. A certain regional space has different abilities and initial conditions in absorbing, mobilizing, guiding, transmitting, allocating and developing financial resources. In a suitable region or space, financial resources participate in regional movement by combining with regional conditions, condense into financial industry, and then form financial agglomeration. Due to the regional differences of conditions and factors, the regional flow of financial resources is bound to occur. And concentrate and aggregate to areas with superior location and other conditions, so as to form different levels of financial agglomeration.

References

[1] Ye C, Sun C, Chen L. New evidence for the impact of financial agglomeration on urbanization from a spatial econometrics analysis[J]. Journal of Cleaner Production, 2018, 200(NOV.1):65-73.

[2] Zhu H, Dai Z , Jiang Z . Industrial Agglomeration Externalities, City Size, and Regional Economic Development: Empirical Research Based on Dynamic Panel Data of 283 Cities and GMM Method[J]. Chinese Geographical Science, 2017(03):122-136.

[3] Tong X, Li X, Tong L, et al. Research of Spatial and Temporal Evolution Mechanism and Countermeasures of Haze Spatial Pattern in China: Visual Field Based on Dynamic Evolution and Spatial Agglomeration[J]. Advances in Meteorology, 2019, 2019(9):1-16.

[4] Porru M, Ozkan L. Monitoring of Batch Industrial Crystallization with Growth, Nucleation, and Agglomeration. Part 2: Structure Design for State Estimation with Secondary Measurements[J]. Industrial & Engineering Chemistry Research, 2017, 56(34):9578-9592.

[5] Chen Q. The Influence of Marine Industry Agglomeration on Regional Economic Development[J]. Journal of Coastal Research, 2020, 103(sp1):263.

[6] Gao L H , Wang G Q , Zhang J . Industrial Agglomeration Analysis Based on Spatial Durbin Model: Evidence from Beijing-Tianjin-Hebei Economic Circle in China[J]. Complexity, 2021,

2021(4):1-10.

 $[7]\ Lv\ Z$, Wang L , Zhang W . An empirical study of factors influencing entrepreneurship using fuzzy logic: Based on provincial panel data[J]. Journal of Intelligent and Fuzzy Systems, 2021, 40(4):1-7.

[8] Loizou E , Karelakis C , Galanopoulos K , et al. The role of agriculture as a development tool for a regional economy[J]. Agricultural Systems, 2019, 173:482-490.

[9] Guo Z, D Robinson, D Hite. Economic impact of Mississippi and Alabama Gulf Coast tourism on the regional economy[J]. Ocean & Coastal Management, 2017, 145:52-61.