

Analysis on Geographical Factors of Regional Economic Development Difference

Hongshou Chen

*Business School, Graduate University of Mongolia, Ulaanbaatar, Mongolia
Hongshou2006@126.com*

Abstract: *Since the reform and opening up, many regions in China have different locations, resources, policy support and other factors, resulting in large differences in economic and financial development between regions. In order to better analyze the mechanism of interaction between geographic factors and economic growth, construct economic growth indicators, regional financial development indicators, and control variable indicators respectively, establish a panel data fixed-effect model, and further propose relevant policy recommendations to reduce regional and economic growth. Inequality, thus providing a theoretical reference for the coordinated development of the regional economy.*

Keywords: *Regional economy, Economic development, Regional differences, Economic growth*

1. Introduction

Over the past 40 years of China's reform and opening up, due to the large differences in location, transportation infrastructure, policy support, etc., there are significant differences in economic and financial development between regions. It is very important to fully understand the difference in geographical influence between China's economic development and economic development. It can help us how to build an economic and financial system that meets the actual needs of local social and economic development according to regional development differences, and to a certain extent promote the high-quality development of the local economy. In the research on the analysis of the influence of geographic factors on regional economic development differences, many scholars have conducted research on them, and achieved good results. For example, Li Shuangyan and others, from the perspective of R&D investment, believe that the development of inclusive finance in the western region has an impact on regional green total factor productivity. Play a driving role and increase the innovation vitality of enterprises through R&D investment. [1] Hu Yao believes that the formation of a financial center is conducive to the rapid accumulation of various economic resources (such as industrial agglomeration, technological incubation, investment and financing services, etc.), through the multiplier effect, transformation and upgrading of the industrial structure, and thus promote regional economic growth. It can be seen that the research on the financial geographic factors of regional economic development differences is of great significance to China's economic development. Based on the new economic system geography and the science of regional integration development, this article considers China's regional economic development and regional integration development from the perspective of financial geographic differences, and further explain the impact of financial geographic differences on the economic development of Chinese counties[2].

2. Research on Financial Geography Influencing Factors of Regional Economic Development Differences

2.1 Theoretical Research on Economic Geography and Regional Economic Growth

(1) Selection of economic geographic indicators

1) Density

Density refers to the density of economic activity per unit area and the relative scale of economic activity settlement per unit area. It is a record of the economic output and income level of a piece of land [3]. Therefore, density can always be measured by GDP per unit area. In addition, since population density is always closely related to economic activities, and people are the creators and customers of

financial services, density can also be measured by the number of people in each region.

2) Distance

Different disciplines have different interpretations of the concept. Among them, the mathematical concept believes that distance is the length of two objects in space or time (that is, the straight-line distance between two points), while geography believes that distance is two The spatial trajectory of the interaction of objects (that is, a spatial relationship). The location of transportation infrastructure, the support of financial policies and the convenience of location are all important factors that affect the distance between regions.

3) Split

Segmentation refers to factors that affect the flow of commodities, capital, population, and knowledge of a country or regional organization, including obstacles to economic activities caused by currency, convention, commercial protection, and language differences. Therefore, improving the barriers to economic and human mobility and promoting inter-regional trade can enable a region to produce greater social and economic benefits.

(2) Applicability of economic geographic indicators

In macroeconomic research, the partial comparison method is a traditional and widely used research method, which can be divided into two categories: one is the longitudinal comparison method. The longitudinal comparison method compares the similarities and differences in the field distribution of the same research topic in different periods, and then examines the migration process and the law of occurrence and development, providing a basis for scientific prediction. The second is the horizontal comparison method. The horizontal comparison method refers to comparing different research materials at the same time, intervening in the cross-section of the research materials, and providing an effective analysis method for understanding the regional differences of the economic system. Vertical comparison method and horizontal comparison method are two different parts of problem analysis, they can be used alone or in combination.

2.2 Geographical Factors of Regional Economic Development

(1) Research on Economic Geography and New Economic Geography

Economic geography, also known as "location theory", is a discipline that studies the interaction between human economic activities and the geographical environment. Traditional economic geography adheres to the traditional location theory, that is, under the premise of perfect competition and constant returns to scale, it emphasizes that geographical factors only have an impact on the initial stage of location selection. However, new economic geography has a more obvious difference from the former, and the main performance is In the following two aspects: One is the so-called "new" in new economic geography, that is, the analysis of "spatial" elements introduced in economic analysis.

The scope of the study is mainly focused on one-dimensional point-like or linear regions, rather than true two-dimensional or even three-dimensional spatial analysis. The extent to which the new economic geography study of policy performance in relation to region-specific developments is less well explained will be reduced. Second, new economic geography conducts indiscriminate analysis of different levels of geographic space such as cities, regions and countries, which is bound to reduce the credibility of model construction.

Through theoretical research, it can be seen that simply using the new economic geography theory to construct a model to analyze the development of regional economy will inevitably ignore the influence of important factors such as politics, society, and culture. This may lead to deviations in the results. However, the new economic geography does Constructive ideas were put forward on some aspects of economic analysis. For example, in the process of social and economic development, the spatial distribution of economic activities is of great significance to the formulation of regional policies, and there is indeed an imbalance in economic development in geography and space. At the same time, in view of the hypothesis setting when the model is constructed, the new economic geography will be more effective in analyzing the regional economic problems of developing countries.

(2) Linear regression analysis for policy and geographic factors

The influence of geographical factors is reflected by comparing the level of economic development between different regions. Over the past 40 years of reform and opening up, according to the

differences in natural resources, transportation infrastructure conditions, economic and scientific and technological development levels between regions, as early as 1986, the state divided China into three major economic belts: the eastern, central and western regions to clarify the role of each region in national economic and social development, and to facilitate the government to formulate unique economic development plans for different regions, so as to fully utilize regional advantages and promote Division of labor and coordination and coordination of social and economic development will ultimately achieve common prosperity in all regions. However, with the continuous growth of the national economic development level, the economic development gap between regions has become increasingly obvious. Therefore, establishing a simple model to analyze the level of regional economic development in different economic zones can not only verify whether financial geographic factors have a significant impact on inter-regional economic development, but it can also be more obvious whether financial geographic factors will have an impact on regional economic and social development. .

2.3 Research on Countermeasures for Regional Economic Development and Promotion

(1) Establish a diversified regional financial institution system

In recent years, China has continuously optimized its business environment and deepened its commercial system, and has greatly released the dividends of reforms, especially private enterprises. The total amount has increased significantly (to 10.598 million in 2012 and 14.369 million in 2017), accounting for all enterprises The proportion of the quantity reached 79.4%. The large number of small and medium-sized enterprises and regional socio-economic levels have obvious differences. The construction of a diversified regional financial system can not only meet the needs of diverse financial services (such as the introduction of basic financial services for the elderly, simplify the financing thresholds for small and medium-sized enterprises, etc.), but also Through the development of strong local financial institutions, to streamline local planning and raise local development funds, to give full play to the benefits of local financial leverage services (such as strengthening the structure of Internet financial products, patent pledge financing loans, etc.), promote full competition in the regional market, and increase finance Effective market supply.

(2) Cultivate growth poles for regional financial development

Regional coordinated development has always been the focus of close attention of the Party Central Committee and the people. Doing a good job in regional coordinated development can not only inject a steady stream of new impetus into the high-quality development of the regional economy, but also take a new approach to regional economic development with a reasonable division of labor and complementary advantages. Way. From the 2017 Central Economic Work Conference first mentioning the three goals of regional coordinated development (i.e. equalized basic public services, balanced infrastructure transportation facilities, and equivalent people's living standards), to the 2019 Central Region Rise Work Symposium, After General Secretary Xi Jinping inspects the Xiongan New Area in 2021, "coordinated regional development" will always be the main theme of high-quality economic development at present and in the future. Looking forward to the reform and opening up, regional coordinated development has entered vertical and horizontal and in-depth development. With the continuous increase of development strategies such as "Western Development" and "East-West Cooperation", regional coordinated development has entered a new normal. However, due to resource endowments and location The situation is quite different, and there is still a long way to go to achieve balanced development of the east, west, south and north (the GDP of the eastern region in 2020 is about 2.46 times that of the western region). The central region has a convenient public transportation infrastructure and rapid economic growth (the average annual economic growth of the central region has reached 8.6% in the past 5 years, and the growth rate ranks first among the four major regions in China), laying a foundation for the realization of a domestic and international dual cycle in the central region With a solid economic foundation, in view of this, the central region should adjust the credit structure in a timely manner by establishing a financial supervision system that matches powers and responsibilities, and accurately flow green finance and technology funds to key areas and weak links, and promote high-quality and coordinated development in the central region.

(3) Construct an open information exchange mechanism

Local governments should continuously optimize the business environment, provide the public with public policy information services covering the entire process in terms of basic social services, government information disclosure, and basic medical and health care, and use the reform of the commercial system as a starting point to promote regional economies. The development and deepening

of cooperation. At the same time, under the policy guidance of local governments, various financial management institutions have deepened the implementation rules for industrial development, using finance as a lever (such as focusing on supporting the financing needs of strategic industrial clusters, accurately supporting the development of advantageous industries in poor areas, and assisting the transformation and upgrading of modern manufacturing. Etc.) Leveraging the high-quality development of the regional economy, and delivering financial “live water” for accelerating the coordinated development of the region. In addition, the government and financial institutions can continue to promote local investment promotion policies and high-quality business environment through various information channels such as the Internet and the media. In addition, government agencies need to manage the normal operation of financial products (such as overdue financial management information, sales of false financial product information, etc.) to maintain normal product supervision, and conduct major investigations (such as notifications) of financial violations by stakeholders. Anti-monopoly case punishment information, illegal disclosure of important information, etc.), protect market rules and promote the sound operation of securities transactions.

2.4 Regional Economic Improvement Measurement Algorithm

Use the theory of urban primacy to fully analyze the urban scale system structure, and put forward feasible regional economic policies for coordinated regional development.^[4] The primacy calculation method is:

$$S = \frac{P_1}{P_2} \quad (1)$$

Among them, S is the primacy degree, and p1 and p2 are the population numbers of cities A and B in the region, respectively. The original calculation index S is used to analyze the city's primacy degree. For a more comprehensive and intuitive comparison, the results of the other two algorithms are also listed. The formula is expressed as:

$$S_1 = \frac{P_1}{P_2 + P_3 + \dots + P_n} \quad (2)$$

Among them, P_2, P_3, P_n refers to the population of the 2nd to nth cities.

3. Experimental Research on Geographical Influencing Factors of Regional Economic Development Differences

3.1 The Purpose of the Experiment

This article mainly uses financial-related ratios, relative ratios of deposits and loans (LSR), and the number of financial institutions to analyze the overall status of regional financial differentiation, and tries to get the current status and magnitude of financial differences in eastern, central, western and northeastern regions of my country.^[5]

3.2 Experimental Method

Due to the lack of statistical data on financial assets and M2 in various regions in my country, it is impossible to directly use Gorbachev's indicators to describe differences in financial development. However, in my country's financial market, indirect financing occupies a major position, and most of the financial assets are concentrated in banks. Deposits and loans are most of the assets of banks, so most scholars directly use bank deposits and loans instead of total financial assets to approximate the financial development status. The revised financial correlation ratio is: $FIR = (S+L)/GDP$, where FIR is For financial-related ratios, GDP is the gross product of each region, S is the deposit amount of financial institutions, and L is the loan amount of financial institutions.

Among them, the ratio of loan balance to deposit balance (LSR) is an indicator to measure the efficiency of regional financial development, that is, the efficiency of financial institutions in converting savings into loans.

4. Experimental Analysis of Geographical Influencing Factors of Regional Economic Development Differences

4.1 Financial Related Ratio (FIR)

The results of the experimental survey of my country's financial-related ratios are shown in Table 1.

Table 1: Comparison of FIR across the country and by region at the end of 2019-2020

Area	2019	2020
East	3.17	3.07
Central	2.11	2.16
West	2.46	2.49
Northeast	2.09	2.11
Nationwide	2.78	2.79

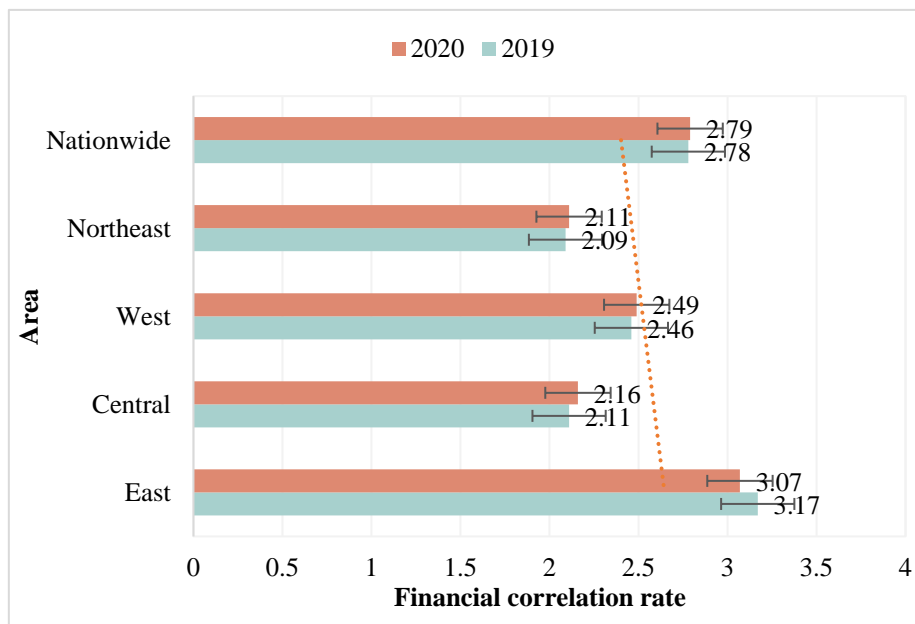


Figure 1: FIR Comparison Chart of China and Regions at the End of 2019-2020

As shown in Figure 1, as of the end of 2020, the financial correlation rate in the eastern region was 3.07. The median income in the central region is 2.16, the lowest among the four regions. The currency stability rate in the western region is second only to the eastern region, which shows that the economic growth rate in the western region is acceptable. The relative value of the three regions in the northeast is 2.11, second only to the western region. The FIR sequence is: Eastern Region>Western Region>Northeast Region>Central Region. Through the definition of relevant departments, this article believes that the eastern, western, northeastern, and central regions have all improved well in terms of cost, scale, and ability to provide services. The inflation rate alone cannot measure a region's economic growth well. level.

4.2 Relative Ratio of Deposit and Loan Balance (LSR)

The ratio of loan balance to deposit balance (LSR) is a measure of the efficiency of regional financial development, that is, the efficiency of financial institutions in converting savings into loans. The survey results are shown in Table 2.

Table 2: Comparison of LSRs across the country and in various regions at the end of 2019-2020

Area	2019	2020
East	0.73	0.74
Central	0.65	0.67
West	0.72	0.72
Northeast	0.74	0.75
Nationwide	0.73	0.75

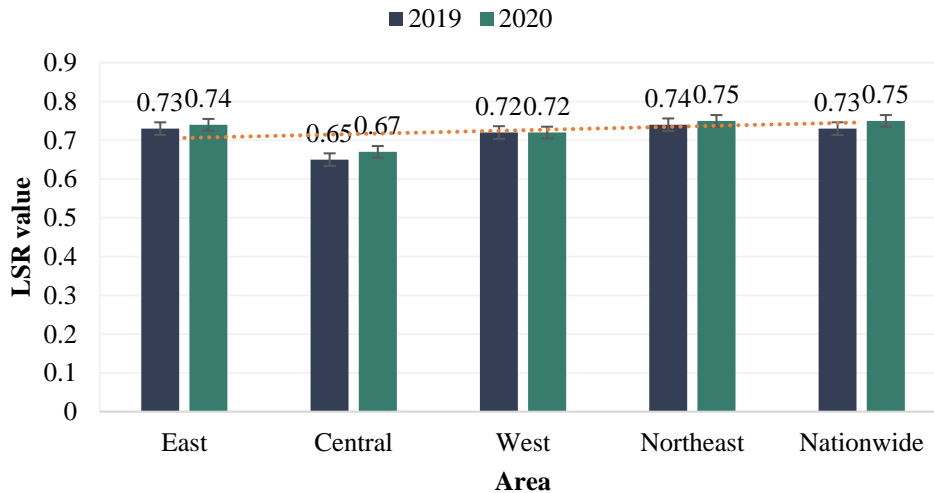


Figure 2: Comparison of LSRs across the country and in various regions at the end of 2019-2020

As shown in Figure 2, it can be seen that LSR actually describes the efficiency of financial institutions in converting savings into loans, which belongs to the efficiency of financial intermediaries. Taking into account the small size of the securities market in each region of my country, the ratio of the loan balance to the deposit balance in each region can generally reflect the efficiency level of a region's financial development. As of the end of 2020, the LSR of the northeastern region was 0.75, leading the country, and financial institutions had the highest efficiency in converting savings into loans; the LSR of the eastern region was 0.74, slightly weaker than that of the northeastern region; the LSR of the western region was 0.72, weak In the eastern and northeastern regions; the central region has the lowest LSR level of 0.67. The order of LSR is: Northeast Region>Eastern Region>Western Region>Central Region. Through the definition of LSR, we can know that in the Northeast, Eastern, Western, and Central regions, the efficiency of financial institutions in converting savings into loans is gradually decreasing.

5. Conclusions

From the above analysis of the results, it can be seen that there are differences in regional economic development due to factors such as location, natural resources, and transportation infrastructure. However, in recent years, with the continuous advancement of China's coordinated regional development strategy and the pace of building a moderately prosperous society in an all-round way, absolute poverty in various regions has been basically eliminated, but the uneven regional development, the increase in income of low-income groups and the construction of a long-term poverty reduction system still need to be further deepened. From a macro perspective, the economic development potential and quality of the eastern region is better than that of the western region. Therefore, to maximize the benefits of financial and fiscal funds, and to be guided by implementation effects, to evaluate the effectiveness of policies in a timely manner based on the results, and to concentrate limited financial resources in key industries or fields of regional economic development can effectively make up for the shortcomings of regional economic development. So that the fruits of reform and development benefit all people. [6]

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