Poster Session

AN ANALYSIS ON THE DEVELOPMENT GAP BETWEEN THE NORTH AND THE SOUTH IN CHINA UNDER THE NEW PATTERN: CHARACTERISTICS, CAUSES AND COUNTERMEASURES

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With the continuous development of China's economy and the entry of socialism with Chinese characteristics into a new era, the main social contradiction in China has been transformed into the contradiction between the growing needs of the people for a better life and the unbalanced and insufficient development. Regional economic disparity is an important manifestation of unbalanced development, a long-standing phenomenon in the process of China's economic development, and also the focus of continuous academic attention. With the continuous promotion of the "western development" and the "rise of central China" strategies, the economy of the western region has grown rapidly. In 2019, the economic growth of the western region will reach 10.17%, the total GDP will account for 20.8% of the country, and the imbalance between the East and the West will gradually decrease. In contrast, in the northern region, the economic development has been slow in recent years, and the GDP growth rate has declined rapidly, while the southern region still maintains a stable development trend. In 2019, the GDP growth in the North was negative, about 11 percentage points lower than that in the south. The regional development pattern at the national level has gradually changed, and the East-West imbalance has gradually shifted to the North-South imbalance, and the gap has gradually widened. The unbalanced development between the north and the South has gradually become a new problem facing China's regional development. So, what are the main aspects of the unbalanced development between the north and the south? What are the factors that cause these imbalances? What can be done to promote the coordinated development of North and South China? These will become the key issues to be discussed in the process of building a regional economic layout with complementary advantages and high-quality development during the "fourteenth five year plan" period. However, for a long time, the academic research has focused on the gap between the East, the middle and the west, including the analysis of the difference characteristics from the overall perspective, the factor perspective, the employee income perspective, and the analysis of the causes and relevant countermeasures from the perspectives of governance, system, economy. However, there are few studies on the unbalanced development of the north and South regions, and most of them are analyzed from a single factor.

Therefore, this paper believes that at the key point of the opening year of the "fourteenth five year plan" period, it is necessary to comprehensively sort out the reality of the unbalanced development between the north and the South and analyze the influencing factors of the imbalance, so as to put forward optimization suggestions for narrowing the gap between the north and the South and promoting the coordinated development between the north and the south, in order to provide reference for the strategic decision-making of China's regional coordinated development.

1 RESEARCH OBJECT AND DATA SOURCE

1.1 Define the study area

In the selection of research objects, the traditional geographical North-South Division method is adopted, that is, the Qinling-Huaihe River line is used as the boundary to divide the North-South areas. Due to the availability and continuity of data, the provinces and cities included in this study are 31 provinces and cities in the mainland, excluding Hong Kong Special Administrative Region, Macao Special Administrative Region and Taiwan Province. The southern region includes Jiangsu, Anhui, Hubei, Chongqing, Sichuan, Tibet Autonomous Region, Yunnan, Guizhou, Hunan, Jiangxi, Guangxi Zhuang Autonomous Region, Guangdong, Fujian, Zhejiang, Shanghai and Hainan; The northern region includes Beijing, Shandong, Henan, Shanxi, Shaanxi, Gansu, Qinghai, Xinjiang Uygur Autonomous Region, Hebei, Tianjin, Inner Mongolia Autonomous Region, Liaoning, Jilin, Heilongjiang and Ningxia Hui Autonomous Region.

1.2 Data source

This paper aims to make a comprehensive analysis of the unbalanced development between the north and the south through the inter provincial panel data, and analyze the influencing factors reflected behind the data, and on this basis, put forward the corresponding optimization ideas and development paths. It mainly selects relevant indicators of economic aggregate level, investment level, consumption level, industrial structure, population flow, innovation ability, etc. the time span is mainly from 2000 to now. The data are mainly from China Statistical Yearbook, China Urban Statistical Yearbook, statistical yearbooks and economic development reports of all provinces and cities, and other relevant official reports.

2 CURRENT SITUATION AND CHARACTERISTICS OF UNBALANCED DEVELOPMENT IN THE NORTH AND SOUTH REGIONS

2.1 Proportion of economic aggregate "rising in the South and falling in the north"

Since the reform and opening up, the economic aggregate of the South has been higher than that of the north. As can be seen from the figure, from the early stage of reform and opening up to the early 1990s, the proportion of the total economic output of the north and South regions gradually increased; From 1993 to 2003, the proportion of the total economic output of the north and South regions tended to be stable, and from 2003, it began to shrink; However, with the impact of the financial crisis, taking 2013 as the watershed, the economic proportion of the northern region began to decline significantly, from 57.4:42.6 in 2013 to 61.5:38.5 in 2018. In terms of per capita GDP, since the population in the north is significantly less than that in the south, the per capita GDP in the North was higher than that in the south from 2004 to 2014. However, since 2015, the per capita GDP in the South has exceeded that in the north and has an expanding trend. In 2018, the per capita GDP in the South was 8800 yuan higher than that in the north.

2.2 Economic growth is "fast in the South and slow in the north"

In terms of economic growth, the economic growth of the southern region has exceeded that of the northern region since about 2013, and the gap has shown a continuous widening trend. In 2018, the economic growth rate in the North was 6.3% and that in the South was 7.3%. At the provincial level, the last five provinces in China in 2018 were all northern provinces, including Tianjin, Jilin, Heilongjiang, Inner Mongolia Autonomous Region and Liaoning. However, the growth rate of southern provinces is basically higher than the national average, of which Guizhou and Tibet Autonomous Region have reached 9.1%, Yunnan Province has reached 8.9% and Jiangxi Province has reached 8.7%.

2.3 Traffic network "dense in the South and sparse in the north"

In terms of high-speed rail network, the northern region started earlier. China's first high-speed rail Beijing Tianjin Intercity Railway was opened in August 2008, but the northern region failed to keep up with the subsequent construction.

At present, it presents a pattern of overall branch line development and local network development; The south high-speed rail started relatively late. In 2009, the first long-distance high-speed rail from Guangzhou to Wuhan via Changsha was opened, but the follow-up development speed is very fast. As of the beginning of 2018, China has opened 24548 km of high-speed rail lines, 8878 km in the north and 15670 km in the south.

2.4 Innovation ability "strong in the South and weak in the north"

The innovation ability can be analyzed from such factors as innovation subject, innovation talents, innovation input and innovation output. From the perspective of innovation subjects, the innovative enterprises in the south are significantly more than those in the north, especially the unicorn enterprises, and the gap is growing; From the perspective of innovative talents, the number of double first-class universities is the same from north to south, but the universities in the north are mainly concentrated in Beijing, while the distribution in the south is relatively balanced, but the number of undergraduate graduates in the south is higher than that in the north; From the perspective of innovation investment, the growth of innovation investment in the north is slowing down, and the gap between North and South innovation investment has widened significantly. In 2018, the difference reached 427.16 billion yuan. In terms of innovation output, the number of patent applications in the south is 2.8 times that in the north, which is overwhelming the north.

3. INFLUENCING FACTORS OF UNBALANCED DEVELOPMENT IN THE NORTH AND SOUTH REGIONS

3.1 Differences in industrial structure

Due to good resource conditions and national decisions, the northern region mainly develops heavy industry represented by coal and steel, while the service industry develops slowly and the proportion of industrial structure is unbalanced, so it is difficult to adjust. In the first three quarters of 2019, the GDP of the northern region was 27trillion, accounting for 38.3% of the country, while the steel output accounted for 58.6% of the country, and the beverage product output accounted for 29.7% of the country. Taking Shaanxi Province and Shanxi Province as examples, the industrial structure of the province is 7.7:46.5:45.8 and 4.8:43.8:51.4 respectively, and the industrial proportion remains at a high level. Compared with the southern region, which is dominated by high value-added manufacturing and service industries, its industrial structure transformation and upgrading is in good shape. The provinces represented by Shanghai, Guangdong and Zhejiang vigorously promote scientific and technological innovation, and actively develop emerging industries such as the Internet and the new generation of information technology.

3.2 Differences in systems and mechanisms

The system and mechanism reform in the North lags behind that in the south, which is an important factor affecting the unbalanced development between the north and the south. First of all, in the ownership structure of the northern region, the proportion of public ownership is relatively high, especially with more state-owned enterprises, and the reform process is slow. In 2018, the proportions of state-owned holding industrial enterprises, private industrial enterprises, foreign-invested and Hong Kong, Macao and Taiwan invested industrial enterprises in the South and North were 4.88:75.92:19.20 and 10.37:79.11:10.51 respectively. The proportion of state-owned holding industrial enterprises in the North was 5.49 percentage points higher than that in the south, but the proportion of total profits of state-owned holding industrial enterprises in the North was 14.2 percentage points lower than that in the south. It can be seen from the figure that before 2014, the total profits of state-owned holding industrial enterprises in the north were higher than those in the south.

3.3 Differences in the degree of opening to the outside world

Opening to the outside world means that regions integrate into the world economic system, expand market scope, and welcome corresponding capital investment and technology investment, which greatly promotes economic growth.

The degree of opening up in the south is significantly higher than that in the north. There are two main reasons: on the one hand, the geographical location of the southern coastal areas is superior, which is convenient for foreign trade and cultural exchanges; On the other hand, under the idea of "unbalanced development", China has successively set up special economic zones in Shenzhen, Shantou, Xiamen and other places, giving rich policy support. In recent years, the opening up of the southern region has been further accelerated. The construction of the Yangtze River Delta region and the Guangdong Hong Kong Macao Great Bay area has been continuously and effectively promoted, and the establishment of free trade zones has been continuously approved.

3.4 Differences in the degree of regional cooperation

The degree of regional cooperation refers to the degree of integration of cities into the regional economic system. The cooperation and linkage between cities is conducive to giving full play to the comparative advantages of all parties, avoiding homogeneous competition, and achieving win-win results and high-quality development. The degree of regional cooperation in the north is lower than that in the south, which is also one of the important reasons for the unbalanced development between the north and the south. The degree of regional cooperation can be reflected by business contact flow data such as "headquarters branches" of enterprises. From the national level, it can be seen that the density of cooperation network in the south is higher than that in the north, and the degree of regional cooperation in the northeast and northwest is significantly lower than that in other parts of the country. The regional cooperation network shows an obvious "core edge" feature. Except Beijing and Tianjin, other core cities such as Shanghai, Nanjing, Hangzhou, Chengdu and Chongqing are located in the south.

4 OPTIMIZATION IDEAS AND PATHS FOR UNBALANCED DEVELOPMENT IN THE NORTH AND SOUTH REGIONS

4.1 General idea: coordinate the relationship between the government and the market, and clarify the division of their roles

4.1.1 Government level: accelerate the reform of system and mechanism and improve the regional policy system

At the government level, efforts should be made to accelerate the reform of systems and mechanisms, improve the regional policy system, and ensure the coordinated development of regions from the system, which mainly includes three aspects. First, the government should actively formulate laws and regulations, build institutional mechanisms for regional coordinated development, including cooperation mechanisms in key areas and major policy communication and coordination mechanisms, break down regional administrative barriers, move from single regional development to multi regional coordinated development, improve the unity of policy formulation, rule consistency and implementation synergy, and strengthen cooperation between the north and the South and within the northern region.

Secondly, the northern region should change its concept, speed up the reform of ownership structure, treat the public sector and non-public sector equally, create a good investment and market environment, and attract more excellent private industrial enterprises to build factories and put them into operation; Accelerate the internal reform of state-owned enterprises, improve incentive measures, improve the production and operation efficiency of state-owned enterprises, and further expand the pilot scale of comprehensive reform of state-owned enterprises in the north.

4.1.2 Market level: give full play to the role of the market and promote the free flow of factors

The market is "an invisible hand" and plays a decisive role in the allocation of resource factors. The key to regional coordinated development lies in the rationality of factor allocation and the freedom of factor flow. First of all, we should strengthen the division of labor and cooperation among various capital markets and promote the orderly and free flow of capital across regions. The northern region should further deepen the reform of the financial system and the fiscal and tax

system, and strengthen the market vitality and factor circulation power; Secondly, establish and improve the market management system with unified standards. The South and North regions should establish a regional standard system according to their own conditions under the requirements of the national unified market to ensure fair competition and orderly cooperation in the market; Finally, we should improve the property rights trading market between regions and promote the cross regional online trading of various existing property rights trading markets. The northern region should actively promote the interconnection of public resource trading platforms, promote cross regional property rights trading, realize the sharing of property rights trading information and data, and protect the legitimate rights and interests of various industrial enterprises.

4.2 Industrial structure: strengthen industrial division and cooperation and optimize the industrial structure system

Reasonable industrial structure will promote the orderly and healthy development of urban economy to a great extent. The second industry in northern China is too heavy, the service industry develops slowly, and the industrial structure is unbalanced. In the future, we should effectively integrate resources, continuously promote the optimization and upgrading of industrial structure, and strengthen the industrial division and cooperation among regions. First of all, the northern region should strengthen the technological transformation of traditional manufacturing industries, actively develop new industrial formats, and speed up the transformation between old and new driving forces, such as health care, cold land tourism and other industrial growth points.

Secondly, the northern region should learn from the experience of the southern region, give full play to the comparative advantages of various regions, strengthen regional division of labor and cooperation, and achieve complementary development. Taking the three northeastern provinces as an example, we can sort out the resource endowments and advantageous industries of each province from the regional level, form a reasonable and complementary industrial division from the overall level, and achieve co construction, sharing and win-win results; In addition, the three northeastern provinces can strengthen industrial ties with Beijing Tianjin Hebei region, make full use of the innovative cluster industries in Beijing and Tianjin, strengthen industrial innovation and technological innovation, make full use of Russia's border advantages, strengthen industrial complementarity and commodity trade, and promote economic development.

4.3 Spatial pattern: optimize urban pattern network and strengthen regional linkage development

It is an economic law that industries and population are concentrated in advantageous regions, forming a growth power source with urban agglomeration as the main form, and then driving the overall efficiency of the economy. The national new urbanization plan also puts forward that China's urbanization development should take urban agglomeration as the main form to promote the coordinated development of large, medium and small cities and small towns. The northern region should rely on the pole driving role of the existing urban agglomeration, especially the Beijing Tianjin Hebei Urban Agglomeration, to fully strengthen the regional linkage development. At present, there is a certain gap between the Beijing Tianjin Hebei Urban Agglomeration and the Yangtze River Delta Urban Agglomeration and the Pearl River Delta urban agglomeration. We should speed up the adjustment and optimization of the spatial layout, enhance the competitiveness and economic strength of the central cities in the urban agglomeration, and drive the northern hinterland. Secondly, the northern region should accelerate the integrated development of metropolitan areas, including Shenyang metropolitan area, Lanzhou metropolitan area, Harbin metropolitan area, etc. To implement specific regional linkage development measures, the northern region should actively promote the construction of inter provincial industrial cooperation parks, such as the Hebei Beijing coordinated development demonstration park and the inter provincial cooperation Industrial Park jointly built by Nanchang Economic Development Zone and Tianjin Economic Development Zone; The northern region can focus on developing cross regional cultural tourism projects, such as the northwest ring road project in Lanzhou and Xining.

4.4 Infrastructure: accelerate the construction of interconnection and enhance the guarantee of coordinated development

The infrastructure of connectivity and management coordination is the support and guarantee for regional coordinated development. Regional transportation facilities, regional information facilities and regional energy facilities are indispensable. First of all, the northern region should strengthen the construction of comprehensive transportation system, including rail transit system, highway system, airport system and port system, especially the construction of high-speed rail network in the northeast and northwest regions, which currently account for only 6.5% and 9.6% of the national high-speed rail mileage respectively. Secondly, the northern region has gradually strengthened the construction of a new generation of information infrastructure, built a high-speed ubiquitous information network, and promoted the intelligent development of urban agglomerations, such as further promoting the scale layout based on Internet Protocol version 6 (IPv6), and promoting the construction of 5g networks. Finally, the northern region should further optimize the construction of energy facilities, coordinate the exploitation and utilization of oil, gas and coal energy, jointly promote the construction of new energy facilities such as wind energy and solar energy, further promote the construction of regional power grids, and improve the power exchange and supply guarantee capacity. It is worth noting that the northern region not only needs to further improve its internal infrastructure connectivity, but also should strengthen the links between the northern and southern regions.

5 CONCLUSION

China's economy has changed from a high-speed growth stage to a high-quality development stage, and the corresponding economic and social structure is undergoing profound changes. In the future, China will accelerate the construction of a new development pattern with the domestic big cycle as the main body and the domestic and international double cycles promoting each other, which puts forward higher requirements for optimizing the regional economic layout in the new era. Over the past two decades, the development gap among the eastern, central and western regions has gradually narrowed, while the economic development gap between the northern region and the southern region has gradually widened due to industrial structure, system and mechanism, and the degree of opening to the outside world, resulting in chain effects such as lagging infrastructure construction, insufficient innovation investment, and large population outflow. Under the new situation, the northern region should change its concept, focus on strengthening the innovation of system and mechanism, break down administrative barriers, respect market choice and objective laws, actively develop advantageous regions, strengthen the division of labor and cooperation within the region and with the southern region, and gradually narrow the gap with the Southern region and promote the coordinated development of the northern and southern regions by relying on the national strategic support such as the coordinated development of Beijing, Tianjin and Hebei and the comprehensive revitalization of the northeast and North. Of course, the revitalization of the northern region has a long way to go, and involves the overall consideration of all aspects. Starting from the objective data and factual characteristics, this paper puts forward the corresponding optimization ideas and paths, hoping to provide some reference for the coordinated development of the north and the south.

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