



A Study on the Uneven Development of Regional Integration in the China's Yangtze River Delta

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Abstract. With the support and transformation of the domestic and foreign economic dual circulation government work in the new era, accelerating the regional integration construction of the Yangtze River Delta is the same A key link. On the basis of various exchanges and cooperation between the government, enterprises and non-governmental organizations in the past, the Yangtze River Delta Development Zone has played its advantages under the geographical advantages and achieved the effect of rapid growth in the fields of economy, medical care and education, but the problem of unbalanced and uncoordinated development in the region has become more and more obvious. Based on the above problems and combined with the background analysis of the current environment of the new crown epidemic and industrial upgrading, the in-depth development of regional integration and policy improvement are becoming more and more important. Based on this, the analysis believes that it is a very desirable way to drive the development of backward areas in education, economy, trade, environment, medical care and other aspects through construction investment, humanistic care, employment security and other means to achieve a win-win situation. The ultimate goal of this paper is to achieve high-quality integrated development in the Yangtze River Delta region, and to explore paths and accumulate valuable experience for cities with integrated development in other regions of the country.

Keywords: Yangtze River Delta · Regional integration · Education · Unbalanced development · Transportation

1 Introduction

Since the reform and opening up, the Yangtze River Delta region has always been in an important position in China's economic development. Promoting development with reform, promoting the transformation and upgrading of industrial structure through innovation, and improving economic growth efficiency have become important strategic tasks for current development. The realization of regional integration construction is an important path to improve efficiency growth, which is conducive to the efficient allocation of production factors and the promotion of industrial integration.

In order to further promote the construction of regional integration and stimulate a new round of economic growth vitality, the central government has successively put

forward three major development strategies of Beijing-Tianjin-Hebei coordination, the Yangtze River Economic Belt and the “Belt and Road”, which have become an important engine for future national economic growth and efficiency improvement. The Yangtze River Economic Belt covers 11 provinces and cities, with a population and GDP of more than 40% of the country, and is an important part of China’s economic system. Practice has proved that a variety of new urban cooperation models such as “adjacent area cooperation”, “frog jump counterpart cooperation” and “trusteeship cooperation” are relatively sound in the development of China. The regional cooperation mechanism and the inter-regional benefit-sharing mechanism provide new ideas for the future regional integration development of the Yangtze River Delta and even the coordinated regional development of the whole country [1]. Under the influence of the new crown pneumonia epidemic, the Chinese government’s long-term “going out” strategy to control overcapacity has increased significantly in the uncertainty risk of international trade, which seriously restricts the effect of “de-capacity” in the use of the international market. In this context, the central government stressed the need to accelerate the formation of a “new development pattern with the domestic cycle as the main body and the domestic and international dual cycles promoting each other”. The study believes that giving full play to the advantages of the domestic super-large-scale market and tapping the potential of the domestic demand market will become a realistic path for the Chinese government to control overcapacity in the future [2]. At the macro level, the smooth realization of the “internal circulation” requires the establishment of a unified and open market system, however, there are still institutional obstacles in China that restrict the outflow of factors, the efficient distribution of products and the orderly circulation. Excessive intervention by local governments and other issues interfere in the process of regional integration. Local governments tend to adopt “beggar-thy-neighbor” development policies such as local protection and trade barriers, weakening the incentives for cooperation and common development between regions. The direct consequence of the segmentation of the market is that the serious industrial isomorphism and resource utilization efficiency are downturned, in order to pursue local tax growth and fiscal revenue increase, the formulation of local industrial policies focuses on the pursuit of “large and complete” or “small and fine” industrial structure layout, which makes eastern China. The similarity of industrial structure between the central and western regions is very high, which makes it difficult for regions to exert comparative advantages and causes great waste of regional resource advantages.

Based on the above analysis, the main question explored in this paper is how to improve the efficiency of regional economic growth through the regional integration construction of the Yangtze River Economic Belt. Consider how to establish a relatively complete set of programs to promote the development of surrounding backward cities while developing the yangtze river delta region while developing the economy of the Yangtze River Delta region, combined with the resource opportunities and challenges of the Yangtze River Delta, and to achieve the construction of regional integration, and provide reference for the Pearl River Delta, Beijing-Tianjin-Hebei and other regions that are building regional integration.

2 Historical Background

From the perspective of thrust, the most important causes of influence can be classified as natural causes - that is, geographical causes; From the perspective of trade development, the Yangtze River Delta is located in the lower reaches of the Yangtze River, east of the Yellow Sea, the East China Sea, located at the confluence of the rivers and seas, the region can rely on the Yangtze River water transport, communicate the east and west regions, connect the north and south regions, exchange foreign economy, it plays an important role in trade exchanges "to undertake the support pillar", which brings the innate advantage of "drainage resources" to the development of the Yangtze River Delta region, which is conducive to the accumulation of cost resources for the development of the region; From the perspective of people's livelihood development, the Yangtze River Delta is located in the plain area, with flat terrain, vast hinterland and sufficient water sources; Located in the subtropical monsoon climate zone, the temperature is suitable, the soil is fertile, the climate is relatively stable, which is conducive to the development of the primary industry in the Yangtze River Delta, providing the most adequate food security, so it has produced a famous commodity grain base in the country: Jiangnan Plain, Dongting Lake Plain, Poyang Lake Plain, Jianghuai Plain, Taihu Lake Plain, which also attracts more people to live here, bringing labor force to the development of the region and accumulating economic development capital.

At the pulling level, the policy factors of New China from its founding to the present have played a guiding role, the Yangtze River Delta is the pilot area of China's reform and opening up, and the government and relevant departments have provided important opportunities and strong driving forces in policy to promote regional cooperation and integrated development in the Yangtze River Delta; In terms of policy content, reform and opening up is an important era background for the integration of the Yangtze River Delta, from 1982, the State Council issued the "Notice on the Establishment of the Shanghai Economic Zone and Shanxi Energy Base Planning Office", proposing to establish The Shanghai Economic Zone with Shanghai as the center, Suzhou, Wuxi, Changzhou, Nantong, Hangzhou, Jiaxing, Huzhou, Ningbo and Shaoxing and other 10 cities to form the Shanghai Economic Zone, which also represents the earliest prototype of policy institutions for the cooperative development of the Yangtze River Delta; By 2008, the State Council had officially issued the Guiding Opinions on Further Promoting Reform, Opening Up and Economic and Social Development in the Yangtze River Delta region, marking the official elevation of regional integration to a national strategic decision. Then in November 2018, General Secretary Xi Jinping made important instructions to support the development of regional integration in the Yangtze River Delta and elevate it to a national strategy [3]; From the perspective of the number of relevant policies, the number of texts showed a fluctuating trend, with the proportion of implementation opinions in policy texts accounting for 30.43%, while the implementation details accounted for only 5.80%. In general, it shows that the state attaches great importance to the regional integration and development of the Yangtze River Delta, but the overall stability is insufficient, the number of relevant policies in the Yangtze River Delta region is small, and it has obvious characteristics of the central government taking the lead and the response of various provinces and cities. However, under the improvement of national

policies and the optimization of the overall layout, the cooperation in the integrated development of the Yangtze River Delta has ushered in a “dividend” development outlet.

3 The Current Situation Analysis

Through the comprehensive consideration of GDP comparison, education level distribution, medical resource allocation, talent attraction mechanism, transportation network construction and other aspects of some parts of the Yangtze River Delta, this paper believes that this will be the main factors that constitute the regional integration construction of the Yangtze River Delta.

From a macro level, the opportunity advantages of the Yangtze River Delta have provided a good external environment for the integrated development of the Yangtze River Delta for the world today to face major changes unprecedented in a century, the acceleration of the reform of the global governance system and the international order, and the convergence and integration of the world’s new round of scientific and technological revolution and industrial transformation and China’s domestic economic optimization and upgrading. Socialism with Chinese characteristics has entered a new era, and the economy has shifted to a stage of high-quality development, which puts forward higher requirements for the integrated development of the Yangtze River Delta [4]. The construction of the “Belt and Road” and the in-depth implementation of the development strategy of the Yangtze River Economic Belt have injected new impetus into the integrated development of the Yangtze River Delta, and it can be seen that the Yangtze River Delta has great development potential in all aspects.

On the other hand, there are also certain limitations and obstacles to the development of the Yangtze River Delta. As an important economic hinterland for foreign trade, the integrated development of the Yangtze River Delta is facing a more complex and changeable international environment, and the turmoil of external countries has also brought challenges to the regional integration development of the Yangtze River Delta. Analysis shows that the current international main challenge is the rise of protectionism and unilateralism in the world; The trend of economic globalization has slowed down, the uncertainty of world economic growth is relatively large, and the mechanism of cross-regional co-construction, sharing, co-protection and co-governance is not yet perfect; The development of the region is unbalanced and insufficient, and the level of integrated development of infrastructure, ecological environment and public services needs to be improved; The integration of science and technology and industry is not deep enough, and the synergy of industrial development needs to be improved; The administrative barriers that hinder the high-quality development of economy and society have not yet been completely broken, and a unified and open market system has not yet been formed; The comprehensive deepening of reform has not yet formed a system integration effect, and the institutional system linked to international rules has not yet been established, which are the new challenges that the Yangtze River Delta will encounter in the future integrated development.

(1) Uneven development of overall economic development.

First of all, from the PERSPECTIVE OF GDP in some parts of the Yangtze River Delta in 2021 (Table 1), the areas with relatively good economic development conditions in the

Table 1. The development gap in some parts of the Yangtze River Delta in 2021. [Note: Data collection and statistics by authors]

| City/Quantization | GDP of parts of the Yangtze River Delta in 2021 (100 million yuan) | increase speed | Urbanization rate |
|--------------------|--|----------------|-------------------|
| Shanghai | 43214.85 | 8.10% | 89.30% |
| Suzhou | 22718.3 | 8.70% | 81.72% |
| Chizhou | 1004.2 | 10.20% | 60.10% |
| Huangshan Mountain | 957.4 | 9.10% | 36.16% |

region, such as Shanghai, Suzhou, Hangzhou, Nanjing, Ningbo, and Wuxi, compared with areas with relatively backward economic development levels (such as Tongling, Chizhou, Huangshan), highlighting the large difference in regional production activity values in 2021. Among them, the GDP values of Shanghai and Huangshan differ by 4,225.745 billion yuan, and the growth rate of economic development is also quite different, which reflects the phenomenon that the Yangtze River Delta is still in an unbalanced development between regions.

(2) The allocation of basic needs for people's livelihood needs to be improved.

Second, education is an important cornerstone of national rejuvenation and social progress. General Secretary Xi Jinping stressed that we should adhere to the priority development of education as an important first move to promote the development of various undertakings of the party and the country, and constantly make education meet the requirements of the development of the cause of the party and the country, the expectations of the people, and the comprehensive national strength and international status of China [5]. As an important part of the public resources of each country, medical and health resources play an irreplaceable role in the social and people's livelihood, and the effective allocation of medical and health resources will improve the people's living standards and promote the construction of a harmonious socialist society. However, from the perspective of the national education situation (Table 2), China has more than 510,000 schools, 270 million students, and more than 16 million teachers, and the education volume is the largest in the world, but the development between regions, urban and rural areas, and schools is still unbalanced, and the educational needs of the masses vary greatly. Seeing the inter-city development in the Yangtze River Delta region, in some cities in the Yangtze River Delta listed, the city's middle schools, universities, and hospitals are in the construction and allocation of resources. The distribution of medical and educational resources varies greatly, and among them, the gap between educational and medical resources has widened by more than 10 times, which has greatly hindered the process of achieving regional integration in terms of people's livelihood needs.

(3) The supply and demand side of the employment problem is unbalanced.

Third, employment is an effective way to alleviate the gap between the rich and the poor and eliminate poverty on a large scale. The issue of employment and unemployment is an issue related to social justice, a very realistic social issue, and an issue related to the safe operation and healthy development of society. Secondly, for Chinese society, the problem

Table 2. Distribution of education and medical resources in some parts of the Yangtze River Delta in 2022. [Note: Data collection and statistics by authors, data from Office for National Statistics]

| City/City-wide statistics | Number of secondary school distributions | Number of hospitals distributed | Number of universities distributed |
|---------------------------|--|---------------------------------|------------------------------------|
| Shanghai | 850 | 405 | 63 |
| Hangzhou | 391 | 271 | 47 |
| Zhoushan | 41 | 56 | 4 |
| Tongling | 82 | 31 | 3 |

Table 3. Proportion of the labour force aged 15–59 in parts of the Yangtze River Delta [Note: Data collection and statistics by authors, Policy supply and reflection of regional integration in the Yangtze River Delta]

| city | Hangzhou | Suzhou | nanking | Shanghai | Zhenjiang | Xuancheng |
|-------------------|----------|--------|---------|----------|-----------|-----------|
| Labor force share | 70.10% | 69.50% | 68.30% | 66.80% | 64.60% | 63.80% |

of employment and unemployment is a very urgent problem, and with the deepening of regional optimization of China's modernization process and market economy process, the importance of this problem has become more and more prominent. First, let's first look at the distribution of unemployment rates in some cities in the Yangtze River Delta (Table 3), the proportion of unemployment rates in areas with relatively developed economies and resources is relatively high, and there is an upward trend, which shows that in economically more developed areas, employment pressure is high, job shortages, and talent competition is fierce; Second, from the perspective of labor distribution, more high-quality labor force is more willing to go to cities with great potential and opportunities for development. However, the risk that this is likely to occur in the future is that talents will become more and more concentrated, and the allocation of resources will be more and more "monopolized", and the consequence of this is that the development of regional integration in the Yangtze River Delta will become more and more unbalanced.

(4) The layout of the transportation network should be "covered with needs".

In the process of social and economic development, the role of transportation is particularly critical, for the economic exchanges and development between various regions has played a great role in promoting, the function of transportation to fully play, so that the means of production between various regions to be rationally allocated, and all kinds of resources to integrate, so that the industrial structure of each region is more reasonable, and ultimately make the regional economy think of a good direction of development. In July 2021, the National Development and Reform Commission issued the "Multi-level Rail Transit Planning in the Yangtze River Delta Region", planning that by 2025, the Yangtze River Delta on the track will be basically completed, forming a multi-level, excellent and high-quality rail transit system for trunk railways, intercity railways, urban

(suburban) railways, urban rail transit, and the Yangtze River Delta region will become a demonstration and leading area for the in-depth integration and development of multi-level rail transit. Effectively support the development of infrastructure interconnection and regional integration. The total mileage of rail transit reaches more than 22,000 km (including trunk railways, intercity railways, urban (suburban) railways and urban rail transit), the new mileage exceeds 8,000 km, high-speed railways reach cities above the prefectural level, railways connect all cities with a permanent population of more than 200,000, and rail transit transportation services cover 80% of urban areas with a permanent population of more than 50,000. However, according to the current situation, the traffic mileage of 41 cities in the Yangtze River Delta in 2020 is relatively large, of which Shanghai and Zhoushan are 845 km apart in terms of high-speed traffic mileage. However, due to the needs of urban land area and population base, some cities have no opportunity to declare rail transit construction in the future [6].

The data are derived from the statistical yearbooks, statistical bulletins and urban statistical yearbooks of Shanghai, Jiangsu, Zhejiang and Anhui provinces; Due to the lack of data in 2021, the 2020 data is uniformly used, of which the 2020 data of Jinhua City is missing, and the 2019 data is used).

(5) Unified and coordinated governance of the environment.

Through data analysis, it is found that the strategy of using the advantages of environmental resources to attract local government policies and forming industrial linkage to drive the development of backward areas will be a potential opportunity for the development of the Yangtze River Delta. The first point is that from the perspective of environmental index, due to the uneven distribution of the service industry and heavy industry in the interregional distribution, some cities with slow economic development have encountered environmental development problems at the same time, which will aggravate their financial burden, but under the dividends of the policy, they encourage the construction of natural scenic areas with excellent development potential and can circulate and drive regional economic development through government matchmaking or policy attraction. The construction of cultural tourism such as beautiful villages and exclusive IP. The second point is to establish unified environmental governance and protection measures, delineate the air pollution index in each area, and scientifically manage and realize a unified coordination mechanism for air quality management in the Yangtze River Delta region by improving the process or ordering rectification within a time limit. At the same time, the upstream cities ensure that the residents and industrial water of the downstream cities are normal, and because the entire Yangtze River Delta region is in the lower reaches of the Yangtze River, there are many lakes and wetlands, and while establishing a sound water coordination mechanism, protecting the natural ecological environment is the historical responsibility of the Yangtze River Delta region.

Overall trend changes: According to the GDP statistics of the past 5 years, it can be obtained that some cities with better economic development in the Yangtze River Delta have a faster growth rate in 5 years, while Tongling, Chizhou, Huangshan and other cities with relatively backward economic development are not only more backward in economic development, but also the growth rate is slowing down, which shows that although the country attaches importance to the development of the Yangtze River Delta within 5 years, However, the issue of regional integration has not yet been well resolved.

4 Optimize Configuration Recommendations

Different cities and regions in China are facing different development problems in development, and the Yangtze River Delta region, as the region with the highest degree of globalization, urbanization and industrialization in China, has also taken the lead in showing social problems such as population aging, migrant labor shortage, and low fertility rate. To alleviate the imbalance in the allocation of talents and resources in the Yangtze River Delta region and improve the livelihood of people in backward areas, combined with the above data analysis, the study puts forward the following suggestions:

Promote the integration of the human resources market [7]: The Yangtze River Delta region should continue to promote the integration of human resources in surrounding cities with Shanghai as the radiation center; Actively improve the welfare mechanism for talent mobility, carry out reasonable industrial layout and positioning according to the development of different cities, and promote the reasonable flow of talents; Regional governments coordinate and interact with the market, formulate a set of talent introduction policies suitable for their own regions, encourage the attraction of talents from surrounding developed cities, and jointly improve supporting systems such as employment, social security, and household registration policies, so that personnel can achieve cross-regional mobility and convenient employment, and ultimately achieve regional human resources sharing.

Improve the performance evaluation mechanism: According to the above analysis, it can be concluded that the full realization of regional integration in the Yangtze River Delta must establish a set of perfect performance evaluation mechanisms, and the existing integration policies in the Yangtze River Delta are more inclined to the number of projects landed than to the overall quality of the region, ignoring the different characteristics of governments at all levels. In the subsequent regional integration development, it is recommended that governments at all levels establish a set of programs suitable for local development according to local conditions, combined with regional characteristics and their own capabilities; The performance evaluation mechanism can be continuously improved in the process, and it must be true and reliable to ensure the implementation of the welfare and preferential policies of foreign personnel. Only by establishing a perfect evaluation mechanism can we exert great action and driving force in implementation and implementation.

Increase the construction of rural infrastructure resources: After investigating the resource allocation phenomenon in some parts of the Yangtze River Delta in 2021, it can be found that the distribution of medical and educational resources is quite different, which is not conducive to the process of regional integration in terms of people's livelihood needs. The study proposes to establish and improve regional integration through government investment, with policy attraction, local government funding, and relevant provincial departments to establish a policy of talents going to the countryside, giving outstanding teachers and doctors to the countryside the same or roughly the same welfare treatment in the original unit, attracting high-quality education and medical talents to backward areas, and prohibiting relatively developed areas from excavating outstanding talents from backward areas. During the period of work in the station, the local government should ensure that it is properly placed according to its reasonable requirements, and the unit should care about its daily living level. In accordance with the qualifications

of the introduced personnel and the relevant talent introduction policies of the local government, appropriate and reasonable compensation will be given, and the time limit of the contract shall be agreed, and the original unit may be returned to the original unit after expiration or the talent introduction contract can be re-drafted and renewed according to the current situation. (Compared with the previous special policies such as “three branches and one support”, the talent introduction policy carried out this time for the comprehensive and in-depth construction of regional integration in the Yangtze River Delta needs to be introduced in backward areas; When outstanding talents enter the region to carry out work, the education, medical care and other conditions of local residents’ children will also be significantly improved; At the same time, the smooth implementation of this policy will also effectively alleviate the problem of employment saturation in the surrounding developed areas, and promote the economic prosperity and infrastructure construction of backward areas).

Give play to the service function of the central city: the establishment of a regional development fund from the core area is mainly used for the completion of infrastructure projects in the peripheral areas, and the fund is focused on the construction of education, health facilities and human resources training in the peripheral areas; The surrounding backward areas are pulled by major developing cities to form a group. In the context of regional integration in the Yangtze River Delta, in the radiation range, there can be surrounding cities driving each other, interlocking, the upper layer forms a large regional community, the lower layer forms a small, vertical downward, each layer forms a perfect mutual aid chain, in the development of mutual help, complementary advantages, and jointly promote economic development.

5 Conclusions

This paper mainly analyzes the thrust level and the pull level, combined with the geographical environment, political environment and national policies of the Yangtze River Delta, analyzes the external conditions and advantages of the Yangtze River Delta region that can develop rapidly in recent years. The preconditional geographical factors make the Yangtze River Delta region have a better development hinterland and an effective space for economic development compared with other regions in China; Whether from the national strategy, the people’s livelihood plan, or from the perspective of economic development, it is urgent to accelerate the regional integration of the Yangtze River Delta [8]. In the past, the strategic cooperation proposed was generally based on economic development, and many of the plans listed were ultimately not effectively implemented due to the decision-making of the local government, the lack of outstanding talents, the lack of detailed plans, the lack of pioneering spirit, etc., so that the regional integration policy was not fully implemented; At the same time, some areas have not been well integrated into the construction in the process of regional integration and development, resulting in no regional effect and missing development opportunities; In the past, backward cities in the development and construction, too heavy on the economy, ignored or diluted the development of the entire city’s education, medical care and other areas of people’s livelihood, did not use a set of perfect urban layout to create a new urban planning system. According to the imbalance, the study believes that measures such as the

integration of human market resources, the improvement of the performance evaluation mechanism, the increase in the construction of rural infrastructure resources, and the service function of central cities should be brought into play. There is still a long way to go to achieve the regional integration process of the Yangtze River Delta, this process must require the government, enterprises, non-governmental organizations to work together, in the future development of the joint construction of regional ecological chain, the region as the human body's ecological circle, in the construction of each important "organ" at the same time, also need "heart parts" - to other parts of the continuous "blood transfusion" and "blood return", in the minimum of people's livelihood security together to achieve resource allocation regional integration development.

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