

Research on the Promotion Strategy of High-quality Development in the Yangtze River Economic Belt

Yue Guo, Xinyu Zhang, Wenjie Shen and Sihan Ren

Anhui University of Finance and Economics, Bengbu, 233030, China

Abstract

The three cities and provinces in the middle and western reaches of the Yangtze River are key areas to promote the development of the Yangtze River Economic Belt, promote the rise of the central region, and consolidate the strategic pattern of "two horizontal and three vertical" urbanization, and play an important role in China's economic and social development pattern. This paper analyzes the relationship between the digital economy, industrial upgrading and the green and High-quality development of the regional economy in the Yangtze River Economic Belt. On this basis, it puts forward relevant policy implications, such as: increasing fiscal expenditure, expanding opening to the outside world, optimizing the scale of cities, and strengthening High-quality development cooperation between regions.

Keywords

Yangtze River Economic Belt; High-quality Development; Improvement Path.

1. Introduction

On January 5, 2016, General Secretary Xi Jinping proposed at the symposium on promoting the development of the Yangtze River Economic Belt, "to focus on large-scale protection and not to engage in large-scale development", and emphasized that for a long time now and in the future, it is necessary to put the restoration of the ecological environment of the Yangtze River over the top. It takes ecological and environmental protection as the goal to lead the economic development of the Yangtze River Economic Belt. The 19th National Congress of the Communist Party of China proposed to "establish a diversified and market-oriented ecological compensation mechanism", establish a leadership system and working mechanism for cooperation between the government and the market, innovate a multi-participation mechanism for watershed environmental protection, build a platform for market participation in ecological environment construction, and build a multi-participation ecological environment. Incentive policies and monitoring mechanisms for environmental governance. The construction of the Yangtze River Economic Belt is a major national strategy in my country's regional economic development. However, with the rapid economic development, the contradiction between resources and the environment in the Yangtze River Economic Belt has become increasingly prominent. The resources are depleted and the environment is deteriorating. High-quality economic development has become an inevitable choice[1].

On March 5, 2021, Premier Li Keqiang pointed out in the government report that it is necessary to accelerate the digital development of the entire industry, build new advantages in the digital economy, promote the transformation and upgrading of industrial digitalization and digital industrialization, and accelerate the process of promoting the construction of a digital society. The scale of China's digital economy has increased from 2.6 trillion in 2005 to 35.8 trillion in 2019, and the proportion of digital economy added value in GDP has risen from 7% in 2005 to 29% in 2019, indicating that the current digital economy It has played a very important role in promoting the development of the national economy[2]. At the same time, after more than 40

years of reform and opening up, my country's economy has entered a stage of High-quality development. As the "golden corridor" of China's economic development, the Yangtze River Economic Belt has unique resources and geographical advantages, so it should become the pioneer of China's High-quality development. After the 19th National Congress of the Communist Party of China, General Secretary Xi Jinping has repeatedly emphasized that the key to promoting the development of the Yangtze River Economic Belt is to do a good job of strategic planning, guiding planning and technological innovation, and to promote High-quality economic development with the development of the Yangtze River Economic Belt. This requires the practical implementation of the "Five Development Concepts", prioritizing environmental protection and green development, and the development of the digital economy can better meet the needs of the people who want both "gold and silver mountains" and "lucid waters and lush mountains". Double appeal[3].

Most of the existing studies focus on the connotation of High-quality development, the measurement of High-quality development level, and the influencing factors of High-quality development. There is still room for further research on the measurement and improvement path of High-quality development in the Yangtze River Economic Belt[4]. On the basis of summarizing and summarizing the research on the measurement and improvement of High-quality development level by domestic and foreign scholars, this paper takes the Yangtze River Economic Belt as the research object, and constructs the Yangtze River economy from the four dimensions of economic growth quality, environmental governance ability, green living ability, and resource utilization ability. With a High-quality development level evaluation system, the AHP and grey relational methods are used to measure, and the key factors affecting the High-quality development level are further examined, and relevant policy recommendations are finally put forward. Compared with the existing research, the marginal contribution of this paper can be summarized as follows: First, there are differences in different regions, and the relevant research results in other regions may not be applicable to the Yangtze River Economic Belt. This paper uses the panel data of prefecture-level cities to study the Yangtze River Economic Belt. Provide a more scientific theoretical basis for the formulation of High-quality development policies in the Yangtze River Economic Belt. Second, this paper measures the weight of High-quality development level indicators and the High-quality development level based on the analytic hierarchy process and grey relational method, so as to point out the focus and provide theoretical support for the improvement path of High-quality development level. Third, the measurement of High-quality development level only answers the question of "what", but not "how". On the basis of measuring the High-quality development level of the Yangtze River Economic Belt, this paper constructs a panel model, explores a feasible path to improve the High-quality development level of the Yangtze River Economic Belt, and further answers the question of "how to do it".

2. Literature Review

The existing literature mainly focuses on the High-quality economic development and the relationship between the digital economy, industrial structure upgrading and High-quality economic development, which is embodied in the following aspects:

2.1. Drivers and Measures

The driving factors Ren Baoping and Li Yumo [5] believe that the driving force for High-quality economic development is technological innovation, High-quality human capital, and the level of cooperation between High-quality productivity factors; China's economy currently has high economical impact in terms of development structure, power and efficiency. There are still constraints on the improvement of quality development . In the future, innovation-driven, structural rebalancing and development efficiency will become the new impetus for the High-

quality development of China's economy [6] Measured indicators Zhu Bin [7] from the five dimensions of population, society, economy, environment, and resources To build a High-quality development index system, it is found that China's High-quality economic development as a whole presents a spatial distribution pattern that is strong in the east and weak in the west and weak in the south and the north; Wu Zhijun and Liang Qing [8] focus on innovation, coordination, comprehensive quality and efficiency, greenness, and openness. And sharing 6 dimensions to construct an indicator system for High-quality economic development, it is found that China's High-quality economic development presents a significant regional uneven distribution pattern, which generally shows a decreasing spatial distribution pattern in the east-central-west.

2.2. The Impact of Digital Economy on High-quality Economic Development

In the early literature on the relationship between the digital economy and economic development, most of the studies focused on the impact of the digital economy on the operating efficiency of the market economy [9-11], while there were relatively few studies directly surrounding the impact of the digital economy on economic development. There is little literature that directly discusses the impact on the quality of economic development. In recent years, especially since the 19th National Congress of the Communist Party of China, domestic scholars have begun to pay attention to the research on the impact of the digital economy on the quality of economic development. Jing Wenjun and Sun Baowen [12] believe that the digital economy can have an impact on the High-quality economic development based on multiple dimensions. At the micro level, the digital economy centered on the mobile Internet can combine economies of scope, economies of scale, and long-tail effects, and promote the matching of market supply and demand, thereby optimizing the allocation of market resources, thereby promoting High-quality economic development. At the macro level, the digital economy can promote the quality of economic development by improving resource allocation efficiency and total factor productivity. Further, Ding Zhifan [13] started from the theoretical analysis framework of micro, meso and macro, and found that at the micro level, the digital economy can not only help enterprises to improve the impact of economies of scale and scope, but also improve the efficiency of resource allocation, thereby promoting economic growth. Quality development; at the mesoscopic (industry) level, it can optimize the level of the industrial structure with the help of the three major effects of industrial innovation, coordination and integration, and promote the rationalization and advanced transformation and upgrading of the industrial structure; at the macro level, increase production factors and deepen capital. Accumulate and improve the allocation of factors to improve the total factor productivity of the social economy, so as to improve the quality of economic development. Zhang Teng et al. [14] used a spatial econometric model to study and found that the digital economy has a significant improvement effect on High-quality economic development.

2.3. The Impact of Industrial Structure Upgrading on High-quality Economic Development

At present, there are few literatures that directly study the impact of manufacturing structure upgrading on the quality of economic growth, and most of them focus on the impact of industrial structure upgrading on economic growth. Dekle et al. [15] believed that in the process of industrial structure transformation and upgrading, different industrial sectors correspond to different productivity levels, and input factors often flow from lower productivity sectors to higher productivity sectors, generating structural dividends, thereby promoting economic sustainability. increase. Gan Chunhui et al. used the fixed-effect model to study and found that the promotion of industrial structure transformation on economic growth showed significant periodic characteristics. Rationalization of industrial structure can inhibit economic fluctuations, and high polarization of industrial structure can break the original economic

growth. The equilibrium level plays a role in promoting economic fluctuations. As for the relationship between the upgrading of industrial structure and the quality of economic growth, relevant research is still in its infancy and needs to be further expanded. Ren Xiaoyan and Yang Shuili pointed out that in view of the large differences in industrial structure in different regions of China, the impact of industrial structure upgrading on High-quality economic development in the eastern, central and western regions is different. Zhu Fenghui and Liu Lifeng found through the study of the spatial econometric model that with the optimization and upgrading of the industrial structure, the overall quality of China's economic development presents a spiral upward trend, and it also has a spatial spillover effect. Fan Qingquan et al. found through the panel threshold effect model test that, based on the premise of effective control of environmental pollution, with the continuous improvement of the level of clean industrial structure, the upgrading of industrial structure has a significant effect on the quality of economic development. In addition, some scholars have studied the relationship between specific industrial structure upgrading and economic growth. Sepp et al. studied the productivity of many countries and found that the upgrading of manufacturing structure will produce a significant positive economic growth effect.

3. Theoretical Mechanism of High-quality Development

3.1. The Mechanism by Which Digital Economy Affects High-quality Economic Development

The digital economy centered on the Internet uses efficient information calculation and information transmission to affect the industrial chain organization division of labor, value distribution, transaction costs, external demands and other ways, prompting changes in the traditional manufacturing industry chain, thereby promoting the upgrading of the manufacturing industry. First, the digital economy breaks the rigid constraints of geographic space on the organization and division of labor in traditional industrial chains, greatly expands the boundaries of its division of labor, accelerates the optimization and upgrading of the industrial chain at the manufacturing end, and promotes the upgrading of the manufacturing industry. An organizational network based on high-efficiency digital information can not only improve resource sharing and professional collaboration among organizational divisions, but also reduce the dependence of organizational division on adjacent geographic spaces, thereby accelerating the pursuit of economies of scale, scope, and transaction costs. The targeted manufacturing enterprises have changed from geographic space agglomeration to virtual internet network agglomeration. Second, the digital economy will reconstruct the value distribution method of the traditional manufacturing industry chain. The application of digital information technology represented by big data and artificial intelligence has greatly improved the production efficiency of the industrial chain of manufacturing enterprises and the space for product value appreciation. The volume is often greater than the knowledge-intensive product development and product marketing links. The integration of digital information technology and advanced production tools improves the production efficiency and value creation of the processing and manufacturing links, thereby reducing the manufacturing industry chain. The processing and manufacturing links and the R&D and design links The value distribution gap between product marketing and product marketing will reshape the value distribution form of the "smile curve" of the traditional manufacturing value chain, so as to promote the division of labor in the production chain to realize the upgrading of the manufacturing industry.

Third, the digital economy can reduce the transaction cost of the division of labor in the industrial chain. According to Matthews' division method of transaction cost, transaction cost includes execution cost and organizational cost, which depends on the interaction of network information, and its changes are affected by the organizational form on the industrial chain and

the number of members in the organization. The development of the digital economy will reduce the execution cost and organizational cost of enterprises, and also reduce the transaction cost of the division of labor in the industrial chain, thereby breaking through the restrictive effect of transaction costs on enterprises and the dependence of enterprises on adjacent geographic spaces, which is a great tool for manufacturing enterprises. It seeks higher value returns, thereby enabling the upgrading of the manufacturing industry. Fourth, the digital economy will reshape consumer demand. In the context of the rapid development of the digital economy, Internet companies will drive the development of online platforms, and the rise of these Internet platforms will amplify the "long tail effect" that is, under the platform-based business model, will continue to amplify the heterogeneous needs of consumers, which will greatly increase the demand for small batches and personalized products, which will lead to changes in consumer demand. At the same time, it will accelerate the disintegration of the traditional manufacturing industry chain. Under the force of the new consumption model, it will promote the division of labor in the traditional industry chain. It is inevitable to realize the upgrading of manufacturing industry.

In addition, upgrading the manufacturing industry is conducive to promoting High-quality economic development. In the context of the development of the digital economy, with the integration of digital new technologies represented by big data and artificial intelligence, the manufacturing industry chain has also ushered in a comprehensive innovation, and the upgrading of the manufacturing industry can be achieved. Production, management and other links improve the quality of economic development, thereby promoting High-quality economic development. First of all, on the R&D side, enterprises can upgrade the manufacturing industry to reduce the production cost per unit product and increase corporate profits, and the improvement of operating efficiency will force manufacturing enterprises to increase product research and development efforts, improve their technological innovation capabilities, and speed up the transformation of technological achievements. It is the pace of actual productivity, thereby promoting High-quality economic development. Secondly, on the production side, through the upgrading of the manufacturing industry, enterprises abandon the traditional manufacturing production method, improve the efficiency of resource allocation and product quality, and realize the transformation from "extensive" production to "intensive" production and resource-wasting to environment-friendly transformation, so as to promote High-quality economic development. In addition, on the management side, the upgrading of the manufacturing industry can stimulate the enthusiasm of managers to learn, improve their own management level, and continuously improve the efficiency of enterprise operation and management. Contribute to high quality.

3.2. Nonlinear Spillover Effects of Digital Economy on High-quality Economic Development

In the context of the digital economy, due to the decrease in the cost of information acquisition, the economic activities of various departments in manufacturing enterprises have become more frequent, and the division of labor has become more clear. The integration of new digital technologies promotes the transformation and upgrading of traditional manufacturing industries to modern manufacturing, prompting enterprises to expand reproduction, which in turn produces economies of scale, economies of scope and knowledge spillovers, enabling surrounding areas to obtain dividends from High-quality development and triggering the spillover effect of High-quality economic development. When the digital economy develops to a certain extent, the marginal cost of economic activities among various departments of the enterprise shows a slow downward trend and a geometric upward trend for the benefits, and the improvement of the development level of the digital economy and the upgrading of the

manufacturing industry will expand this trend, that is, Metcalfe The rule is established in the High-quality development of the regional economy.

3.3. Spatial Spillover Effects of Digital Economy on High-quality Economic Development

The digital economy is characterized by high technology, high growth, and high permeability. Through efficient and accurate information transmission, it compresses the dependence on geography, time and space, and enhances the depth and breadth of the connection with surrounding areas. Yilmaz et al. used panel data of 48 states in the United States and found that network informatization has a spatial spillover effect by using an econometric model. Liu et al. found that the Internet has a significant spatial spillover effect on the level of economic development through a spatial econometric model, and at the same time has a significant role in promoting the optimization of industrial structure. Through the study of spatial econometric model, Zhang Teng et al found that there is a significant spatial spillover effect in the digital economy.

4. Conclusions and Recommendations

Based on the above research conclusions, in order to further improve the high-quality development level of the Yangtze River Economic Belt, this paper puts forward the following policy recommendations:

First, increase fiscal expenditure and play a promising government role. Improve the support and restraint of fiscal expenditures in High-quality development, especially increase financial subsidies for green environmental protection industries, and stimulate their green innovation capabilities. Strengthen the access restriction management of energy conservation and environmental protection, strictly control the entry of high-polluting and high-energy-consuming industries, and strengthen environmental regulations and government interventions for existing high-polluting industries, and strictly control the discharge of pollutants. Comprehensively promote the construction of green basic public services, strengthen support for green basic public services, optimize the supply of green public infrastructure, and promote the equalization of green public services.

Second, expand the level of opening to the outside world and continue to optimize the scale of cities. On the one hand, rationally raising the level of opening to the outside world is conducive to enhancing technology spillover and diffusion effects. Therefore, foreign capital should be actively guided to flow to high-tech industries and service industries, and the entry of "three high" foreign-funded projects should be strictly restricted. Increase opening-up efforts, with the help of foreign capital, adjust the industrial structure, optimize the industrial layout, learn from the development experience of upstream regions, and promote High-quality development in the middle and downstream regions. On the other hand, a reasonable city scale is conducive to exerting the talent agglomeration effect. Therefore, it is necessary to continue to increase the proportion of urban population in the upper and middle reaches and attract all kinds of high-tech talents, so as to promote the improvement of the High-quality development level of the Yangtze River Economic Belt. Excessive city scale will bring crowding effect, which is not conducive to the improvement of High-quality development level. Therefore, it is necessary to reasonably guide the transfer of talents from the downstream areas to the middle and upper reaches, which can not only alleviate the crowding effect caused by the unreasonable scale of the city, but also give full play to the role of talents, so as to better promote the green coordinated development of the upper, middle and lower reaches.

Third, strengthen inter-regional High-quality development cooperation and improve resource utilization capabilities. Drive High-quality development with innovation, establish a green

technology innovation exchange platform in the Yangtze River Economic Belt, and accelerate the formation of a scientific and effective green talent co-construction and sharing mechanism. Transform the development mode within the global space, strengthen regional cooperation, explore the construction of a global modern ecological industrial system, and improve resource utilization capabilities. Fully explore the resources in the upper, middle and lower reaches of the Yangtze River Economic Belt, especially the rich natural resources in the upper reaches, and accelerate the promotion of ecological industrialization. Sort out the characteristics of natural resources and human resources, and lay the foundation for the ecologicalization of the industry. Improve the value of ecological products in the upper, middle and lower reaches of the Yangtze River Economic Belt, and strengthen the linkage and mutual promotion of ecology and industry. Fully tap green ecological products, extend the industrial chain, increase added value, and realize that the green economy drives High-quality development, and High-quality development feeds back the green economy.

Acknowledgments

This work is supported by the National Student Innovation and Entrepreneurship Training Project of Anhui University of Finance and Economics, project number: 202110378272.

References

- [1] Belforte, G., Eula, G., Ferraresi, C., Ivanov, A., Testore, F., 2009. New method for raising High-quality fabrics. *Journal of the Textile Institute* 100, 358-367.
- [2] Feng, M., Guo, H.X., 2019. Research on the Evaluation of High-quality Economic Development Based on Factor Analysis. *Journal of Scientific & Industrial Research* 78, 827-830.
- [3] Gama, A.P., Gaitan, A.A.A., Arteaga, M.I.R., Gomez, G.H., Gomez, C.L.C., Mena, A.M., Ieee, 2014. In Search of High Quality in Postsecondary Education in Colombia, *IEEE Frontiers in Education Conference (FIE)*, Madrid, SPAIN.
- [4] Huang, X.H., Cai, B.Q., Li, Y.L., 2020. Evaluation Index System and Measurement of High-quality Development in China. *Revista De Cercetare Si Interventie Sociala* 68, 163-178.
- [5] Li, B.X., Wang, H., Comprehensive evaluation of urban High-quality development: a case study of Liaoning Province. *Environment Development and Sustainability*.
- [6] Li, Z.D., Yang, W.P., Wang, C.J., Zhang, Y.S., Yuan, X.L., 2019. Guided High-quality Development, Resources, and Environmental Forcing in China's Green Development. *Sustainability* 11.
- [7] Munter, C., 2014. Developing Visions of High-quality Mathematics Instruction. *Journal for Research in Mathematics Education* 45, 584-635.
- [8] Prajapati, H.B., Dabhi, V.K., Ieee, 2009. High Quality Web-Application Development on Java EE Platform, *IEEE International Advance Computing Conference*, Patiala, INDIA, pp. 1663-1668.
- [9] Salzenstein, P., Saleh, K., 2015. Advances in high quality factor optical resonators for optoelectronics, *Conference on Nonlinear Optics and Applications IX*, Prague, CZECH REPUBLIC.
- [10] Tian, S.Z., Qi, A., Li, Z.H., Pan, X.B., Liu, Y.S., Li, X.M., 2022. Urban "Three States" Human Settlements High-quality Coordinated Development. *Buildings* 12.
- [11] Tian, W., Li, W.H., Song, H.F., Yue, H.D., 2021. Analysis on the difference of regional High-quality development in Beijing-Tianjin-Hebei city cluster, *8th International Conference on Information Technology and Quantitative Management (ITQM) - Developing Global Digital Economy after COVID-19*, Chengdu, PEOPLES R CHINA, pp. 1184-1191.
- [12] Wei, D.D., Qiu, L.X., Yu, H.H., Ieee, 2017. Research on Design and Development of High-quality Micro-lecture Resources, *12th International Conference on Computer Science and Education (ICCSE)*, Houston, TX, pp. 634-638.
- [13] Wu, F., Wang, X.G., Liu, T., 2020. An Empirical Analysis of High-quality Marine Economic Development Driven by Marine Technological Innovation. *Journal of Coastal Research*, 465-468.

- [14] Yu, W.R., McCann, J.A., Acm, 2015. High Quality Graph-Based Similarity Search, 38th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), Santiago, CHILE, pp. 83-92.
- [15] Zhao, K., Wu, W.S., Ye, J.M., How trade affects High-quality development through spillovers? Economic Research-Ekonomska Istrazivanja.