

The Impact of Digital Economy on the Coordinated Development of Urban and Rural Areas in the Context of Common Prosperity

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ABSTRACT

Chinese modernization is the modernization of common prosperity for all people, and only by achieving common prosperity can the all-round development of people be implemented. The difficulty and focus of common prosperity lies in promoting the coordinated development of urban and rural areas. In recent years, the digital path has been a new direction for the coordinated development of urban and rural areas, and the digital economy has empowered rural revitalization to become a new driving force for the high-quality development of agriculture and rural areas, gradually reducing the difference between urban and rural development. Therefore, on the basis of the principle analysis of the digital economy and the coordinated development of urban and rural areas, this paper emphasizes that the new development stage should actively promote the in-depth reform of the digital economy, pay attention to preventing and resolving potential risks while expanding the scale, and further give full play to the positive role of the digital economy in promoting the coordinated development of urban and rural areas, so as to empower high-quality economic development.

KEYWORDS

Common Prosperity; Digital Economy; Coordinated Development of Urban and Rural Areas.

1. INTRODUCTION

Over the past 40 years or so of reform and opening up, China's economic development has been rapid, and at present, it has basically achieved the accumulation of quantity and the speed of catching up, and has achieved development achievements that have attracted worldwide attention. At present, China's comprehensive national strength is constantly increasing, and the people's living standards have also been markedly improved, but the existing problems and hidden crises are also quite obvious. From the perspective of the overall economic development structure, limited by China's long-term urban-rural dual economic structure, the current development gap between urban and rural areas in China is still relatively large, resulting in practical problems such as unbalanced and uncoordinated urban and rural economic development, so it is urgent to actively promote high-quality economic

development in order to achieve common prosperity. In this context, how to balance urban-rural development and alleviate the urban-rural gap has become an important issue to be solved urgently in the academic community.

The dual economic structure of urban and rural areas is a typical feature of China's economic and social development. Due to the long-standing constraints of the dual economic structure and the irrational allocation of resources, China's economic development has created huge wealth at the same time, but there have been disparities and unfairness. According to the public data of the National Bureau of Statistics, China's Gini coefficient has shown a trend of first increasing and then decreasing since the reform and opening up. Before the implementation of reform and opening up, the economic growth of urban and rural areas in China was unbalanced, and even formed a vicious circle, which was manifested in the partial urbanization of institutional policies and preferential measures, so the dual economic structure of urban and rural areas was increasingly solidified [1]. In the early days of reform and opening up, the market economy also emerged in urban areas, and the economic ties between urban and rural areas were not very close, which made the gap between urban and rural areas continue to widen. With the gradual deepening of reform and opening up, the problem of urban-rural disparity has been paid more and more close attention by the government, in view of this, in the new development stage, China needs to coordinate the promotion of new urbanization, actively implement strategies such as rural revitalization, strive to break the dual economic structure of urban and rural areas, and take urban-rural integration as the starting point to promote the coordinated development of urban and rural areas.

At the same time, with the progress of science and technology, digital technology is constantly upgrading, and the digital economy is fully integrated and penetrated into many fields, and people's production and life are undergoing profound changes. During the pandemic, the digital economy has played a huge role in epidemic prevention and control, maintaining social production and order stability, and effectively ensuring people's basic livelihood. Not only that, in the battle of poverty alleviation in the context of epidemic prevention and control, the digital economy has effectively ensured the realization of the poverty alleviation goal as scheduled with the platform built by big data. In recent years, the scale of China's digital economy has been rising, and the digital economy has become a key engine to promote high-quality economic development. The "14th Five-Year Plan" and the outline of the long-term goals for 2035 emphasize that China must accelerate the development of key digital technologies, give full play to the special advantages of the digital economy, especially on the basis of big data and intelligent application scenarios, deepen the integration of digital technology and the real economy in an all-round and multi-level manner, and actively promote the transformation and upgrading of traditional industries, which will not only help create new advantages in China's economic development, effectively respond to the fierce international competition in the future, but also help empower high-quality economic development.

This paper fully absorbs the existing major research results and deeply explores the impact mechanism of digital economy on the coordinated development of urban and rural areas. The possible innovations of this paper are: first, to refine the research perspective, which not only enriches the relevant research on the digital economy, but also supplements the research on the influencing factors of urban-rural coordinated development, and provides a new path for promoting the coordinated development of urban and rural areas. Second, the combination of theory and empirical methods is used to deeply analyze the impact mechanism of digital economy on the coordinated development of urban and rural areas. Thirdly, the main content of this study can provide new ideas for academic research and provide theoretical reference and empirical basis for government decision-making departments to develop digital economy.

2. LITERATURE REVIEW

By combing through the representative achievements of the academic community, the connotation of the digital economy has not yet formed a unified standard, and scholars mainly interpret the digital economy from three perspectives based on factors such as national conditions and economic development status. First, from the perspective of industry, the digital economy includes two levels: digital industrialization and industrial digitalization, and the digital economy promotes major adjustments in the industrial structure, which not only enhances the added value of digital core industries, but also promotes the optimization and upgrading of traditional industries [2]. Second, from the perspective of factors, different from the traditional factors of land, labor, and capital, data is a new factor that is incorporated into economic and social production activities, and data has outstanding mobility and technology, and is deeply integrated with traditional factors of production, showing significant positive externalities for economic development [3]. Third, from a technological perspective, the core connotation of the digital economy is the rapid innovation and widespread application of digital technology, which optimizes the economic development structure and reshapes the way of social governance through innovation-driven effects, and accelerates the digitalization process of the real economy, ultimately promoting economic growth [4]. At present, domestic scholars have conducted detailed and in-depth research on the digital economy, but there is no unified standard system for its index measurement, and there are two main measurement methods. First, the digital economy development index published by authoritative research institutions such as CCID Research Institute and Tencent Research Institute is directly used in the research [5], and second, scholars construct their own index system according to the connotation and scope definition of the digital economy to measure the digital economy index [6].

The coordinated development of urban and rural areas has always been a hot topic in the academic circles, and the existing studies mainly use ArcGIS and spatial autocorrelation methods to explore the spatial pattern and spatiotemporal evolution characteristics of the coordinated development of urban and rural areas. In the process of research, although scholars have different emphases on the coordinated development of urban and rural areas, their understanding of its essence is relatively unified, emphasizing the interdependence and interconnection of urban and rural areas, involving the coordination of economic, social, and environmental aspects, and requiring the gradual elimination of the dual structure of urban and rural areas in order to narrow the gap between urban and rural areas and improve economic efficiency and the welfare level of urban and rural residents [7]. The gap between urban and rural areas is widespread in all countries of the world, and it is an inevitable problem in the process of economic and social development. Therefore, exploring the influencing factors of urban-rural coordinated development to alleviate the urban-rural gap and promote urban-rural coordinated development is a current research hotspot. From the perspective of institutions, the formulation of scientific urban-rural development strategies is conducive to promoting the coordinated development of urban and rural areas, such as reforming the household registration system and land distribution system, and through innovative systems, the relationship between urban and rural areas can be coordinated, and the economic system of urban and rural areas can be optimized, so as to finally realize the integrated development of urban and rural areas. From a technical point of view, compared with urban areas, the backward production technology in rural areas greatly limits the large-scale production of agriculture, affects the long-term sustainable development of the rural economy, and makes the resource allocation and factor flow between urban and rural areas in an unbalanced state [8], widening the gap between urban and rural areas, so it is necessary to improve the educational inequality and strengthen the investment of human capital in rural areas to improve the level of agricultural mechanization and thus contribute to the coordinated development of urban and rural areas [9]. With the deepening of research, scholars have gradually refined their research perspectives, considering not only the macro-level influences, but also the micro-level factors at a deeper level.

Based on the existing literature, it can be found that both the digital economy and the coordinated development of urban and rural areas have been very rich in relevant studies in the academic circles, but few studies have used the combination of theory and empirical evidence to explore the impact of the digital economy on the coordinated development of urban and rural areas, and the value of new economic forms such as digital economy on the coordinated development of urban and rural areas has not been paid attention to. Scholars pay more attention to the research of digital economy and urban-rural coordinated development, but few existing studies have explored the mechanism of digital economy on urban-rural coordinated development, that is, there is still a lack of direct evidence on the impact of digital economy on urban-rural coordinated development. This paper intends to use a combination of qualitative and quantitative analysis to explore the mechanism of the impact of digital economy on the coordinated development of urban and rural areas, in order to deepen the existing research perspective to a certain extent.

3. THE CURRENT SITUATION AND PROBLEMS OF COORDINATED DEVELOPMENT OF URBAN AND RURAL AREAS

3.1. The Problem of Large Rural Population and Low Urbanization Rate is Still Widespread

The urbanization rate is the most intuitive indicator to measure the degree of urban-rural integration, and the current urban-rural integration status can be further analyzed through the urbanization rate, and the urban-rural integration degree is higher in areas with high urbanization rate. According to the urbanization rate in 2021 announced by various provinces and autonomous regions, Guangdong Province has the highest urbanization rate at present, with an urbanization rate of 74.63%, which has entered a stage of stable development. As a demonstration area with a high level of urbanization, Jiangsu Province has an early start to urbanization, and at the same time actively promotes the development of new urbanization, by improving the employment rate of rural labor transfer, optimizing the spatial layout of urbanization, building a coastal urban development axis, creating a new layout of high-quality urbanization development, improving the urbanization rate, and promoting urban-rural integration, as of 2021, the urbanization rate of Jiangsu Province has reached 73.94%, and the development is stable. Nevertheless, the problem of low urbanization rate is still widely existing in other provinces in the demonstration area, such as Henan Province, the urbanization rate is only 56.45%, combined with the analysis of industrial development and population in Henan Province, Henan Province, as a typical Central Plains province, has a large population, while the total development of secondary and tertiary industries is relatively low, and the accommodation rate of rural population is low, resulting in the current agricultural population in Henan Province still accounts for a large number of people, and the urbanization rate is low. Many provinces and cities with low urbanization still have a long way to go in exploring the work of improving the level of urbanization.

3.2. The Imbalance between Urban and Rural Development is Serious, and the Income Gap is Still Large

The income gap is the core indicator to measure the efficiency of urban-rural integration development, and the urban-rural per capita income gap reflects the urban-rural income gap. In response to the problem of narrowing the income gap between urban and rural residents, the provinces and cities in the demonstration zone have promulgated a number of policies to narrow the income gap, for example, Zhejiang Province has implemented the policy of "rural dividends" in order to narrow the income gap between urban and rural areas. Not only Zhejiang Province, at present, by reducing the number of agricultural population, developing rural industries, increasing income sources and other ways to increase the income of rural residents, narrowing the income gap between urban and rural areas has

gradually become a common measure for various provinces and cities to promote urban-rural integration, but up to now the problem of the disparity between urban and rural income is still obvious, taking Zhejiang Province, which has led the income level of urban and rural residents in all provinces and regions in the country for many years, as an example, in 2021, the per capita disposable income of urban and rural residents in Zhejiang will be 68,487 yuan and 35,247 yuan respectively. The income ratio of urban and rural residents is about 1.94, although Zhejiang Province is gradually reducing the income ratio of urban and rural residents through various ways, but the current income gap between urban and rural residents is still very obvious, and the task of solving the imbalance between urban and rural development, narrowing the income gap, and improving the coordinated development of urban and rural integration is still very arduous.

3.3. The Secondary and Tertiary Industries are Generally Developed, But Some Regions Still Need to Be Further Improved

The higher the proportion of secondary and tertiary industries, the better the development of modern industries in the region, and the higher the potential for coordinated development of urban-rural integration in the future. According to the added value and proportion of primary, secondary and tertiary industries in the provinces and cities in the demonstration zone, only the secondary and tertiary industries in Sichuan Province and Jilin Province account for less than 90%, indicating that the current driving role of modern industries in the region is relatively low, and it is still necessary to further explore new development paths to promote urban-rural integration and rural revitalization through modern industries in the future, while the secondary and tertiary industries in Zhejiang Province, Guangdong Province and Jiangsu Province account for more than 95%. In 2021, the investment in the primary industry of Guangdong Province increased by 31.8% year-on-year, and the prefabricated vegetable industry in Guangdong Province ranked first in the country, which stimulated the vitality of industrial development in rural areas, which also played a good leading role in the development of characteristic industries in other provinces and cities across the country.

Table 1. Urbanization level, income level, and development status of secondary and tertiary industries in 11 provinces in the demonstration zone in 2021

	Indicators/provinces and cities	Zhejiang	Fujian	Guangdong	Jiangsu	Shandong	Henan	Jiangxi	Sichuan	Chongqing	Shanxi	Jilin
Urbanization level	Number of people living in cities and towns	4752	2918	9466	6289	6503	5579	2776	4841	2259	2516	1505
	Number of rural populations	1788	1269	3218	2217	3667	4304	1741	3531	953	1438	870
	Urbanization rate (%)	72.66	69.69	74.63	73.94	63.94	56.45	61.46	57.82	70.33	63.63	63.37
Revenue	Per Capita Disposable Income of Urban Residents (RMB)	68487	51140	54854	57743	47066	37095	41684	41444	29850	40713	24421
	Per Capita Disposable Income of Rural Residents (RMB)	35247	23229	22306	26791	20794	17533	18684	17575	18100	14745	17642
	Ratio of per capita income between urban and rural areas	1.94	2.20	2.46	2.16	2.26	2.12	2.23	2.36	1.65	2.76	1.38
The level of industrial development	Primary (100 million yuan)	2209	2898	5004	4722	6029	5621	2334	5662	1922	2409	1554
	Secondary sector (100 million yuan)	31189	22866	50219	51775	33187	24332	13183	19901	11185	13803	4768
	Tertiary industry (100 million yuan)	40119	23046	69147	59866	43880	28935	14102	28288	14787	13589	6913
	Secondary and tertiary industries Percentage	97.00	94.06	95.98	95.94	92.74	90.45	92.12	89.49	93.11	91.92	88.26

4. CONCLUSION AND SUGGESTIONS

By combing and summarizing the existing literature, this paper constructs a comprehensive measurement index system of digital economy and urban-rural coordinated development in China, and uses the entropy weight method to measure the level of digital economy and urban-rural coordinated development in each region. On this basis, this paper discusses the impact and mechanism of digital economy on the coordinated development of urban and rural areas from the theoretical and empirical perspectives, and mainly draws the following four conclusions: first, the digital economy obviously promotes the coordinated development of urban and rural areas, and the conclusion is still valid after the endogenous and robustness test; second, there are significant differences in the impact of digital economy on the coordinated development of urban and rural areas in different regions, and the driving effect of digital economy in the eastern region is relatively more prominent; third, combined with the threshold model, it is found that the digital economy has a significant threshold effect on the coordinated development of urban and rural areas, when the digital economy index ranks first Fourth, the development of the digital economy is conducive to narrowing the income gap between urban and rural residents and improving the level of regional entrepreneurship, thereby promoting the coordinated development of urban and rural areas.

Based on the above conclusions, this paper puts forward the following three suggestions: First, actively develop the digital economy and promote the coordinated development of urban and rural areas. Although the current development trend of China's digital economy is good, and the scale and efficiency are constantly improving, there are still many weak links, which restrict the healthy and sustainable development of the digital economy. Therefore, we should take scientific development as the guide, technological upgrading as the core, and institutional design as the guarantee, and actively build an all-round and multi-level digital market to help the digital economy develop at a higher level. Second, we need to implement a differentiated development strategy to effectively promote coordinated regional development. For regions with a relatively good level of digital economy development, it is necessary to further optimize the development model of the digital economy, promote the effective integration of the digital economy with traditional industries, clarify the risk characteristics of the digital economy, and scientifically respond to data security problems; Achieve balanced development of the digital economy through synergy to better contribute to high-quality economic development. Third, establish and improve the risk management and control system to achieve scientific and effective supervision of data security. It is necessary to establish and improve a scientific and reasonable intelligent risk control system, and actively promote the digital economy and build a strict tracking and reward and punishment mechanism, take effective measures to reduce market risks, and provide a comprehensive guarantee for the long-term sustainable development of the digital economy.

ACKNOWLEDGMENTS

This study was supported by the Anhui University of Finance and Economics College Student Research Innovation Fund Project (XSKY23123).

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