

Research on the Impact of Digital Inclusive Finance on Urban Rural Integration Development

-- Taking the Yangtze River Delta Region as an Example

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ABSTRACT

The research on the impact of digital finance development on urban and rural integration can effectively integrate big data, 5G, blockchain and other digital technologies into urban and rural integration development with finance as the carrier, and maximize the use of new Internet technologies. This article first analyzes the significant achievements of digital inclusive finance in supporting rural revitalization, then analyzes the problems of digital inclusive finance in serving rural revitalization, and finally proposes countermeasures and suggestions.

KEYWORDS

Digital Finance; Urban Rural Integration; New Internet Technology.

1. INTRODUCTION

The coordination and overall planning of urban and rural finance is an important aspect of breaking down barriers to economic development between urban and rural areas in China, achieving coordinated and stable regional development between urban and rural areas, and ultimately achieving high-level integrated development between urban and rural areas. With the rapid development of productivity, the separation of urban and rural areas will continue to move towards integration and coordination under the promotion of a market economy, ultimately achieving a state of integrated urban-rural development.

The Yangtze River Delta region includes 41 cities in Shanghai, Jiangsu Province, Zhejiang Province, and Anhui Province, with superior geographical conditions, excellent natural endowments, strong economic foundation, relatively complete system, complete urban system, and developed science, education, and culture. It has become one of the regions with the best development foundation, optimal institutional environment, and strongest overall competitiveness in China, and plays a very important strategic role in the overall construction of socialist modernization. In November 2018, General Secretary Xi Jinping announced at the first China International Import Expo that he would support the development of regional integration in the Yangtze River Delta and upgrade it to a national strategy. In December 2019, the Central Committee of China and the State Council issued the Outline of the Development Plan for Regional Integration in the Yangtze River Delta.

At the 2017 National Financial Work Conference, General Secretary Xi Jinping stressed that finance should focus on "serving the real economy". One of the factors that constrain the integrated

development of urban and rural areas is the urban-rural financial dualization that accompanies the dual economic structure. The dual economic structure between urban and rural areas and the dual financial structure between urban and rural areas interact and influence each other, and the huge gap in the level of financial development between urban and rural areas further affects the overall and coordinated development of the urban and rural economy.

In recent years, digital technologies such as cloud computing, artificial intelligence, and 5G have developed rapidly and been widely applied. The integration of inclusive finance and digital technology has formed digital inclusive finance, breaking through the geographical limitations of traditional financial services, greatly solving the problems in the promotion of inclusive finance in rural areas, further narrowing the gap between urban and rural financial development levels, and promoting coordinated development of urban and rural finance has become possible. The Peking University Digital Inclusive Finance Index (2011-2020) released in April 2021 points out that after the COVID-19, the development of digital inclusive finance is still growing, which further narrows the difference in digital inclusive finance between regions. At the urban and rural level, the level of urbanization is positively related to the development of digital finance.

Comprehensively and systematically summarize the existing research results on digital finance and urban-rural integration development, closely combining with the current situation, using digital interconnection technology to improve the level of inclusive finance, promote urban-rural integration development, propose new topics for urban-rural integration development, and further deepen the theory of urban-rural integration development. Explore the impact of digital finance on the development of urban-rural integration, propose corresponding strategies and suggestions, and provide theoretical support for breaking down barriers to urban-rural development gap and achieving high-level urban-rural integration.

The Yangtze River Delta region, as one of the most active, open, and innovative regions in China, accounts for less than 4% of the country's land area and creates 25% of the country's total economic output. The strategic positioning of "one pole, three zones, and one highland" can radiate to the entire China through research on its urban-rural integration development, providing solutions to the regional imbalance in China's development. The research on the impact of digital financial development on urban and rural integration can effectively integrate big data, 5G, blockchain and other digital technologies into urban and rural integration development with finance as the carrier, and maximize the use of new Internet technologies. The COVID-19 has had an indelible impact on the urban and rural economy. As the finance supporting the development of the real economy, the research on promoting the integrated development of urban and rural areas by using digital finance can provide a reference for the recovery of urban and rural economy after the epidemic.

2. LITERATURE REVIEW

Huang Xiaoming (2014) believes that urban-rural integration occurs between agricultural regions with higher development levels and non agricultural sectors with lower development levels. By promoting cooperation between the two, production factors can flow and be optimized for distribution, thereby reducing the income gap between residents in the two regions and gradually moving towards the same level of development, thus moving towards economic integration. Zhang Haipeng et al. (2020) quantitatively studied the level of urban-rural integration in the surrounding capital region from 1995 to 2015 by establishing an evaluation system for urban-rural integration indicators and a coupling coordination model. They found that the level of urban-rural integration development fluctuated and increased, with economic development level, industrial productivity level, and policy regulation being the main factors affecting its development. Ye Chao and Yu Jie (2020) scientifically evaluated the level of integrated development between urban and rural areas from the perspective of combining new urbanization and rural revitalization strategies, and proposed that the theory of urban-

rural integration should be reconstructed from three aspects: space, economy, and society, in order to achieve the model of co governance between urban and rural areas in China.

Digital inclusive finance refers to all activities that promote inclusive finance through the use of digital financial services (GPMI White Paper, 2016). Wibella et al. From the perspective of commercial banks, Lin Defa and Zhang Xian (2020) found that although blockchain and other Internet technologies have brought new impetus to commercial banks to promote financial services in rural areas, problems such as weak infrastructure, imperfect risk management system, and lack of professionals still hinder the development of digital inclusive finance of commercial banks. Pang Yanbin (2020) believes that we should strengthen the promotion and education of digital inclusive finance, strengthen the construction of digital inclusive finance infrastructure, strengthen the supervision of digital inclusive finance, and play the role of digital inclusive finance in rural revitalization.

3. DIGITAL INCLUSIVE FINANCE HAS ACHIEVED SIGNIFICANT RESULTS IN SUPPORTING RURAL REVITALIZATION

3.1. Continuously Improving the Financial Policy System for Serving Rural Revitalization

The Peking University Digital Inclusive Finance Index (2011-2020) released in April 2021 points out that after the COVID-19, the development of digital inclusive finance is still growing, which further narrows the difference in digital inclusive finance between regions. At the urban and rural level, the level of urbanization is positively related to the development of digital finance.

Table 1. Summary of policies related to digital finance and urban-rural integration

Year	File	Related content
2016	G20 Advanced Principles of Digital Inclusive Finance	Advocate the use of digital technology to promote the development of inclusive finance, balance innovation and risk, and construct an appropriate legal and regulatory framework for digital inclusive finance.
2021	2021 No. 1 central document	Digital inclusive finance, as a fixed term, has been included for the first time in the development of rural digital inclusive finance, supporting cities and counties to build a shared agricultural credit information database within the region.
2021	Opinions of the Central Committee of the Communist Party of China and the State Council on Comprehensively Promoting Rural Revitalization and Accelerating Agricultural and Rural Modernization	Taking the county as an important entry point for urban-rural integration development, strengthening overall planning and top-level design, and accelerating the equal exchange and two-way flow of urban and rural factors.
2021	The 14th Five Year Plan for National Informatization	Priority action will be given to "digital inclusive financial services" to improve digital financial infrastructure and enhance financial services for the people's livelihoods.
2022	Action Plan for Digital Rural Development	Fully leverage the driving and empowering role of informatization in rural revitalization, deepen inclusive financial services in rural areas, and strengthen policy support and security guarantees.
2022	Opinions of the Central Committee of the Communist Party of China and the State Council on Doing a Good Job in Key Work of Comprehensively Promoting Rural Revitalization in 2022	Calmly respond to the century long changes and the pandemic, and strengthen financial services for rural revitalization.

3.2. Basic Construction of a Diversified Rural Financial Service System

Based on the multi-level and differentiated financial service needs of rural entities, China has basically formed a diversified rural financial supply system, including policy financial organizations,

commercial financial organizations, and other financial organizations, to create a fully functional, complementary, competitive, and inclusive rural inclusive financial service system.

3.3. Digital Inclusive Finance has a Significant Positive Impact on Rural Revitalization

Provinces with higher levels of economic development also have relatively better levels of rural prosperity. Rural revitalization is the foundation of economic development, and common prosperity cannot be separated from rural revitalization. The significant positive coefficients of coverage breadth and usage depth indicate that the widespread deployment of digital inclusive financial services in rural areas and the active promotion of digital financial services by local governments and financial institutions can effectively improve the effectiveness of rural revitalization.

4. PROBLEMS IN DIGITAL INCLUSIVE FINANCIAL SERVICES FOR RURAL REVITALIZATION

4.1. Insufficient Financial Coverage in Rural Areas

China's rural areas are vast, with significant differences in economic development, population distribution, and urban areas. Compared with cities, there are still some issues with the small reach radius and narrow coverage of financial service channels and service capabilities in rural areas

Townships are facing a situation of blank and hollow financial services, and the "last mile" of rural financial services has not been fully opened up. Especially in impoverished areas, there is a shortage of financial service resources, and there is still significant room for improvement in the accessibility and convenience of financial services.

4.2. Insufficient Differentiated Positioning and Collaboration among Financial Institutions

Financial institutions in rural areas are mainly rural credit cooperatives and rural commercial banks, supplemented by other types of financial institutions. The multi-level and diversified demand for rural financial services has not been effectively met. Providing credit services to rural areas is costly and risky, posing challenges to the sustainable development of rural financial services. Existing financial products and service methods cannot meet the needs of agricultural and rural development well. The availability of credit for farmers and rural small and micro enterprises is still insufficient, and the problems of difficult loans for banking and financial institutions and rural areas coexist.

4.3. Rural Financial Infrastructure Construction Still Needs Improvement

The problems of "difficult, expensive and high-risk financing" in rural areas are still prominent. The rural financial service system is not perfect, and the demand satisfaction is not high on the whole. In recent years, rural financial institutions have gradually built and improved the payment system, but there are still some problems in remote areas that have not yet reached the Internet payment. The credit system is the support for the normal operation of the rural financial system and the key for farmers to obtain loans. However, the construction of the credit reporting system in rural areas started relatively late, facing problems such as the lack of credit data and data sharing mechanisms, which to some extent led to the imperfect risk mitigation mechanism in rural finance and increased risks of agricultural loans. The social trust in rural areas is relatively lacking, and the level of rule of law in rural social governance is relatively low. The overall construction of the rule of law environment is still weak.

5. CONCLUSION AND INSPIRATION

5.1. Digital Inclusive Finance Should Adhere to the Development Concept of "Market Orientation and National Support"

The market and government will play a joint regulatory role, adhering to market mechanisms as guidance, so that the reasonable flow of capital, technology, and talent can improve regional systems, spatial connections, and the ability to integrate factor resources and coordinate development, promoting the endogenous force of sustainable development of digital inclusive finance. Local governments need to strengthen higher-level planning and coordination, regulate the development of digital inclusive finance from top to bottom, alleviate the phenomenon of unstable development, and promote the coordinated development of digital inclusive finance in different regions.

5.2. Multi Party Linkage Development of Digital Inclusive Finance to Comprehensively Support Rural Revitalization

For the government, we should focus on solving the unbalanced development of rural digital inclusive finance in different regions and groups, and improve the development of rural Internet and Internet penetration. Community aspect: Strengthen publicity and education, guide rural residents to improve their understanding and acceptance of digital inclusive finance. On the enterprise side: Strengthen the research and application of digital inclusive technology, and deepen the digital transformation of finance. Guide large banks to export risk control tools and technologies to rural small and medium-sized financial institutions, and enrich the supply of digital financial services.

5.3. Vigorously Promote the Digital Development of Rural Areas, Innovate and Promote the Process of Rural Revitalization

On the one hand, developing rural digital infrastructure, smart agriculture, and rural public services can improve the level of rural digitization, and accelerate the modernization of agriculture and rural areas through digital transformation. On the other hand, rural financial institutions need to make up for the shortcomings of digital talents, increase talent cultivation and funding investment, collaborate with universities and fintech companies to cultivate talents, and also increase the introduction of digital talents through methods such as improving salary levels and increasing rewards.

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