

Research on the Problem of Digital Finance Supporting the Development of Rural Industry

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Abstract

Due to the imbalance between supply and demand and the insufficient service depth of traditional financial services, digital finance uses Internet technology to build a network financial trading platform to inject new vitality into the development of rural industries. At present, the implementation of digital finance in rural is obviously differentiated regional digital regional financial development, the rural credit system construction is not perfect, digital financial infrastructure is not sound, weak financial supervision and financial technology inter-disciplinary talent gap big problems, such as digital financial support for its role to the development of rural industry. Future needs the government to strengthen the construction of rural infrastructure in remote areas, improve the level of digital financial education, build digital financial credit reporting platform to perfect the rural credit system construction, the innovation of financial products to improve the financial service industry to agriculture adaptation degree and defuse financial risks and strengthen the financial regulation for the digital can assign a financial support to rural industry development.

Keywords

Digital Finance; Rural Revitalization; The Industrial Development.

1. Introduction

The Chinese government has always attached great importance to issues related to agriculture, rural areas and farmers. For 18 consecutive years since 2004, the No. 1 Central Document has been issued to guide the work related to agriculture, rural areas and farmers, and has put forward development goals and policy suggestions on these issues. In 2020 is the Chinese to build a well-off society in an all-round way and the key to win out of poverty tough years, under the background of the issued by the China 2021 "the central committee of the communist party of China, the State Council on promoting rural revitalization of the opinions of the modernization of rural areas to speed up the agriculture around the strategy of rejuvenating rural and agricultural rural modernization, to the" three rural "work a comprehensive deployment.

With the in-depth development of Internet technology, the Internet penetration rate in rural areas has increased significantly, and the development of digital inclusive finance has achieved remarkable results. The number of Internet users in China's rural areas has risen sharply from a year earlier, with more than 300 million in rural areas as of December 2020, accounting for one-third of the country's Internet population, according to data from the China Internet Center. The Internet penetration rate in rural areas is growing faster than that in urban areas, reaching 55.9 percent by the end of 2020. Digital dividends are used to combine finance with the Internet, and the deep integration of mobile payment and inclusive finance is strengthened with the rapid development of digital economy. Digital finance in China has a broad prospect for development in rural areas. To keep up with the global wave of technological revolution, the benefits of the construction of the digital infrastructure, rural and solve the "SAN nong" and

small micro enterprise financing difficult problem, get through the "last one kilometer" of financial services, China has issued policy documents such as the Promotion of Financial Inclusion Development Plan 2016-2020, G20 High-level Principles for Digital Financial Inclusion, and Fintech Development Plan 2019-2021, which are committed to promoting the integrated development of finance and Internet technology. In view of the special situation in rural areas, digital finance will help revitalize the rural industry.

The People's Bank of China has joined forces with relevant departments to vigorously promote the development of inclusive finance, financial institutions have taken the initiative, and all sectors of society have actively cooperated, and the development of inclusive finance in China has achieved remarkable results. More than 76 percent of adults in rural areas used electronic payments at the end of 2019, up 4.06 percent from a year earlier, according to the "2019 China Financial Inclusion Index Analysis Report" released by the People's Bank of China. The proportion of credit loans to rural households increased. By the end of 2019, the proportion of credit loans to rural households exceeded 16%, 0.63% higher than that at the end of the previous year. In addition, the construction of rural credit system has achieved significant results. Through the peasant household credit information system, a total of 186 million peasant households have established credit files, and the credit access rate of the documented peasant households is 51.47%. However, the rural population is not highly educated, the popularization of financial knowledge is not enough, the construction of rural credit system is not perfect, and the phenomenon of loan elite capture exists in formal commercial banks (Wang Xiaohua and Wen Tao, 2021), which restricts the access of farmers and small and micro enterprises to funds to a certain extent.

Based on the new starting point and new journey, this paper explores the current situation and problems of digital finance supporting the development of rural industries, and gives corresponding countermeasures based on the national conditions, so as to provide reference for the development of digital finance in rural areas.

2. Research background of digital finance supporting the development of rural industries

2.1. The current situation of rural industry development

With the support of the national policy of strengthening agriculture, benefiting agriculture and supporting agriculture, the added value of agricultural economy has increased year by year. Innovative rural business model is widely used, in ensuring food security in China, promote the transformation and upgrading of agriculture, rural areas the 123 industrial convergence, increasing farmers' income to get rich has achieved remarkable achievement.

2.1.1. The industrialization of agriculture will be further promoted and the integration of primary, secondary and tertiary industries will develop

In the process of industrial development, China's rural areas pay attention to industrial integration. They not only cooperate with the local culture and tourism bureau to develop rural tourism, so that rural characteristic products and culture can go global. We also cooperate with local leading enterprises to develop deep processing of agricultural products, no longer limited to selling agricultural primary products, extend the industrial chain of agricultural products, and optimize the allocation of agricultural resources. At the same time, farmers are encouraged to enter the leading enterprises or become shareholders, and the incentive mechanism of wages or dividends is given full play to tie the fate of leading enterprises closely with farmers, which can not only improve the production efficiency of enterprises but also increase the income of farmers. In 2019, there were 90,000 leading enterprises in agricultural industrialization (1,542 of which were key state leading enterprises), 2.2 million farmer cooperatives, and 870,000 family farms, helping 125 million rural households enter the market.

2.1.2. Disposable income of rural residents continues to increase

In recent years, the disposable income of rural residents has been increasing year by year, driven by intensified poverty alleviation efforts and the rural revitalization strategy. By 2020, the annual per capita disposable income of rural residents has exceeded 17,000 yuan, and the urban-rural income gap has gradually narrowed. Rural residents have more idle funds for venture investment, which is conducive to the smooth development of digital finance in rural areas.

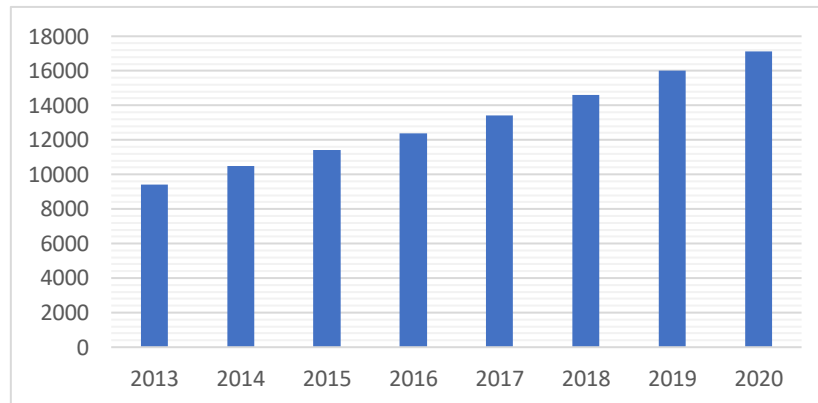


Figure 1. Per Capita Disposable Income of Rural Residents (2013-2020)

2.2. The development of rural digital finance in China

At present, China's digital finance supports the development of rural industries in a good situation, digital finance has been deeply promoted in rural areas, and the coverage of rural digital financial services has increased significantly.

2.2.1. The Internet penetration rate in rural areas is increasing year by year, and the construction of digital financial infrastructure is accelerating.

According to statistics, the number of netizens in China will reach nearly 1 billion by 2020, and the Internet penetration rate will exceed 70%. Among them, the number of rural Internet users reached 309 million, with the Internet penetration rate exceeding 30% and showing a growing trend year by year (the data is from the statistical report on the development of the Internet in China over the years). The above data indicate that China's digital infrastructure construction has achieved remarkable results in rural areas, providing a convenient channel for financial support for rural revitalization.

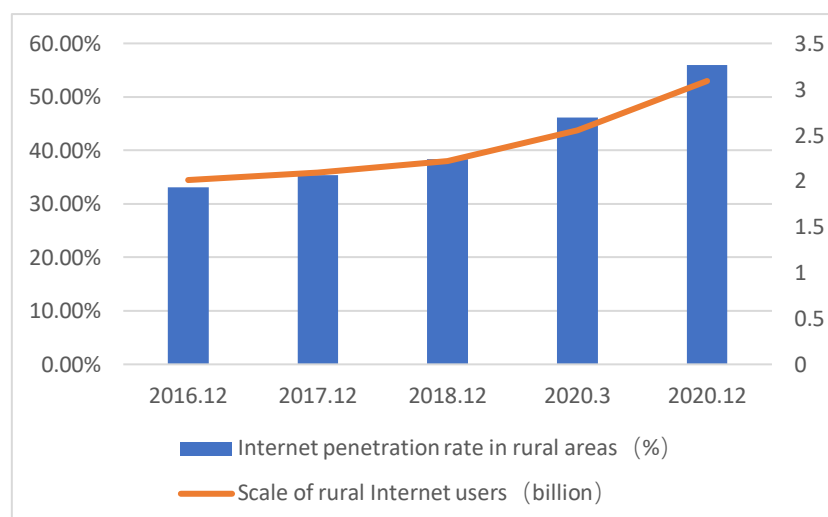


Figure 2. Internet application in rural areas

2.2.2. The number of digital financial service subjects continues to increase and the service scope continues to expand

In order to solve China's current problems of "agriculture, rural areas and farmers" and implement the strategy of rural revitalization, commercial banks on the one hand actively expand their branches in rural areas, arrange technical personnel stationed in the branches to provide financial services and publicize financial knowledge; At the same time, the online financial service platform will be built to broaden the financial service channels, and the "online + offline" model will be adopted to improve the penetration rate of financial applications in rural areas. Internet e-commerce platforms represented by Alibaba, Jingdong and Suning have also developed Internet financial platforms and been widely promoted. According to statistics, by 2019, the scale of China's Internet payment business had reached 2,857 trillion yuan, among which the scale of third-party payment exceeded 250 trillion yuan.

2.2.3. The number and scale of digital finance continue to expand, and financial products continue to innovate

Digital finance makes use of technological advantages to innovate financial products. By formulating financial products that are in line with the operation of rural households and the development of small and micro enterprises, digital finance creates corresponding financial products for rural village industry according to local conditions. The Bank of China's "Huinong e-credit" is a typical combination of inclusive finance and Internet technology, which can solve the farmers short-term funding needs large, small loans seasonal characteristic and risk tolerance to launch innovative problems such as small loans, loans and other financial products. Financial technology company also actively in the wave of the digital pratt & whitney financial and represented by alibaba, jingdong, such as the Internet enterprise in bai, bai and jingdong ious also introduced on the basis of small loans for farmers and small micro enterprise financing, to some extent for the rural development of agricultural industrialization provides financing channels in the process of production and sales.

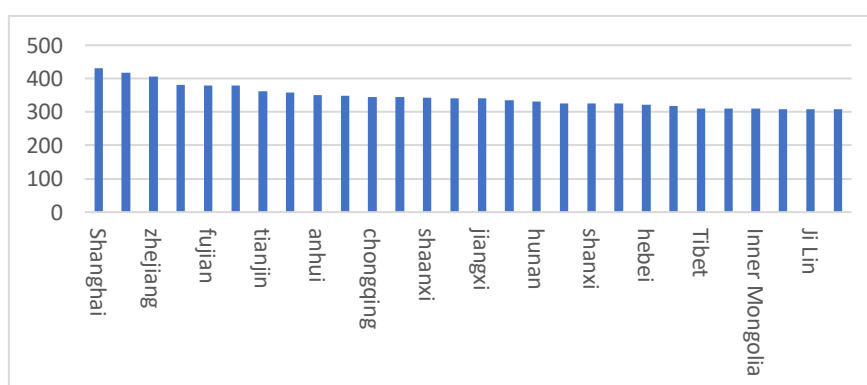


Figure 3. Digital Financial Inclusion Index in 2020

3. The difficulties faced by digital inclusive finance in supporting the development of rural industries

3.1. Restricted by the development level of e-commerce and finance, the development of rural digital finance in different regions is obviously differentiated

The level of financial development in a region is closely related to its level of economic development, openness and scientific and technological innovation. China's financial development lacks an overall planning, so it shows a spatial pattern of decreasing in the east,

the middle and the west corresponding to the level of economic development (Xing Yan, 2021). According to the digital financial inclusion index released by Peking University in 2016 to measure the development level of regional digital financial inclusion, the latest data in 2020 shows that the digital financial inclusion index of Beijing and Shanghai as well as provinces and cities with developed e-commerce, such as Jiangsu and Zhejiang, is significantly higher than that of other regions. However, the digital financial inclusion level of western regions represented by Tibet, Qinghai and Gansu is significantly lower than that of eastern and central provinces and cities due to their inland location and economic development blockage (Guo Feng et al., 2020).

3.2. The lack of financial supply is caused by the low degree of adaptation between financial services and agriculture and the imperfect rural credit system

Although financial institutions are constantly innovating financial products to meet the needs of farmers, the innovation speed of financial products is far behind the innovation speed of farmers' production and management mode. Due to the property of the farmers can provide less collateral, most farmers meet the requirements of the commercial bank collateral is limited to housing and other fixed assets, and can be real estate as collateral, such as urban residents, farmers cultivated land and are owned by the collective land property right, from the perspective of property rights, farmers have no right to any organization or individual outside the collective transfer of its arable land and land property rights, greatly limits the farmers in the emerging industry development the mortgage financing ability (Zhou Rui, 2021). In addition, compared with mature companies, farmers have low credit rating, unstable income and other problems, leading to banks' financial exclusion of middle and low-income farmers and new business themes (Zhou Li, 2020). Although the government strongly encourages financial institutions to provide farmers with loans benefiting farmers, it is still large farmers and small and micro enterprises with high credit rating that really receive financial support (Wang Xiaohua et al., 2021), and the problem of difficult and expensive financing for small farmers has not been solved. The unsound credit system and the profit orientation of banks lead to the contradictory situation that farmers can not provide collateral and banks are reluctant to lend money.

3.3. Restricted by financial feasibility, the service depth of digital finance in rural areas is obviously insufficient

On the one hand, the construction of digital infrastructure in rural areas is not perfect, and there is still poor network signal or even no network in remote areas, which leads to the normal development of digital finance in the region, and the traditional commercial banks can only open branches in rural areas to carry out financial services. However, there are many problems in rural areas, such as inconvenient road traffic and high transaction cost of financial services for farmers, which lead to the lack of extensive and in-depth financial services in rural areas of China., on the other hand, due to the rural residents do not have a high level of education, combined with China's young rural labor force population loss problems, in all ages, mostly women and children in the countryside, the crowd is not close to contact new things, limited by knowledge and habits of Internet use is not frequent, understanding of financial knowledge are much rarer. Therefore, in the face of digital finance, such emerging products are difficult to contact or even reluctant to contact.

3.4. There are potential risks and weak financial supervision in developing digital finance in rural areas

At present, the integration and development of rural industries is in the primary and immature stage, and the integration and development between industries has not entered a stable period,

and the risk is large. The financial quality of the residents and the financial supervision of the government in rural areas are somewhat different from those in urban areas, and there are investment risks and default risks in the development of digital financial services in rural areas. On the one hand, rural areas are the breeding ground of informal credit institutions in China. Non-formal credit, such as private credit and usury, is widely prevalent in rural areas. In addition, digital finance has not yet formed a mature anti-fraud risk control model in promoting rural industry integration. Digital risk control cannot predict the economic cycle in the short term and is difficult to prevent the occurrence of "black swan" events (He Hongqing, 2020).

On the other hand, the current domestic science and technology regulatory construction has not started, mainly focused on the urban areas of traditional business system upgrade and regulatory innovation. The supervision coverage of financial supervision departments in rural areas is still weak, the construction of targeted supervision and technology capacity lags behind, and the potential risks of rural digital finance cannot be ignored.

3.5. There is a large gap of inter-disciplinary talents in fintech

Digital finance is a complex system engineering with Internet technology as the support and financial service as the core. The promotion and application of digital finance need the input of compound talents with both science and technology and financial knowledge. However, in terms of China's actual development, the training mode of talents with digital literacy has not been established yet, and the system and mechanism of industry-university-research cooperation and other cross-border cooperation need to be improved (He Hongqing, 2020). In addition, for the moment, a lot of village and township level cadre own lack of corresponding digital quality, and agricultural university and agricultural professional college students also seldom back to rural employment, and the digital economy related professionals more than basic concentrated in large and medium-sized cities, rural workers, not only lack of digital economy, and business skills and comprehensive qualities are yet to be improved. The lack of talents with digital literacy will lead to the lack of innovation in agricultural and rural production management, and will also make the integrated development of digital economy and agricultural and rural economy face a series of uncertain human factors obstacles (Wen Tao et al., 2020).

4. Countermeasures to support the development of rural industries with digital finance

4.1. Strengthen rural infrastructure construction in remote areas and improve the level of digital finance

Infrastructure construction in rural areas is a prerequisite for the rapid development of digital finance in rural areas. In terms of infrastructure construction, in addition to strengthening the construction of road transportation infrastructure, improving the convenience of farmers' production and management, opening up rural markets and attracting more funds to rural areas; We will also strengthen digital infrastructure construction, further support optical fiber construction and network coverage in remote rural areas, and timely update equipment to ensure the quality of network signals. We will make plans for the development of 5G networks in rural areas and launch them as soon as possible. It can be considered to timely distribute smart phones to rural residents in some remote areas, and provide regular operation guidance, so as to gradually eliminate the barriers to the use of terminal equipment. Every household should have the network and signal anytime and anywhere, so as to provide technical support for the development of digital finance in rural areas.

4.2. Build a digital financial credit investigation platform and improve the rural credit system

Therefore, improving the digital financial credit investigation platform plays a crucial role in improving the efficiency of bank lending, managing the loan information of farmers, and making digital finance truly benefit rural areas. We should continue to strengthen the construction of the rural credit system, improve the application of alternative data such as payment, government affairs and business in the credit evaluation of farmers, and steadily increase the credit loan ratio under the premise of controllable risks. In addition, it is of practical significance to strengthen farmers' sense of integrity and improve the bank lending process to reduce the risk of default and improve the efficiency of financial services.

4.3. Innovate financial products and improve the degree of compatibility between financial services and rural industries

The industries in rural areas are different from those in urban areas. As the main industry in rural areas, agriculture requires financial institutions to create financial products with rural characteristics by giving full play to their innovative consciousness. Financial institutions should strengthen innovation, set up to adapt to the current mode of development of rural financial products, combined with peasant household production seasonally strong, short loan time limit and low limit of credit, adjust measures to local conditions personalized financial products innovation actively, carry out the industrial chain finance, explore agricultural products futures and agricultural insurance products, err on the side of expanding the scope of the admittance of agriculture for collateral, for the financial services played a positive role in the process of rural revitalization.

4.4. Pay attention to digital financial supervision and guard against financial risks

In the process of financial transactions, we should always be vigilant about investment risk and default risk. Rural areas, as weak areas of financial supervision, are the key areas for preventing and resolving financial risks. On the one hand, the government should strengthen supervision and use big data, cloud computing and other technologies to screen illegal financial institutions and crack down on financial crimes. Legislation should be adopted to regulate the development of digital finance in rural areas, and specific penalties should be issued for illegal fund-raising and the theft of farmers' personal information. At the same time, private credit should be regulated to prevent the spread of usury in rural areas. On the other hand, financial institutions should strengthen the training intensity of internal staff on financial risk knowledge, improve the awareness of financial risk identification, and at the same time, be vigilant in network maintenance to prevent data leakage. On the basis of the original laws and regulations, supplement, revise and improve the relevant legal systems of digital economy and digital finance.

4.5. Strengthen the cultivation of the national financial level

The size of national financial knowledge reserve is closely related to the level of financial development and financial risk of a country. On the one hand, the state should pay attention to the cultivation of inter-disciplinary talents in fintech, encourage colleges and universities to set up fintech majors, and effectively solve the shortage of inter-disciplinary talents in China. On the other hand, it is necessary to balance the investment in financial education between urban and rural areas and between regions to narrow the gap between urban and rural areas and the eastern and western regions. First, regulators, financial institutions and education departments should be encouraged to strengthen cooperation, and special education on "Internet +" finance should be vigorously developed according to the cognitive characteristics of rural left-behind groups. Second, professional financial talents should be sent to rural areas to help farmers

understand financial policies and financial products, teach them to use digital financial software and financial management and correctly identify financial risks, and effectively use the media to publicize financial knowledge, so as to resolve the doubts in the minds of farmers about digital finance.

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