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Analysis of the Impact of Digital Inclusive Finance on the Income Gap between Urban and Rural Residents

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Abstract

Digital Inclusive Finance was born by the combination of digital technology and Inclusive Finance. Its digitalization and inclusive nature not only broke through the limitations of geography and time, made it easier for finance to enter rural areas, alleviated rural financial exclusion, but also reduced the cost of financial services, improved information asymmetry, and reduced the threshold effect, alleviate the exclusion effect and give play to the indirect poverty reduction effect to narrow the urban-rural income gap. Through the analysis of the relevant theoretical basis and mechanism, this paper studies the impact of digital Inclusive Finance on the urban-rural income gap. Research shows that the development of digital inclusive finance can narrow the income gap between urban and rural residents through a variety of ways. Therefore, China should establish the development strategy and general idea of digital Inclusive Finance, reshape the development path, create a digital inclusive finance ecosystem with multi-party cooperation and mutual support, and actively play the joint role of other factors and digital Inclusive Finance, so as to promote the development of digital Inclusive Finance and narrow the income gap between urban and rural areas.

Keywords

Digital Inclusive Finance; Urban-Rural Income Gap; Threshold Effect; Exclusion Effect; Indirect Poverty Reduction Effect.

1. Introduction

Since the founding of new China for more than 70 years, China's economic scale has been expanding, the national economy has continued to grow rapidly, and people's living standards have undergone earth shaking changes. According to the data of the National Bureau of statistics, the per capita disposable income of Chinese residents has increased from 49.7 yuan in 1949 to 32188.8 yuan in 2020, and the per capita consumption expenditure has increased from 88.2 yuan in 1956 to 21209.9 yuan in 2020. However, during this period, the development mode of China's urban-rural dual economy has greatly promoted the flow of resources to urban areas with greater economic potential, resulting in the continuous expansion of the urban-rural income gap, in which the urban-rural per capita income ratio reached a peak of 3.28 times in 2009, and then although it has declined, it is still hovering at a high level. The Fifth Plenary Session of the 19th CPC Central Committee clearly put forward the long-term goal of significantly narrowing the gap between urban and rural regional development and the gap between residents' living standards.

The development of the real economy needs to rely on the support of the financial industry. The existence of the urban-rural income gap is largely due to the financial gap between the two. China's financial structure has obvious urban-rural dualistic characteristics, which is specifically reflected in the fact that financial resources mainly flow to urban areas, while the financial supply in rural areas is obviously insufficient. The needs of rural residents for financing, wealth management and other businesses are difficult to be met, and there is a serious financial exclusion. Therefore, to narrow the urban-rural income gap, we must change the current urban-rural dual financial structure. The development process over the years shows that only relying on the improvement of traditional financial measures cannot fundamentally change the urban-rural dual financial structure. In 2006, the concept of Inclusive Finance was introduced into China, and officially became China's top-level system concept at the Third Plenary Session of the 18th CPC Central Committee in 2013, putting forward the practical proposition of "developing Inclusive Finance, encouraging innovation, and enriching financial market levels and products". In 2016, the State Council issued the development plan for promoting Inclusive Finance (2016-2020), which incorporated inclusive finance into the national financial development strategy. Although the concept of Inclusive Finance strongly advocated by the state at all levels in recent years has solved the contradiction of insufficient supply of rural financial services to a certain extent, the financing cost in rural areas is so high that the effect of Inclusive Finance on improving the urban-rural dual economy is greatly discounted. In the same year, at the G20 summit, digital Inclusive Finance was listed as one of the important topics, indicating that Inclusive Finance has opened a new chapter in the development of informatization, gradually moving from offline manual to online digital technology processing. In November 2020, "digital Inclusive Finance, new finance - the third China Inclusive Finance Innovation and Development Summit" held and released the "China Inclusive Finance Innovation report (2020)", which pointed out that digital Inclusive Finance has become the mainstream of the current inclusive finance development; On December 17, 2020, Zhongguancun Internet Finance Research Institute released the China fintech and digital Inclusive Finance Development Report (2020), which pointed out that the practice of digital Inclusive Finance in China is becoming richer, and new services and products are constantly emerging, Digital Inclusive Finance, which relies on digital technology, also provides more and more effective financial services for rural areas on the basis of reducing existing costs, and makes it possible to narrow the income gap between urban and rural areas.

Therefore, the development of digital Inclusive Finance has greatly increased the availability of financial services for rural residents in China, made up for the shortcomings of traditional financial services while providing financial support for rural residents, reduced operating costs and service thresholds by relying on digital technology, and alleviated the risks caused by information asymmetry, It has important practical significance for low-income groups to achieve wealth growth and narrow the urban-rural income gap.

2. Journals Reviewed

2.1. Inclusive Finance and Digital Inclusive Finance

As for Inclusive Finance, it can be defined as a financial system that can effectively and comprehensively provide services to all sectors and groups of society. Its original intention is to emphasize the continuous improvement of financial infrastructure to improve the availability of financial services. Now it provides more convenient financial services to people from all walks of life, especially in underdeveloped areas and low-income people in society, at a lower cost. internationally, Bruhn and love (2014) [1] proposed that inclusive digital finance increases the number of poor people who can access financial services, and countries that implement inclusive finance can therefore achieve poverty reduction and economic growth. Domestically, Li Tao (2021) [2] believes that Inclusive Finance indirectly drives the development and prosperity of vulnerable groups and poor areas through pro poor growth, and improves the pattern of income distribution. Zhang Ping (2011) [3] believes that microfinance is an important part of the inclusive financial system and plays a major role in poverty reduction.

In recent years, as a new form of financial development in China, digital finance has become an important tool to promote the development of rural Inclusive Finance, narrow the urban-rural income gap and alleviate poverty by virtue of its advantages of convenient transactions and low cost(Mookerjee and kalipioni, Suri and Jack, 2016) [4]. Some scholars further discussed the mechanism of digital finance to reduce poverty, believing that it can improve poverty by directly expanding credit access and increasing credit availability (Zhou Li et al., 2021) [5], and can also play a role through indirect channels such as increasing employment and entrepreneurship opportunities, promoting economic growth and narrowing the income gap (Liu Jinyi and Liu Chunyang, 2020) [6], and Liu Ziqiang (2021) [7] through combing the existing literature, it is found that the role of digital finance development in promoting absolute poverty alleviation has been confirmed.

As a new thing, digital Inclusive Finance has gradually become a hot spot since 2016. Yin yingkai and Hou Rui (2017) [8] combed the development logic, international experience and "China's contribution" of digital Inclusive Finance, and put forward an innovative "new wild goose model" for the development of digital Inclusive Finance in China in combination with national strategic planning, believing that China can become an international "leader" in this field by giving full play to its advantages; Qiu Zhaoxiang and Xiang Xiaojian (2018) [9] analyzed the characteristics, advantages and main problems of developing digital Inclusive Finance, and provided five ways to develop digital Inclusive Finance.

2.2. Income Gap between Urban and Rural Areas

In terms of the influencing factors of urban-rural income gap, domestic scholars have done a lot of research to find out many factors that can affect the urban-rural income gap. Through empirical analysis, Lu Ming and Chen Zhao (2004) [10] believe that urbanization plays a significant role in reducing the urban-rural income gap, and the structure of government fiscal expenditure also has a significant impact on the urban-rural income gap; Feng Yun (2014) [11] found through empirical research that due to the gap between urban and rural education levels, fewer people in rural areas can receive higher education than in urban areas, resulting in a large urban-rural income gap. The classical Kuznets' inverted U-curve hypothesis believes that the income gap between urban and rural areas will first increase and then decrease with economic development. Many scholars have found that financial development also has the same effect on income gap. Li Zhijun and Xi junyang (2012) [12] analyzed that in the long term, financial development is indeed expected to narrow the income gap between all levels, but it depends on which side of the top of the inverted U curve the financial development in the region is on.

2.3. Digital Inclusive Finance and Urban-rural Income Gap

Many scholars have studied the relationship between digital Inclusive Finance and urban-rural income gap in China, and the relevant research results have repeatedly proved that digital inclusive finance can help narrow the urban-rural income gap. Song Xiaoling (2017) [13] used the Theil index to measure the urban-rural income gap. The empirical analysis results show that digital inclusive finance can significantly converge the latter. Zhang Xun et al. (2019) [14] found through empirical research that the development of digital finance has increased household income, and rural low-income groups have benefited more significantly. The development of digital finance is more conducive to rural residents rather than urban residents' entrepreneurship, demonstrating the inclusive effect of digital finance under the Internet revolution. Liu Jinquan and Bi Zhenyu (2019) [15] put forward the hypothesis that "the development of Inclusive Finance can promote economic growth, alleviate poverty, and then promote the reduction of urban-rural income gap", and analyzed the impact mechanism of the development of Inclusive Finance on urban-rural income gap. Tanyanzhi (2018) [16] to 2015 time period data by building a spatial panel model concluded that there is a negative correlation between digital Inclusive Finance and urban-rural income gap. Among the decomposition indicators of digital Inclusive Finance, coverage plays a greater role in narrowing the urban-rural income gap.

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3. Theoretical Basis

3.1. Dual Economic Structure Theory

The British economist W.A.Lewis put forward the theory of dual economic structure. He mentioned that there are two completely different economic systems in general developing countries at the same time: one is the traditional agricultural system, the other is the modern industrial system. While the latter is booming and the production efficiency is advancing by leaps and bounds, the former is in a situation of low production efficiency, stagnant development speed and single source of income for rural residents. The difference between the two economic structures makes the income gap between urban and rural residents show a trend of further expansion. In the process of studying the dual economic structure, Lewis also pointed out that the most effective way to change the development trend of the widening income gap between urban and rural residents and promote the coordinated development of industries is to directly target rural residents engaged in agricultural production and take appropriate measures to increase income. To truly expand their sources of income, on the one hand, rural residents can change the single planting mode, choose products with high economic value, or adopt the centralized and large-scale planting mode to improve their income; On the other hand, rural residents engaged in agricultural production can find employment in cities and towns, engage in non-agricultural production with higher income, and then increase their income. At the same time, it can also promote the development of urban economy.

3.2. Financial Exclusion Theory

Financial Exclusion mainly refers to the phenomenon of geographical exclusion, which is caused by the fact that residents living in poor and remote areas are limited by geographical location and transportation conditions and are difficult to access financial service institutions. At the same time, from the perspective of economic benefits, financial institutions tend to set up service outlets in areas with better geographical location and relatively concentrated affluent groups, resulting in less distribution of service outlets in poor and rural areas, financial consumers and investors of the poor and rural population are greatly restricted and excluded in their access to financial services and products. With the development of information technology, people in this region have more convenient access to financial information and services, which has alleviated the financial exclusion effect to a certain extent. However, at the same time, a large number of literature and research have also proved that only a small number of groups will seek financial services through digital channels. Previously excluded service groups still prefer to obtain financial services in financial service entities, also known as local bias. In order to explain and study this phenomenon, scholars at home and abroad use the concept of Financial Exclusion, take the supply of financial services as the research perspective, focus on exploring the reasons for its insufficient supply, and finally seek solutions to eliminate financial exclusion. At present, financial service entities obtain financial services, which is also known as local bias. In order to explain and study this phenomenon, scholars at home and abroad use the concept of Financial Exclusion, take the supply of financial services as the research perspective, focus on exploring the reasons for its insufficient supply, and finally seek solutions to eliminate financial exclusion. At present, the concept of financial exclusion is still in development. Although there is no unified definition of it in the academic circles, the accessibility and usability of financial products are all emphasized as the main criteria to measure Financial Exclusion in the research.

4. Analysis of Influence Mechanism

At this stage, although the urban-rural income gap in China has narrowed to a certain extent, the gap level is still large, which has brought considerable pressure to China's economic growth

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and social harmonious development. Combined with the characteristics of digital technology, this paper expounds the influence mechanism from the following three aspects.

4.1. Reduce Threshold Effect:

As a kind of service industry, financial services must pay a certain cost while enjoying services. Digital Inclusive Finance is not to provide free services, but to provide financial products and services at an affordable cost for people in rural areas, remote areas and poverty-stricken areas who need financial services. The service objects of Inclusive Finance are mainly small and medium-sized enterprises, urban low-income groups, farmers, special groups (poor people, disabled people, etc.). Poor people often need financial services more than high-income people in terms of demand, but due to the lack of collateral and the lack of relevant credit information in rural areas, such long tailed customers are often excluded from the service threshold of financial institutions, and digital inclusive finance can effectively reduce the service threshold of people in rural areas, More groups that need financial services can be included, so that both urban and rural residents can have equal access to financial services. The main reason is that the overall cost of financial services has been greatly reduced through the application of digital technology, which not only improves the efficiency of operations, but also saves time costs. And with the continuous progress of technology, the cost of financial services will further decline in the future. By reducing the threshold effect, we can alleviate the unequal distribution of financial resources between urban and rural residents, so that rural residents can also enjoy equal financial services, improve the income of rural residents, and gradually narrow the urban-rural income gap.

4.2. Alleviate the Financial Exclusion Effect:

Under the economic structure of urban-rural dual development and the development background of the transition from planned economy to market economy, the economic development of rural areas and the economic strength and anti-risk ability of rural residents cannot be compared with the economic development of cities and urban residents. In addition, financial institutions have "dislike the poor and love the rich", and many institutional service outlets in towns and villages have been cancelled to reduce costs, Therefore, a large number of farmers are excluded from the financial service system. Secondly, from the perspective of the exclusion of risk assessment, financial institutions have different requirements for services in urban and rural areas. The loan conditions for urban enterprises and residents are relatively loose, while the conditions for rural enterprises and rural residents are more stringent, mainly because the source of income of farmers is not stable, Farmers' income will be associated with the natural environment of the year, resulting in greater fluctuations, low anti risk ability, coupled with poor farmers' credit environment and lack of relevant credit information, so the risk assessment procedures of financial institutions for loans in rural areas are more rigorous and cautious. In terms of product exclusion, when designing financial products, financial institutions tend to have more diversified and targeted products for urban areas, while financial products for rural areas are relatively simple, ignoring the diversified needs of rural and farmers for financial services. With the continuous development of China's economy, rural residents' financial needs for payment, financial management, insurance and other aspects are increasing, providing better conditions and broad demand space for the development of digital Inclusive Finance. In terms of risk assessment, the transaction data of enterprises and residents can be collected, analyzed and processed through modern digital technologies such as big data and cloud computing. And with the popularization of mobile payment and 5g technology, financial data for rural areas has been gradually incorporated into the credit reporting system. Financial institutions can effectively identify the potential risks of customers, and also provide a sound and effective credit platform for small, medium-sized and micro enterprises, rural enterprises and individuals with loan needs. At the same time, for product design, the

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popularization of digital technology can make it more convenient for financial institutions to understand the financial needs of rural residents, design financial products that are more suitable for rural areas and meet rural characteristics, and provide services for rural residents more efficiently and conveniently. Therefore, the development of digital inclusive finance can promote the rational allocation of resources, weaken the financial exclusion effect, and improve the financial environment in rural areas.

4.3. Indirect Poverty Reduction Effect:

Digital inclusive finance can also indirectly reduce the rural poor through the "trickle-down effect" by stimulating economic growth, so as to narrow the income gap between urban and rural areas. Digital Inclusive Finance enables more effective and reasonable allocation of financial resources, improves the pertinence and efficiency of financial services, increases the coverage group, reduces transaction costs, improves the efficiency of capital investment, promotes the further expansion of total social demand, and promotes economic growth. The improvement of the overall level of economic development in a region can help high-income people obtain a better resource environment and drive the economy forward. At the same time, economic development can increase more jobs, provide richer economic resources for low-income groups and help them get rid of poverty. This virtuous circle can improve the overall financial environment, reduce unemployment and increase the income of low-income groupsFor financial institutions, the improvement of economic level can help them develop more adaptive financial products, enhance the pertinence and efficiency of financial services, effectively help urban and rural people reduce the level of poverty, and play the role of poverty reduction. Not only that, the improvement of social and economic level will also promote the growth of government revenue, and then increase fiscal expenditureAnd the government has always attached great importance to people's livelihood issues. In order to improve people's livelihood and increase people's happiness, especially in rural areas, the government will increase expenditure on improving people's livelihood from multiple perspectives (such as education, medical care, etc.), and vigorously support rural construction and development, which will promote the improvement of living conditions of residents in rural areas. With the support and help of the government, farmers can obtain more resources, improve their technical level, increase the source of income, and then reduce the gap with urban high-income people.

5. Conclusions and Policy Recommendations:

Technological progress is an important force to promote financial innovation. Inclusive Finance has achieved unprecedented development in the world, largely thanks to the coupling of technology and finance. It points out a new direction for the development of traditional Inclusive Finance, and digital inclusive finance came into being. By virtue of its advantages in permeability, availability and sustainability, digital Inclusive Finance has reduced the threshold and cost of financial services, greatly reduced the differences in financial development between urban and rural areas, and thus promoted economic growth. Through the analysis of this paper, it can be seen that from the perspective of the country as a whole, promoting digital Inclusive Finance is of great significance to reduce the urban-rural income gap. This overall role suggests that when formulating strategic plans to narrow the urban-rural income gap, the government should ensure that the development of digital technology and Internet technology is synchronized with the improvement of economic level. Relevant policies can be formulated from the following aspects:

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5.1. Government Departments Should Improve the Digital Construction in Rural Areas

Give full play to the role of digital Inclusive Finance in alleviating the income gap between urban and rural areas. On the one hand, promote the use of digital technologies such as big data and cloud computing in rural areas, expand the coverage of digital Inclusive Finance and enrich its services for rural poor groups to meet the financial needs of poor groups; On the other hand, we should promote the construction of basic data platform in rural areas to understand the financial service needs of groups in poor areas, appropriately reduce the access threshold of financial institutions, and realize the adaptive matching of financial service supply and demand between financial institutions and poor groups. Improve the digital financial system, enrich the diversity of digital financial products, launch products that are highly acceptable and practical to rural residents, and promote the development and innovation of digital technology.

5.2. Improve the Distribution of Educational Resources

Improve the education level of residents in rural areas, and then improve their financial literacy. According to the conclusion of this paper, the concentration of educational resources in urban areas will lead to the widening of the income gap between urban and rural residents, so a measure to narrow the income gap is to increase the number of educational resources available in rural areas, improve the level of compulsory education and vocational education, and help the population in poor areas accumulate human capital, Strengthen the role of digital Inclusive Finance in narrowing the income gap between urban and rural areas. In addition, the generally low financial literacy of rural residents is also one of the important factors that restrict their participation in digital Inclusive Finance. Therefore, it is also necessary to strengthen the popularization of financial education for rural residents, pay attention to the education of basic and practical financial knowledge and financial skills, and provide targeted financial risk training for them to strengthen their awareness of risk prevention.

5.3. Clarify the Development Strategy and General Idea of Digital Inclusive Finance

Compared with traditional bank outlets, digital finance greatly reduces the operating costs of Inclusive Finance, expands the scope of services, improves service efficiency, and is easy to form economies of scale. The digital inclusive financial market has great development potential. Financial institutions should formulate the development strategy of digital Inclusive Finance as soon as possible, clarify the overall development idea, and actively expand market share, so as to gain the first mover advantage and gain scale income. In the choice of customer groups, the county "agriculture, rural areas and farmers", low-end community residents, small and micro enterprises and individual industrial and commercial households should be regarded as the main customer groups of digital Inclusive Finance; In terms of network layout, we should build a three-dimensional service channel combining online and offline, and give full play to the role of digital technology and agency network; In terms of product design and marketing planning, differentiated product design and targeted marketing planning are carried out for different target customer groups and network layout.

5.4. Accelerate the Pace of Financial Infrastructure Construction

Promote the deep integration of traditional financial business and new digital technology, constantly innovate products and optimize service methods. We can gradually improve the financial literacy level of residents in economically underdeveloped areas and remote rural areas by regularly carrying out theme activities and lectures aimed at popularizing financial knowledge in economically underdeveloped areas, supplemented by the distribution of knowledge leaflets and souvenirs. We should guide and encourage financial professionals to enter economically underdeveloped areas, popularize relevant knowledge and carry out

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business cooperation with local rural banks and small, medium and micro enterprises, and form a point-to-point publicity service system.

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