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Research on the Impact of Digital Finance on the High-quality Development of China's Economy

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Abstract: At present, China's economy is in a period of transformation and development. Facing multiple challenges at home and abroad, it is particularly important to explore a new path of high-quality economic development. The rise of digital finance has provided a new perspective on this. The present paper aims to study the supporting role of digital finance in the high-quality development of China's economy and reveal the action mechanism between the two. Through the literature analysis method, this paper sorts out the relevant literature of digital finance to support high-quality economic development, defines the concept of digital finance and high-quality economic development, analyzes the economic and ecological effects of digital finance from the perspective of macro to micro, and points out the possible research directions in the future. The research results show that digital finance plays a positive role in promoting the high-quality development of China's economy by improving the efficiency of financial services and promoting technological innovation.

Keywords: Digital finance, High-quality development, Economic effect, Ecological effect

1. Introduction

Facing the triple pressures of domestic supply and demand balance and expected adjustment, as well as the challenges brought about by the unstable international situation, China urgently needs to explore new development opportunities. In this context, digital finance, incorporating big data, blockchain, IoT, and artificial intelligence technologies., has emerged and is regarded as a fresh catalyst for high-caliber economic advancement. The inclusive characteristics of digital finance make it establish a broad and deep connection with economic development, triggering a question worth exploring: whether digital finance has the potential to advance the high-caliber development of China's economy. If so, what is its mechanism. In order to answer this question, the academic circle has conducted many studies. The existing literature is extensive, but scattered; rich, but somewhat messy; the conclusions are generally consistent, but also contradictory; but still simple. This situation underscores the need for a structured review of digital finance literature supporting high-quality economic development, laying the groundwork for further investigation. This paper aims to systematically analyze pertinent literature, offering insights into how digital finance can foster high-caliber economic growth. It provides a roadmap for future research and offers practical guidance on leveraging digital finance to advance China's economic development.

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2. Overview of Digital Finance and High-Quality Development of China's Economy

2.1. The Definition of Digital Finance

The concept of digital finance began in 2015, the world bank poverty alleviation consultation group, there are three research angles: 1) from the digital financial participants, digital financial participants mainly have two, Conventional financial entities and emerging fintech firms, in the fresh financial service providers, financial technology companies occupy the dominant position. 2) Starting from the function of digital finance, Tang Song et al. propose that digital finance can leverage modern information technology to revitalize financial resources outside the formal financial system, thus enabling its service to the real economy. 3) From the characteristics of digital finance, Feng Xingyuan et al. advocate that the definition of digital finance must encompass the characteristics of inclusive finance extensively. When defining the connotation of digital finance,Viewing digital finance as inclusive of both digital traditional financial operations and innovative financial ventures by Internet firms, Huang Yiping and Huang Zhuo underscored its technical and financial attributes [1].

Manyika holds the view that, in terms of its concept, digital finance constitutes a financial service provided through certain tools such as mobile networks or credit cards. Gomber and Koch introduce the provider, type of business and the technology used in digital finance from three dimensions. They encompass the entities offering digital financial services, the nature of the business, and the employed technology.

2.2. Measurement Method of Digital Financial Development Level

Four primary methodologies exist for assessing China's digital finance development status:

The initial method involves utilizing data gathered from traditional financial surveys to evaluate the advancement of digital finance. Lu Yajuan and Zhang Jingjing used China Family Survey data (CHFS) in their study to measure digital finance from a micro perspective, which can only reflect the use of family digital finance, which is not applicable to other fields [2].

Second, an index system for digital finance is established based on digital economic data provided by certain institutions. For example, the digital economy index system in China Digital Economy Index Report, but there are great conceptual differences between digital economy and digital finance. The scientific nature of this method has been questioned to some extent, and few scholars have used it at present.

Third, using network crawlers and text mining methods to build a digital financial index system. Shen Yue and Guo product by determining the Internet financial keywords, using the web crawler tool to extract corresponding search amount to build the Internet financial indicators, but this method builds the index of keyword selection subjectivity, and cannot avoid the wrong keywords repeated, so using this method to build the accuracy of digital financial indicators are questioned.

Fourth, utilize the digital financial index published by research institutions to assess the level of digital financial development.The most commonly used is Beijing university digital pratt & whitney financial index, the index is Guo Feng with the help of the ant gold suit about user data, from the financial coverage, depth, digital degree three angles, the coefficient of variation empowerment method, through 33 specific indicators of 31 provinces, 337 regional cities, about 2800 counties of digital financial index [3]. The advantage of this index is that it is conducive to horizontal and vertical comparison between regions, reflecting the balance of inclusive financial services, while the disadvantage is that it does not reflect the data of specific enterprises. The index is authoritative, has convenient and fast access to data by others, and is adopted by most scholars.

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3. Research on How Digital Finance Impacts the High-Quality Development of the Chinese Economy.

3.1. The Economic Effects of Digital Finance

3.1.1. The Macroeconomic Impact of Digital Finance

In terms of total supply, first of all, the expansion of digital finance augments the overall supply volume. In contrast to traditional finance, digital finance boasts reduced transaction expenses, swifter access to information, and heightened efficiency in aligning user demands. Li et al. employed various models to assess the exclusive impact of digital finance on urban innovation, revealing its potential to elevate patent counts, stimulate product creativity, and broaden the total supply scope. Secondly, digital finance's evolution influences the composition of total supply. It enhances the effectiveness of converting savings into investments, directs capital toward high-value industries, ultimately reshaping the total supply framework [4].

In terms of aggregate demand, first of all, Advancements in digital finance amplify the magnitude of aggregate demand. As per macroeconomic quantitative equations, heightened money circulation velocity correlates with expanded aggregate demand. Digital finance's progression facilitates the transmission of policy interest rates to market rates, easing credit constraints. This, in turn, stimulates social consumption and investment, ultimately enlarging the scope of total social demand. Secondly, the development of digital finance will change the structure of aggregate demand, which is reflected in two different transmission mechanisms. 1) As preventive savings channels dilute and opportunistic investment channels strengthen, digital finance fosters continuous expansion of the latter, facilitating China's consumption structure upgrade and optimizing total social demand composition.2) Due to the digital financial can bring a lot of innovative financial products, financial market activity, financial products investment demand growth, investment structure of "real to virtual", but when the number of financial products grows to a certain limit, cause virtual investment expected yield decline, cause social investment preference, investment structure "virtual to real", lead to the change of social total demand structure [5].

3.1.2. The Impact of Digital Finance on the Meso-Concept Economy

A heightened digital finance development level correlates with increased likelihood of traditional farming and animal husbandry transitioning to robotics, fostering mechanization in primary industries and aiding in achieving carbon emission reduction targets. Digital finance facilitates the shift from labor to capital in primary industry production, contribute to the technological progress of primary industry and increase the output value. With time, the impact of digital financial development on substituting capital for labor in primary industry production diminishes gradually, and is significantly manifested in the north, the three regions and the large farmers [6].

Digital finance drives service-oriented growth in the secondary industry, enhancing export quality. Its impact varies over time and among enterprise types, notably boosting service provision in labor-intensive, high-tech, and private enterprises in central and western regions [7]. Since 2013, digital finance has significantly provided value-added services to technology-intensive industries. The impact of digital finance on enterprises in the secondary industry varies significantly, exhibiting heterogeneity by promoting middle and low-end enterprises while inhibiting high-end ones [8].

In terms of the tertiary industry, Digital finance exerts a notably positive influence on the advancement of China's tertiary industry, but there are differences between industries and regions. Compared with the productive tertiary industry, it is more prominent in the life tertiary industry; compared with the tertiary industry in the central region, in both the eastern and western regions,

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digital finance holds more prominence in the tertiary sector. As digital finance progresses, the financial tertiary industry demands increasingly higher levels of education and skills, leading to significant income disparities between highly skilled and low-skilled individuals [9].

3.1.3. The Impact of Digital Finance on the Microeconomy

For banks, Lu Minfeng proposed that the scene financial model will become the mainstream model of the development of commercial banks.The influence digital finance has on commercial banking is mainly reflected in its impact on their performance, showing two different positive and negative results [10].Shen Yue and Guo Ping's research reveals that digital finance enhances commercial banks' total factor productivity via the "technology spillover effect," expanding inclusive financial services and bolstering profitability. However, it can also lowers the performance level of commercial banks, when digital financial to commercial Banks "competition effect" is greater than the "technology spillover effect", it will have a negative impact on its profitability [11].

For enterprises, digital financial can through the scene, data and combination with financial innovation products to make up the traditional financial services, Leverage the advantages of "low cost, rapid speed, and extensive coverage" to lower thresholds and financial service costs, enhancing the financing environment for micro, small, and medium enterprises, and providing more effective service to Pratt & Whitney's financial matters, digital financial tend to ease financing constraints as an intermediary mechanism impact on the enterprise [12].

For individuals and families, digital finance has brought about a notable rise in the earnings and spending of both urban and rural residents in China. In particular, by improving the entrepreneurial behavior of rural residents, it has notably boosted the income of low-income rural individuals, digital finance hasn't led to a significant increase in rural residents' consumption. Regarding household investment, digital finance enhances the allocation of financial assets and encourages investment in riskier assets. In addition, Ma Shuzhong and Hu Zengxi proposed that digital finance can attract the inflow of labor force by providing job opportunities and increasing the expected income [13].

3.2. The Ecological Effect of Digital Finance

Regarding its mechanism of influence, scholars widely concur that digital finance primarily impacts the environment by shaping corporate conduct. Initially, it alleviates financing obstacles that have long plagued China's small, medium, and micro enterprises, along with innovative firms, by providing easier and less costly access to financing. Moreover, environmental investment is characterized by long investment term, high risk and low return, which makes it difficult for many enterprises to use funds for environmental governance. Digital finance is inclusive, and can provide financial support for small, medium and micro enterprises, alleviate their financing constraints, encourage enterprises to engage in green innovation, reduce pollution emissions and reduce carbon emission intensity [14].

Regarding the outcomes of its influence, certain scholars have examined digital finance's singular impact on environmental conditions. They posit that digital finance facilitates the management of environmental pollution issues and enhances environmental optimization, albeit with heterogeneous effects. In cities situated in central and northeastern regions, as well as those with lower pollution levels and less financial oversight, digital finance's development can exert a more pronounced effect on emission reduction. Additionally, some scholars have delved into the combined impact of digital finance on both the economy and the environment. Digital finance fosters the synchronized advancement of the economy and environment, and this influence has

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heterogeneity in geographical location, coordination degree, financial supervision strength, human capital level and traditional financial endowment characteristics [15].

4. Conclusion

This paper elucidates the concepts of digital finance and high-quality economic development. Through a comprehensive literature review, it systematically delineates the impact of digital finance on China's economy and the mechanisms supporting its high-quality development. Overall, digital finance emerges as a positive force across various levels and sectors of China's economy. However, the paper does not delve deeply into enhancing the index system for gauging digital finance development, managing risks, or addressing potential negative impacts. Future research can focus on building a more comprehensive digital financial index system to measure development levels, further studying potential risks and preventive measures, utilizing relative value indices to bridge gaps between economic subjects, conducting additional research on the environmental impact of digital finance, and providing theoretical and practical guidance for digital finance to better serve China's economic quality development.

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