

# An Analysis of Digital Finance in Promoting the Development of New Quality Productivity

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**Abstract:** As a product of the deep integration of financial technology and the digital economy, digital finance plays a significant role in promoting the development of new quality productivity. This paper first elaborates on the connotations of new quality productivity and digital finance and analyzes the mechanisms by which digital finance promotes the development of new quality productivity from both theoretical and practical perspectives. The aim is to explore the value digital finance brings to the development of new quality productivity, along with the challenges it faces, in order to propose corresponding policy recommendations.

**Keywords:** Digital finance; New quality productivity; Digital economy

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## 1. Introduction

In recent years, the accelerated integration of digital technology and the real economy has triggered a new wave of technological revolution and industrial transformation. Within this context, digital finance, as a product of the deep combination of financial technology and the digital economy, has emerged as a key driving force behind the development of new quality productivity. Digital finance is a new financial model that relies on a new generation of digital technologies to carry out activities such as financing, payments, and investments. Compared to traditional finance, digital finance exhibits clear universality, serving a broader range of users, particularly those who previously had limited access to financial services<sup>[1]</sup>.

Digital finance demonstrates a high degree of intelligence, leveraging advanced technology to enhance both the efficiency and convenience of financial services, while also reducing service costs, thus enabling broader participation in financial activities. Digital technology enhances the flexibility of capital flow, strongly supports the growth of emerging industries and innovative enterprises, and contributes to productivity development by continuously optimizing the economic structure. This paper will provide an in-depth discussion

on the internal logic and practical significance of digital finance in advancing new quality productivity and exploring future development directions.

## **2. The meaning of new quality productivity and digital finance**

### **2.1. New quality productivity**

- (1) Upgrading traditional factors through innovation: The core of new-quality productivity lies in driving the digital and intelligent transformation of traditional factors of production through scientific and technological innovation. This involves upgrading traditional factors such as labor and capital into new types of factors like data, knowledge, and technology, thereby forming an integrated and cross-border production system. In this system, the value of data is fully leveraged, promoting the optimal allocation of resources and efficient industry operations.
- (2) Characterized by high technology, high performance, and high quality: New-quality productivity differs significantly from traditional productivity, marked by its three defining characteristics: high-tech content, high productivity, and high-quality development. First, the application of advanced technology makes production processes more intelligent, thereby enhancing efficiency. Second, high efficiency is achieved through optimal resource utilization, with costs reduced via refined management and technological innovation. Lastly, high-quality development emphasizes sustainability, balancing economic benefits with environmental and social gains, while promoting rational resource use and ecological protection.
- (3) Guided by a new development concept: The development of new-quality productivity is guided by a new development paradigm, which emphasizes innovation, coordination, green development, openness, and shared growth. This approach aims to transform the economy towards high-quality development. New-quality productivity is not only essential for optimizing the economic development model and industrial structure but also a crucial response to the demands of the new development stage.

### **2.2. Digital finance**

- (1) Digital technology as the foundation of digital finance: The foundation of digital finance rests on a series of advanced digital technologies, including big data, cloud computing, artificial intelligence, and blockchain. These technologies overcome the time and space constraints of traditional financial services, significantly improving their efficiency and convenience. For instance, big data analysis allows financial institutions to access real-time customer behavior and market trends, enabling more accurate risk assessments and decision-making. Similarly, cloud computing reduces infrastructure costs, allowing more small and micro-enterprises to access high-quality financial services.
- (2) The combination of digital and real in digital finance: Digital finance emphasizes the deep integration of digital technology with financial services, transforming traditional financial products and services through digital means. This “combination of digital and real” model makes financial services not only more personalized but also more inclusive. By accurately identifying customer needs, financial institutions can offer tailor-made financial solutions that more effectively support the real economy. For example, artificial intelligence enables quick loan application processing, improving service efficiency and helping more businesses secure the necessary funding, thus fostering the healthy growth of the real economy.

- (3) The ultimate goal of digital finance – high-quality development: The ultimate goal of digital finance is to serve the real economy and promote high-quality economic development. By fostering technological innovation, improving financial efficiency, and optimizing resource allocation, digital finance injects new momentum into economic growth. As financial services undergo digital transformation, they are better equipped to support green development and sustainability goals, while facilitating the optimization and upgrading of the industrial structure. With the power of digital finance, businesses can use resources more efficiently, lower operating costs, and establish more resilient profit models, thereby contributing to economic transformation and sustainable development.

### **3. The logic of digital finance driving new quality productivity**

#### **3.1. Theoretical logic**

- (1) Digital finance has significantly enhanced the quality and skills of workers, injecting new vitality into the economy. Through the development of inclusive finance, small and medium-sized enterprises (SMEs) and individuals have gained access to convenient and efficient financial services, greatly promoting entrepreneurship and innovation. These accessible financing channels have enabled more workers to secure financial support, allowing them to participate in emerging industries and enhance their market competitiveness. Additionally, digital finance has advanced the digitization of educational resources, enabling workers to continuously improve their professional skills through online learning and adapt to the ever-changing job market. Consequently, digital finance not only generates numerous employment opportunities but also provides significant impetus for the sustainable development of the workforce <sup>[2]</sup>.
- (2) The rise of digital finance has led to a more optimal allocation of labor resources. Through the use of advanced technologies such as big data and artificial intelligence, digital finance can precisely match capital demand and supply. As a result, enterprises no longer need to expend excessive time and energy on resource allocation, allowing them to focus more on core business development and thereby improve productivity. This shift not only optimizes business operations but also contributes to overall economic improvement.
- (3) Digital finance also enhances the efficient use of labor through innovative models such as supply chain finance. By improving enterprise inventory management and optimizing production processes, digital finance helps companies achieve better resource integration. In doing so, businesses can reduce production costs, improve efficiency, and strengthen their market competitiveness.

#### **3.2. Practical logic**

- (1) Digital finance creates an efficient cooperative ecosystem by closely integrating financial institutions, technology enterprises, and the real economy <sup>[3]</sup>. With the support of technological advancements, financial institutions can optimize service quality, while technology companies provide intelligent financial solutions for the real economy. Moreover, industries can achieve efficient capital operations through convenient financial services, promoting overall economic growth and transformation and laying the foundation for future development. At the same time, digital finance provides essential financial support for technological innovation and entrepreneurial investment. This not only accelerates the transformation of scientific and technological achievements but also fosters the growth of emerging sectors, injecting new vitality and energy into the economy and ultimately forming a new type of

productivity <sup>[4]</sup>.

- (2) Digital finance effectively innovates the allocation of production factors. Traditional financial services are often limited by geographical constraints and information asymmetry, making it difficult to achieve optimal resource allocation. Digital finance, however, overcomes these limitations through digital platforms, directing production factors such as capital, technology, and talent more accurately toward emerging industries and innovative fields.
- (3) Digital finance plays a crucial role in supporting industrial transformation and upgrading. Through mechanisms such as green finance and inclusive finance, it facilitates the digital transformation of traditional industries, improving overall industrial standards. This transformation involves not only technological upgrades but also innovations in management and the optimization of business models, thereby promoting the optimization and upgrading of the industrial structure.

## **4. Contemporary values and challenges**

### **4.1. Value**

- (1) Digital finance is a significant driving force in promoting China's socialist modernization. By fostering innovation and entrepreneurship, digital finance has contributed to sustained economic growth. Additionally, it plays a crucial role in enhancing financial efficiency and optimizing resource allocation, injecting fresh momentum into the high-quality development of the economy. More efficient financial services can better support infrastructure development and social progress, thereby establishing a solid foundation for sustainable economic growth. The rapid advancement of digital finance not only accelerates the formation of new quality productivity but also provides strong support for socialist modernization <sup>[5,6]</sup>.
- (2) Digital finance is highly effective in promoting financial inclusion. It lowers the barriers and costs associated with financial services, offering more accessible and equitable financial services to micro, small, and medium-sized enterprises, rural areas, and disadvantaged groups. The expanded access to financial services enables more people to benefit from financial resources, fostering inclusive financial development and allowing them to participate more fully in economic activities, thereby improving their living standards.
- (3) The development of digital finance offers new opportunities for Chinese enterprises to "go global." Through cross-border payments and financing, digital finance helps businesses explore international markets and engage in global competition. This not only enhances the internationalization of enterprises but also promotes foreign trade and strengthens China's influence in the global economy. Digital finance provides convenient and efficient financial services for international transactions, increasing China's competitiveness in the global value chain <sup>[7]</sup>. Therefore, promoting digital finance and elevating the level of financial technology has become a key strategic priority for the transformation and upgrading of China's financial industry <sup>[8]</sup>.

### **4.2. Challenges**

The rapid expansion of digital finance has created new opportunities for the global economy, but it also brings a series of challenges.

- (1) The inefficiency and instability of network infrastructure can lead to transaction delays and service interruptions, negatively affecting user experience. The smooth operation of digital financial systems relies heavily on a stable and efficient network infrastructure, a critical factor in ensuring that users can conduct financial transactions and access various services anytime and anywhere<sup>[9]</sup>. Such infrastructure not only supports real-time transactions but also enhances the overall user experience, providing convenience and confidence in using financial services.
- (2) Data security and privacy concerns are among the core challenges in the development of digital finance. Since digital finance depends on the collection and analysis of vast amounts of data, the protection of this data and user privacy can be compromised. This requires the establishment and enhancement of relevant laws and regulations, clarifying the boundaries and rules for data usage, and strengthening data security supervision to ensure that user privacy and data security are safeguarded. Governments, financial institutions, and technology companies must share responsibility for creating a secure and trustworthy financial environment.
- (3) The shortage of skilled talent is another major constraint on the development of digital finance. The industry requires a large number of professionals with cross-disciplinary skills, particularly in fields such as financial technology, data analysis, and risk management. However, there is currently a shortage of talent training and recruitment in these areas. Therefore, educational institutions and businesses should collaborate more closely, promote multi-level and diversified talent development programs, and establish an education system aligned with industry needs to provide robust talent support for the growth of digital finance.
- (4) Barriers to cross-border cooperation and information sharing present challenges to the global development of digital finance. To fully realize the potential of digital finance, countries must strengthen cooperation, establish unified regulatory standards and technical guidelines, and promote information sharing and connectivity. This will not only help mitigate risks such as cross-border regulatory arbitrage and money laundering but also enhance global financial security. Consequently, governments and international organizations should actively promote multilateral cooperation mechanisms to create a favorable external environment for the healthy development of digital finance.

## 5. Policy recommendations

The rapid development of digital finance presents great potential for the economy, but it also introduces challenges related to security and regulation. To ensure the healthy development of digital finance, a multi-faceted approach is needed to create a safe and reliable digital financial environment.

- (1) Establishing a safe digital financial environment is fundamental. Strengthening top-level design is necessary to formulate a scientifically sound and reasonable strategy for digital finance development. This includes maintaining a comprehensive understanding of the digital financial market and allocating resources and policies effectively. Regulatory policies should foster innovation and support forward-looking fintech projects while emphasizing risk prevention. Throughout this process, regulators must maintain clear communication with industry participants to ensure effective policy implementation, thereby creating a positive atmosphere for the growth of digital finance.
- (2) Strengthening data security and privacy protection is key. The development of digital finance relies on

vast amounts of data, making data security and user privacy protection critical issues. Establishing and improving relevant laws and regulations is essential, especially in the areas of data collection, storage, and usage. Additionally, data security supervision should be enhanced to boost enterprises' data protection capabilities, ensuring that user privacy and data security are safeguarded. This will not only increase user trust but also contribute to the healthy development of the entire industry.

- (3) Increasing investment in talent training is a long-term strategy<sup>[10]</sup>. The rapid growth of digital finance requires a large pool of professionals with diverse skill sets. Collaboration between universities, research institutions, and financial organizations should be strengthened to promote a multi-level education and training system, cultivating talent capable of meeting the demands of digital finance. Moreover, enterprises should actively engage in talent development, combining theory with practice through internships and training programs, thereby providing strong talent support for the advancement of digital finance.
- (4) Promoting international cooperation is crucial to addressing global challenges. The cross-border nature of digital finance has resulted in differences in regulatory standards and technical norms across countries. Strengthening cooperation with other nations and regions is essential to establish unified regulatory standards and technical norms. By promoting information sharing and interconnectivity, countries can collaboratively address cross-border financial risks and support the healthy development of digital finance. Such international cooperation can not only enhance global financial security but also foster economic collaboration and development among nations.

## 6. Conclusion and prospects

As a key force in promoting the development of new quality productivity, the growth of digital finance depends on the joint efforts of governments, enterprises, and all sectors of society. By enhancing the efficiency and convenience of financial services, digital finance promotes the optimal allocation of resources and overall economic growth. It reduces transaction costs and broadens financial inclusion, allowing more people to access financial services. This transformation fosters innovation and supports the development of emerging industries, ultimately driving high-quality economic growth. As technology continues to evolve and market demand shifts, digital finance will play an increasingly critical role and have a profound impact on the future economic landscape.

## Disclosure statement

The authors declare no conflict of interest.

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