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# Digital finance and the Efficiency of Financial Support for The Real Economy: Empirical Evidence from China

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**Abstract:** Based on the provincial panel data from 2013 to 2020 in China, this paper uses the two-way fixed effect model and the Dynamic System GMM model to study the relationship between the development of digital finance and the improvement of the efficiency of financial support for the real economy. The results show that: Digital finance can significantly improve the efficiency of financial support to the real economy in China; Structural heterogeneity shows that, compared with the degree of digitization, the effectiveness of coverage and depth indicators to improve the efficiency of financial support for the real economy is stronger; Regional heterogeneity shows that the impact of digital Finance on the efficiency of financial support to the real economy in the central and eastern regions is stronger than that in the western regions.

**Keywords:** Digital finance, Real economy, Efficiency.

## 1. Introduction

The real economy is the cornerstone of a country's economic development. China's emphasis on the development of the real economy is a major strategic direction for the current economic development, an important support for the strategic advantages of future development, and the foundation for winning the initiative in the international economic competition (Huang, 2018) [1]. Following the report of the 19th National Congress of the Communist Party of China, the report of the 20th National Congress of the Communist Party of China once again stressed that "the focus of economic development should be on the real economy", which fully reflected the important significance of developing the real economy and pointed out the direction for the healthy and high-quality development of China's economy in the future. Nowadays, China's economy is facing downward pressure and the world economy is slowing down. We should continue to promote the transformation of growth momentum, optimize the allocation of resources, expand domestic demand as a whole, and encourage the innovation of digital technology and financial products, so as to promote the growth of the real economy, improve the efficiency of financial support for the real economy, and better respond to the changing world situation.

The emergence of digital finance benefits from the combination of traditional finance and digital technology (Huang and Huang, 2018) [2]. This new financial model has gradually become a banner leading the global financial development after a short period of development of more than ten years. The rise of digital finance is not only an objective requirement to adapt to the rapid development of digital economy, but also an inevitable trend to guide finance to support the growth of real economy and meet the diversified needs of the public. While its development has an impact on the traditional financial industry, it will also stimulate the digital transformation of the traditional financial industry, form a benign competitive relationship with it, and jointly promote the improvement of financial efficiency. As an emerging financial model, digital finance has the advantages of improving user experience, reducing transaction costs, reducing risks and so on. It can better make up for the defects of traditional finance and help finance to support the development of the real economy more pertinently.

## 2. Literature Review

Since the report of the 18th National Congress of the Communist Party of China stressed the need to vigorously develop the real economy, how to boost the real economy and avoid enterprises from "Disenchantment" has become the focus of scholars' attention, and few literatures have directly studied the efficiency of financial support for the real economy. Hua and Li (2014) [3] believed that the problems faced by China's real economy, such as rising production costs, reducing internal and external demand, excessive tax burden and declining return on investment, could be solved by building an open economic system, accelerating tax reform, improving the financial service system, and improving the income distribution and social security system, so as to enhance the sustainable development capacity of the real economy. Wang (2020) [4] found through empirical analysis that digital finance has a significant role in promoting the development of China's real economy. Some scholars have found that by reducing the tax burden of enterprises, increasing employee stock ownership, loosening interest rate control and other behaviors, the financialization of enterprises can be inhibited, and the economic "disequilibrium" can be eased, so as to boost the healthy development of the real economy (Peng et al., 2017; Ren et al., 2011; Yang et al., 2019) [5-7]. After introducing DEA Malmquist nonparametric method into efficiency research [8, 9], it provides ideas for measuring the efficiency of financial support to the real economy [10, 11]. Xu et al. (2017) [12] used this method to measure the efficiency of financial support to the real economy of each province in each year, and made an empirical analysis of the impact relationship between real estate price fluctuations and the efficiency of financial support entities. The study concludes that rising house prices have a significant inhibitory effect on the efficiency of financial support to the real economy, and this impact relationship is revealed through the direct effect of space.

Scholars' research on digital finance focuses on its role in economic growth, household income and consumption, and enterprise innovation. In terms of the impact on economic

growth, some scholars believe that the development of digital finance can promote economic growth by improving the financing environment, promoting and upgrading the industrial structure, and improving the entrepreneurial behavior of residents (Seifalah and Mohamed, 2013; Liu, 2022; Zhang et al., 2018)[13-15]. Zhao and Wang (2022) [16] investigated the income increasing effect of digital finance from the perspective of relative income and vulnerability. The analysis showed that the development of digital finance could improve the availability and use of household finance, promote potential investment and entrepreneurial behavior, and thus increase the relative income level of households. Yi and Zhou (2018) [17] pointed out that digital inclusive finance can significantly promote the enhancement of residents' consumption level, and heterogeneity analysis shows that the promotion effect of low-income class, rural areas and central and western regions is more significant. Scholars' research on the level of enterprise innovation, on the one hand, digital finance can reduce the leverage level of enterprises, alleviate the financing problems of enterprises, and then enhance the green innovation of enterprises (Qiao et al., 2022; Feng, 2022) [18, 19]; On the other hand, digital finance can improve the technological innovation of enterprises by improving the profitability of enterprises and enhancing the enthusiasm of non controlling shareholders to participate in decision-making (Xie and Zhu, 2021) [20]. Xu and Fan (2022) [21] discussed the relationship between digital finance and the growth of real enterprises and the internal driving mechanism from the perspective of the financialization of real enterprises. The study found that digital finance can drive the technological innovation of real enterprises by easing the financing constraints of enterprises; Promote the capital accumulation of entity enterprises by improving the efficiency of resource allocation; By boosting transaction efficiency, it will drive the evolution of labor division in real enterprises, thus boosting the growth of real economy.

The existing literature provides inspiration for this study. In the current era of vigorous development of digital finance, whether it can help finance to more specifically support the development of the real economy. In view of this, this paper selects the data of China's provinces from 2014 to 2021 as the sample to explore the impact of digital finance development on the efficiency of financial support to the real economy, and further analyzes whether this impact will be different due to structural heterogeneity and regional heterogeneity.

# 3. Theoretical Analysis and Hypothesis Presentation

Account for nearly 90% of the real economy, and their importance is self-evident. The development of digital finance provides a direction for alleviating the financing problems of small and medium-sized enterprises. On the one hand, the development of digital finance has broadened the coverage of financial services, met the capital needs of "long tail users" such as small and medium-sized enterprises and underdeveloped regions, and solved their financing difficulties; On the other hand, the development of digital finance can effectively restrain the profit seeking behavior of financial institutions, so as to make the circulation of financial resources such as funds more efficient, meet the capital needs of small and medium-sized enterprises, and promote the efficiency of financial support to the real economy. In the face of such customer groups as low-income people, small and medium-sized enterprises, and backward regions, due to their low asset level, relatively small production scale, and low population density, the service cost and loan risk will be expanded, and the return rate of financial institutions will be reduced. The development of digital finance can alleviate these problems. The combination of digital finance and digital technology can effectively reduce transaction costs, expand production scale, reduce financial risks, expand the scope of services, and promote more targeted financial support for the development of the real economy. The functions of digital finance, such as digital payment and digital credit, can significantly increase the consumption level of households, increase the demand for products, further promote the expansion of enterprise industrial scale, stimulate market activity, and promote the efficiency of financial support for the real economy. The development of digital finance can also enable the government to obtain credit at a low interest rate, stimulate its support for infrastructure, further extend the scope of services, improve the depth of services, and promote the development of the real economy. The digital insurance function of digital finance provides convenience for the development of the real economy, reduces the business risk and entrepreneurial risk of enterprises, so as to improve the motivation of operators and entrepreneurs, improve the efficiency of financial support for the real economy, and promote the high-quality development of the real economy. Based on this, this paper proposes the first hypothesis.

Hypothesis 1: the development of digital finance can significantly improve the efficiency of financial support for the real economy.

There may be structural differences in the effects of the three sub dimensional indicators of explanatory variables on the efficiency of financial support for the real economy. On the one hand, with the development of digital finance, the scope of financial services has been extended horizontally, the depth of service use has been expanded vertically, the transaction costs and liquidity constraints of services have been reduced, and financial resources have been flowing into real enterprises more timely and efficiently; On the other hand, the current digital development is not perfect, the ability to identify new risks is weak, the problem of information asymmetry still exists, and the impact of digital level on the efficiency of financial support to the real economy needs to be improved; In addition, different geographical locations lead to different economic development conditions. Due to better geographical location and rich financial resources, the development level of digital finance in the central and eastern regions is stronger than that in the less developed western regions. The development of regional digital finance is closely related to the financial and economic development of the region. Therefore, the effect of digital Finance on the efficiency of financial support for the real economy may also be different due to different regional economic development. Based on this, the second hypothesis is proposed.

Hypothesis 2: there are regional and structural differences in the role of digital finance in promoting the efficiency of financial support for the real economy.

# 4. Research Design

## 4.1. Model setting

According to the above theoretical research, in order to further explore the effect of digital Finance on improving the

efficiency of financial support for the real economy, the following regression model is constructed:

$$\mathrm{Tfpch}_{it} = \alpha_0 + \alpha_1 \mathrm{FI}_{it} + \gamma X_{it} + \sum year + \sum id + \varepsilon_{it} \quad (1)$$

Explain the variables and symbols in the above formula. $i$ and $t$ are alternate symbols for provinces and years; $\mathrm{Tfpch}_{it}$is the efficiency variables of financial support to real economy; $\mathrm{FI}_{it}$ is the variable of the development level of digital finance;$X_{it}$ is the control variable; $\sum year$ and $\sum id$ denote time point effect and individual effect respectively; $\varepsilon_{it}$ is the error term.

In order to solve the problem of model estimation bias caused by endogeneity and mutual causality as much as possible and improve the robustness of the results, the following dynamic panel model is established:

$$\mathrm{Tfpch}_{it} = \beta_0 + \beta_1 \mathrm{Tfpch}_{it-1} + \beta_2 \mathrm{FI}_{it} + \gamma X_{it} + \sum year + \varepsilon_{it} \quad (2)$$

The main variables in the model will be described in detail below.

## 4.2. Variable selection and data source

(1) Explained variable

Efficiency of financial support to the real economy (Tfpch). This variable is a measure of the real economic output generated by the input of unit financial resources. Because Malmquist index can better solve the problem that data envelopment analysis model can not measure the dynamic change of efficiency due to ignoring the time factor. Referring to the practices of Sun et al. (2011) [10] and Ma et al. (2021) [22], this paper uses the upgraded DEA Malmquist model to measure the explained variable, and calculates the efficiency of financial services in the real economy of China's provinces in the past eight years. According to China's economic and financial development structure, the selected variables are as follows, including four input variables, including three capital input variables, namely, the scale of regional social financing, the amount of fixed asset investment in the financial industry and the original insurance premium income, and one labor input variable, namely, the number of employees in the urban financial industry. The single output variable is the gross output value of the real economy. Refer to the research of Zhang and Zhang (2017) [23], The surplus output value is calculated by subtracting the added value of Finance and real estate industry from the GDP of each province.

(2) Explanatory variables.

Digital finance development level (Fi). The combination of digital finance and digital technology continues to innovate new models, making financial services more and more "inclusive", thus deriving digital Inclusive Finance, but its essence still belongs to digital Finance (Guo et al., 2020) [24]. Therefore, this paper uses the "digital inclusive finance index", which is compiled by the financial research center of Peking University, to measure the development level of digital finance. In addition, a single explanatory variable makes the regression results of the model not convincing enough. This paper continues to select the three sub dimensions of the digital inclusive financial index for empirical analysis, which has certain significance for the research. In addition, in order to ensure the reliability of the empirical results, this paper smoothes the order of magnitude by taking logarithms of the digital inclusive financial index and its three sub dimensions.

(3) Control variable

In addition to the development level of digital finance, some other economic characteristics may also affect the efficiency of financial support to the real economy in the region. Referring to the existing literature and considering the availability and reliability of samples, this paper also selects the level of regional urbanization, government intervention, the proportion of state-owned economy, industrial structure, and the amount of foreign direct investment as the control variables in the model analysis.

The above data are from the China Statistical Yearbook, the statistical yearbooks of various provinces, the digital finance research center of Peking University, China economic network and Wande database.

The descriptive statistics of variables are shown in the table below.

**Table 1.** Variable definition and descriptive statistics

| Vartype | Varname | Varsymbol | SD | Mean | Max | Min |
|---|---|---|---|---|---|---|
| Explained variable | Efficiency of financial support to real economy | Tfpch | 0.277 | 1.022 | 3.236 | 0.574 |
| Explanatory variable | Development level of digital Finance | Fi | 0.288 | 5.493 | 6.068 | 4.746 |
| | Coverage breadth | F-breadth | 0.347 | 5.389 | 5.984 | 4.305 |
| | Depth of use | F-depth | 0.342 | 5.439 | 6.192 | 4.676 |
| | Degree of Digitalization | F-payment | 0.405 | 5.307 | 5.939 | 3.795 |
| control variable | Regional urbanization level | Urban | 0.125 | 0.594 | 0.896 | 0.239 |
| | government intervention | Gov | 0.209 | 0.299 | 1.354 | 0.120 |
| | Proportion of state owned economy | Soe | 0.167 | 0.470 | 0.758 | 0.147 |
| | industrial structure | Is | 0.076 | 0.396 | 0.558 | 0.160 |
| | Foreign direct investment | Fid | 2.087 | 0.554 | 32.696 | 0.047 |

# 5. Empirical Analysis and Test

## 5.1. Benchmark estimation results

In order to verify the above theoretical analysis and hypothesis, this paper regresses model (1) and model (2), and the specific results are shown in Table 2. Among them, (1) is classified as mixed model regression, and the result shows that the index coefficient of digital finance development level is 0.235, which is significantly positive. It shows that the development of digital finance is conducive to improving the efficiency of financial support for the real economy; (2) The regression results of column two-way fixed effect model showed that the coefficient of explanatory variable was also significant, and the coefficient was 0.357, which was consistent with the regression results of mixed model. This shows that digital finance plays an important role in improving the efficiency of financial support for the real

economy. The reason is that the development of digital finance can broaden the scope of financial services, accelerate the flow of funds, reduce transaction costs, reduce financial risks, and then promote finance to promote the growth of the real economy more targeted.

Although the factors that may affect both digital finance and the efficiency of financial support for the real economy have been controlled as much as possible, there may still be some factors that cannot be captured that affect the model estimation. In addition, higher efficiency of financial support for the real economy may also react on digital finance, resulting in inaccurate and rigorous regression results. In order to avoid the endogenous problems that may be caused by the above factors, this paper continues to build a Dynamic System GMM model for regression, (3) column shows that there is a significant positive correlation between digital finance and the efficiency of financial support to the real economy, with a coefficient of 0.63. The AR (2) coefficient is greater than 0.1, which cannot reject the original hypothesis, indicating that $\varepsilon_{it}$ is no autocorrelation; Sargan coefficient is greater than 0.1, indicating that all instrumental variables are exogenous instrumental variables. It is proved that the GMM regression results of the system are robust. To sum up, hypothesis 1 is verified.

**Table 2.** Benchmark regression results

| Variables | OLS<br>Tfpch | FE<br>Tfpch | SYS-GMM<br>Tfpch |
|---|---|---|---|
| L.Tfpch | | | -0.095***<br>(-9.92) |
| Fi | 0.235***<br>(4.41) | 0.357***<br>(7.01) | 0.638***<br>(11.44) |
| Soe | 0.199**<br>(2.26) | 0.229<br>(0.45) | 1.103***<br>(11.02) |
| Is | 0.424*<br>(2.19) | 1.589**<br>(2.43) | 5.591***<br>(16.98) |
| Urban | 0.099<br>(0.71) | 0.238<br>(0.41) | 0.863**<br>(2.10) |
| Fdi | 0.010***<br>(7.67) | 0.007***<br>(3.01) | 0.015***<br>(44.33) |
| Gov | 0.154<br>(1.23) | -0.490<br>(-0.62) | 1.398***<br>(8.38) |
| Constant | -0.642<br>(-1.47) | -1.673***<br>(-7.32) | -6.044***<br>(-19.33) |
| Provincial fixed effect | | consider | |
| Fixed year effect | | consider | consider |
| AR (2) | | | 0.3686 |
| Sargan | | | 0.2496 |
| Observations | 248 | 248 | 217 |

Note: * * *, **, * are significant at the level of 1%, 5% and 10%, respectively.

## 5.2. Robustness test

In this paper, the robustness test is further carried out, and the specific analysis is as follows.

(1) Replacement differential GMM model verification

Replace in the robustness test the dynamic panel differential GMM model is used for empirical regression to further confirm the impact relationship between the two. The results show that in Table 3, the development level of digital finance is significantly positively correlated with the efficiency of financial support to the real economy, with a coefficient of 0.184. The results are also tested by autocorrelation and over identification, proving the reliability of the benchmark regression results.

(2) Consider the time delay of independent variables

Considering that the impact of the development of digital Finance on the efficiency of financial support to the real economy may have time lag, in order to avoid the bias of the empirical results caused by this problem, this paper chooses to carry out the first-order lag processing on the independent variable of the development level of digital finance and then carry out the regression again. The results are shown in Table 3. The coefficient of the development level of digital finance is still significant, indicating that the model estimation results are valid.

(3) Eliminate special samples

Considering that the sample time interval selected in this paper includes the 20202020 outbreak of the new crown epidemic affecting the world, this public health emergency is a strictly exogenous external impact on the macro-economy. If this factor is not considered, it may lead to endogenous problems. After excluding the special samples in 2020, this paper carries out regression again. The results are shown in Table 3. The explanatory variable coefficient is still significant, which again shows that the model estimation results are valid.

## 5.3. Heterogeneity analysis

(1) Structural heterogeneity

This paper further selects the sub dimension index of the digital inclusive financial index for empirical analysis to explore its impact on financial support for the real economy. As shown in Table 4, first of all, the AR (2) and sargan test coefficients are greater than 0.1, which passes the test; Secondly, from the perspective of significance, the regression coefficients of the three dimensions are significant at the level of 1%, indicating that the three dimensions of the digital inclusive financial index can significantly improve the efficiency of financial support for the real economy. Finally, from the perspective of regression coefficient, the coefficients of the three dimensions are 0.848, 0.387 and 0.174 respectively, indicating that the promotion effect of financial

support for the efficiency of the real economy will be different due to the three sub indicators of explanatory variables. Compared with the degree of digitization, the coverage and depth of use have a stronger effect on the promotion of the efficiency of financial support for the real economy.

**Table 3.** Robustness test

| Variables | Differential GMM Tfpch | Consider time delay Tfpch | Eliminate special samples Tfpch |
|---|---|---|---|
| L.Tfpch | -0.276*** (-12.59) | | |
| Fi | 0.184*** (3.64) | | 0.423*** (5.14) |
| 1_ Fi | | 0.245*** (4.69) | |
| Constant | -10.580*** (-9.31) | -5.721** (-2.38) | -2.470* (-1.78) |
| control variable | control | control | control |
| Provincial fixed effect | | consider | consider |
| Fixed year effect | consider | consider | consider |
| AR (2) | 0.258 | | |
| Sargan | 0.171 | | |
| Observations | 186 | 217 | 217 |

The reasons are as follows: firstly, the breadth of coverage horizontally depicts the development environment of digital finance in the region. Its development breaks the restrictions of traditional financial institutions, connects remote areas and small and medium-sized enterprises, reduces the threshold of financial participation, and enables financial resources to flow into real enterprises more timely and efficiently. Secondly, with the deepening of the use of financial services such as digital payment and digital credit, it can effectively reduce the transaction costs, liquidity constraints and transaction risks of entity business entities, promote the efficient allocation of funds, and fundamentally improve the efficiency of financial services to the real economy. Finally, although the degree of digitalization has played an important role in reducing the transaction costs between economic entities. However, the current development of digitalization is still in an imperfect period. On the one hand, with the development of digitalization, there will be some new risks, and enterprises still lack the ability to evade and supervise them, thus facing the possibility of loss; On the other hand, information asymmetry makes it difficult for financial institutions to obtain all the credit information of enterprises in underdeveloped regions, so they can not efficiently provide service support for the real economy.

**Table 4.** Regression results of structural heterogeneity

| Variables | Coverage breadth Tfpch | Depth of use Tfpch | Degree of Digitalization Tfpch |
|---|---|---|---|
| L. Tfpch | -0.106*** (-9.77) | -0.034*** (-3.78) | -0.021*** (-2.78) |
| F-breadth | 0.848*** (13.65) | | |
| F-depth | | 0.387*** (13.89) | |
| F-payment | | | 0.174*** (4.78) |
| Soe | 1.087*** (11.27) | 0.651*** (7.08) | 0.676*** (11.60) |
| Is | 5.629*** (9.30) | 4.503*** (13.06) | 4.058*** (15.47) |
| Urban | -1.213** (-2.04) | 0.773** (2.25) | 2.678*** (9.29) |
| Fdi | 0.015*** (34.35) | 0.020*** (66.68) | 0.018*** (41.79) |
| Gov | 1.255*** (7.33) | 1.327*** (6.91) | 1.364*** (12.17) |
| Constant | -5.863*** (-11.04) | -3.986*** (-13.54) | -3.801*** (-12.94) |
| Fixed year effect | consider | consider | consider |
| AR (2) | 0.3692 | 0.3798 | 0.2847 |
| Sargan | 0.3548 | 0.2617 | 0.2816 |
| Observations | 217 | 217 | 217 |

(2) Regional heterogeneity

In order to explore whether the promotion effect of digital finance development on the efficiency of financial support to the real economy will vary with different regions, this paper divides the panel data into three parts: East, middle and West, and empirically analyzes whether the impact of digital Finance on the efficiency of financial support to the real economy will differ in these three regions. The results are shown in Table 5. In terms of significance, the variables of the development level of digital finance in the eastern region are the most significant, the central region is stronger, and the western region coefficient is not significant; In terms of coefficient, the coefficient of the development level of digital finance in the eastern and central regions is 0.254 and 0.396 respectively, which is larger than the regression coefficient in the western region; To sum up, the role of digital finance in supporting the real economy in the central and eastern regions is stronger than that in the western regions. So far, hypothesis 2 has been verified.

The reason is that the development degree of central and eastern regions and western regions in China is very different. The central and eastern regions play a more important role in promoting financial support for the real economy due to their better geographical location, more developed economy and strong development level of digital finance. Although the development speed of the western region has increased in recent years, it is due to some practical factors, such as underdeveloped economy, geographical disadvantage, lack of financial resources, and inadequate infrastructure. It is not obvious in improving the efficiency of financial support for the real economy.

**Table 5.** Regional heterogeneity effect

| Variables | east<br>Tfpch | middle<br>Tfpch | west<br>Tfpch |
|---|---|---|---|
| Fi | 0.254***<br>(3.67) | 0.396**<br>(2.80) | 0.201<br>(1.79) |
| Soe | 0.421***<br>(4.23) | 0.311<br>(1.62) | 0.649<br>(1.48) |
| Is | 0.680***<br>(3.20) | 1.418***<br>(3.97) | 0.235**<br>(2.95) |
| Urban | 0.148**<br>(2.95) | -1.121**<br>(-2.48) | -1.359<br>(-1.67) |
| Fdi | 0.009***<br>(5.21) | 0.068<br>(0.41) | 0.105*<br>(0.54) |
| Gov | -0.118<br>(-0.42) | 0.758**<br>(3.29) | 0.002<br>(0.02) |
| Constant | 0.457<br>(1.45) | -0.738<br>(-0.69) | -1.338**<br>(-2.41) |
| Provincial fixed effect | consider | consider | consider |
| Fixed year effect | consider | consider | consider |
| Observations | 88 | 64 | 96 |

# 6. Conclusions and Suggestions

The real economy is the cornerstone of social and economic development. In recent years, China has always insisted on leading finance to support the real economy to achieve high-quality development and achieve a virtuous cycle between finance and the real economy. Therefore, this paper links the development of digital finance with the efficiency of financial services to the real economy, selects the panel data of 31 provinces from 2014 to 2021, empirically tests the impact of digital Finance on the efficiency of financial support to the real economy, and then carries out the heterogeneity test. The main conclusions are as follows: (1) digital finance has played an important role in improving the efficiency of financial support to the real economy, and this conclusion has been verified by constructing a Dynamic System GMM model and multiple robustness tests; (2) Compared with the degree of digitalization, the breadth and depth of coverage play a stronger role in promoting the efficiency of financial support to the real economy than the degree of digitalization; (3) The role of digital finance in improving the efficiency of financial support to the real economy in the central and eastern regions is stronger than that in the western regions. Based on the previous research content, the corresponding countermeasures and suggestions are put forward.

First, we should vigorously promote the in-depth development of digital finance and help finance to more specifically support the real economy. Focus on the construction of digital finance related infrastructure and the optimization of the financial environment, and continuously improve the development level of digital finance. On the one hand, it can supplement and improve the existing credit reporting system, provide complete and effective credit reporting services, and alleviate a series of problems caused by information asymmetry; On the other hand, it can reasonably optimize the construction of digital financial service stations, provide targeted services for enterprises, optimize the supply of financial resources, and make it effectively match the capital demand of enterprises, so as to promote the sustainable development of the real economy.

Second, promote the application of digital technology and encourage the innovation of digital financial products. We will increase support for the development of digital technology in core areas such as big data and cloud computing, and continue to promote financial digital transformation. The continuous combined development of Finance and digital technology can realize the upgrading and innovation of

products and services, so as to give full play to the "long tail effect", expand the scope of services as much as possible, minimize the problem of information asymmetry, reduce the operation and payment and settlement costs of market players, and improve the efficiency of financial support for the real economy.

Third, strengthen the policy guidance efficiency of government departments, and enhance the matching degree and accuracy of policy support. For example, we can mobilize the enthusiasm of financial institutions to participate in the construction of digital finance by building platforms and financial subsidies, guide the focus of their services to more real economic sectors, promote the effective connection between the supply and demand of financial services, and meet the credit demand of real enterprises. Financial subsidies can also be invested in financial technology R & D departments and innovative enterprises to mobilize the enthusiasm of R & D personnel and promote financial technology innovation, so as to promote more targeted financial support for the development of the real economy.

Fourth, we should continue to innovate and improve the regulatory system of digital finance, improve the level of regulation, and lay the foundation for promoting financial support for the development of the real economy. The development of digital finance will also lead to a series of risks that are difficult to identify, which may damage the rights and interests of users and disrupt the original benign market operation. Therefore, it is very necessary to optimize the regulatory system in order to make digital finance develop better and effectively avoid risks. The regulatory authorities need to take responsibility, actively find and find problems in the regulatory process, especially strengthen the supervision of loan platforms developed based on digital technology and the Internet, increase entry restrictions, optimize monitoring indicators, optimize exit processes, and avoid risks.

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