

# Research on the Impact of Digital Inclusive Finance on High-Quality Economic Development

Yating Zhu\*

Huazhong University of Science and Technology, Wuhan, 430074, China

**Abstract:** To overcome the shortcomings of traditional finance, digital inclusive finance has emerged to improve the availability and utilization of financial resources in the original financial development model and reduce the cost of financial services, and digital inclusive finance has become an important driver of high-quality economic development. Based on the panel data of 30 provincial regions in China from 2011 to 2019, this paper explores the impact mechanism and effect of digital inclusive finance on high-quality economic development. It is found that: digital inclusive finance has a direct and significant positive impact on high-quality economic development. In terms of regional heterogeneity, the promotion effect of digital inclusive finance on high-quality economic development is significantly stronger in the eastern regions than in the central and western regions. The mechanism test shows that residential consumption is an important transmission mechanism for digital inclusive finance to influence high-quality economic development. Finally, countermeasures such as strengthening the construction of digital inclusive finance infrastructure, formulating regional differentiated development strategies, launching product customized financial services and building a sound regulatory system are proposed.

**Keywords:** Digital inclusive finance, High-quality economic development, Regional heterogeneity, Mechanism analysis.

## 1. Introduction

China's current development goal has changed from high-speed economic development to high-quality economic development. Promoting high-quality development is about building a well-off society in all aspects, the basic realization of modernization, and a strong socialist modernization state, which is a major strategy proposed by the Party Central Committee at the historical turning point of China's development to lead the modernization in the new era [1]. High-quality development should not only emphasize the high efficiency of economic development, but also make innovation the driving force of economic development, focus on the coordination of regional economic development, pay attention to environmental quality in the development process, promote sustainable economic development, and continuously promote the sharing of development results throughout society [2]. In order to achieve the goal of high-quality economic development, it is necessary to find new economic growth points. The "Promoting the Development of Inclusive Finance (2016-2020)" issued by the State Council on December 31, 2015 provides a new development path for our country's high-quality economic development.

From the proposal of inclusive finance in 2005 to the implementation of the development plan for inclusive finance in 2013, inclusive finance has been widely promoted and popularized. The widespread implementation of inclusive finance policies and the rapid development of the digital economy as well as the establishment of sound infrastructure have created favorable conditions for the development of digital inclusive finance. Supported by digital technology, digital Inclusive Finance has low threshold, high efficiency and wide coverage. It can significantly expand the scope of financial services, reduce information asymmetry, reduce transaction costs, improve the efficiency of social financial resource allocation, increase the efficiency and inclusiveness of economic development. It has unique advantages in alleviating poverty, promoting scientific and technological

innovation, and fostering economic growth.

In the process of achieving high-quality economic development, expanding domestic consumption plays an increasingly prominent role. Microfinance and insurance services provided by digital inclusive finance reduce the uncertainty faced by households and increase residents' consumption expenditures, and the convenience and speed of digital payments accelerate residents' consumption decisions. Inclusive finance has opened a new phase of digital development, further expanding its reach and service areas to serve all aspects of high-quality economic development [3].

By exploring the effects and mechanisms of digital inclusive finance on high-quality economic development, we can better sort out the relationship between the two, especially in the context of today's world trade frictions and the impact of the COVID-19, which provides a reference for better development of inclusive financial policies to alleviate the problems in the process of economic development. It also has important practical significance for further research on the new development pattern of the domestic and international dual cycle.

## 2. Theoretical Analysis and Research Assumptions

This chapter mainly explores the mechanism and path of the impact of digital inclusive finance on high-quality economic development based on theoretical analysis and proposes the research hypothesis of this paper accordingly.

### 2.1. The Direct Impact of Digital Financial Inclusion on High-Quality Economic Development

This paper intends to build China's regional economic high-quality development index system from the new development concept of innovation, coordination, green, openness, and sharing, and to analyze the impact of digital inclusive finance on economic high-quality development

using inter-provincial panel data from 2011 to 2019, taking into account the overall economic operation and six latitudes of economic operation, innovation development, coordination development, green development, open development, and shared development. The impact of digital inclusive finance on high-quality economic development is analyzed using inter-provincial panel data from 2011 to 2009. First, digital inclusive finance is essentially the integration of digital finance and inclusive finance, relying on Internet technology to expand the scope of services, reducing people's transaction costs and time costs, and also broadening the scope of capital investment and circulation channels, playing a good role in helping small and micro enterprises and emerging enterprises to obtain initial capital, adding new vitality to the R&D innovation of enterprises, and making the innovation performance of enterprises continuously improve [4]. Second, digital inclusive finance strengthens the efficiency of resource allocation in the process of capital accumulation, can solve the problem of balance between social supply and demand, and then promote the upgrading of industrial structure [5]. Different from traditional finance, digital inclusive finance realizes the efficient connection of funds through digital technology, breaks the restrictions on financial services in geographical regions, alleviates the imbalance of regional development, and promotes social equity. Third, the green economy has been vigorously advocated by the state in recent years. The popularization of digital inclusive finance can effectively suppress environmental pollution through technical effects, enable enterprises to build an environment-friendly green development system, promote the transformation and upgrading of the industrial structure to low-carbon, and become a national sustainable development important focus. Fourth, digital inclusive finance is an important support for the development of digital trade. The digital platform has improved the efficiency of transactions and the scale of transactions, and its inclusive nature can improve the relative position of SMEs and individual merchants in the traditional trade pattern, and provide financial services for foreign investors. This is conducive to improving the level of China's opening up to the outside world. Fifth, Through its inclusiveness and technology, digital financial inclusion increases people's material and spiritual wealth, not only improving the living standards of consumers, but also promoting the distribution of social and economic benefits. Based on the analysis of the above impact paths, this paper puts forward the following hypotheses.

H1: Digital financial inclusion can directly contribute to high-quality economic development.

## **2.2. Regional Heterogeneity of Digital Financial Inclusion Affecting High-Quality Economic Development**

Due to the vast territory of China, the east, central and western regions are affected by the differences in natural resources caused by the original geographical conditions, as well as the technological advantages formed by relying on these innate natural conditions, there is an imbalance in regional economic development in China. Compared with the central and western regions, the eastern region has a superior geographical location, abundant natural resources, advanced

industrial technology, and convenient trade, and is the pioneer area for the development of economic construction in China. At the same time, the eastern region has a higher degree of marketization, while the central and western regions have a lower level of market development, which leads to the inability to fully and rationally utilize financial resources and limits regional economic development. To sum up, the promotion of digital inclusive finance for high-quality economic development is more significant in the eastern region than in the central and western regions. Based on the above analysis of regional variability, the following hypotheses are proposed.

H2: There is regional heterogeneity in the impact of digital inclusive finance on high-quality economic development.

## **2.3. Transmission Mechanism of Digital Inclusive Finance Affecting the High-Quality Economic Development**

Currently, China is establishing a sound long-term mechanism to promote consumption and enhance the pulling effect of consumption on high-quality economic development. Digital inclusive finance enhances residents' convenience of payment and also promotes consumption decisions and consumption growth [6]. The expansion of digital financial coverage can provide urban and rural residents with diversified financial services, especially rural residents. Digital inclusive finance alleviates the impact of financial exclusion on the lives of urban and rural residents, and can reduce the urban-rural income gap while also being able to improve the consumption levels of urban and rural residents [7]. In terms of the depth of digital financial inclusion use, the Internet development model facilitates the financing and transactions of residential households, thus increasing the consumption degree of residents. In addition, the digitalization of inclusive finance can improve the ability to reach financial services, and release consumption potential by easing consumer liquidity constraints, thereby expanding domestic demand and promoting economic transformation and upgrading [8]. Through the improvement of consumption level and the optimization of consumption structure, the living standard of residents can be improved, which is conducive to the realization of the goal of high-quality economic development. Based on the above analysis, this paper puts forward the following hypotheses.

H3: The level of population consumption has a certain transmission role in the process of digital inclusive finance influencing the quality development of the economy.

## **3. Research Design**

### **3.1. Construction and Measurement of the Indicator System for High-Quality Economic Development**

Based on the understanding of the connotation, characteristics, requirements and goals of high-quality economic development, this paper constructs an indicator system for high-quality economic development from the six dimensions of economic operation, innovation, coordination, green, openness, and sharing. The indicators and attributes are shown in Table 1.

**Table 1.** Indicator system of high-quality economic development

Latitude	Indicators	Properties
Economic performance	GDP per capita	+
	Consumer Price Index	-
	Unemployment rate	-
	Urbanization rate	+
Innovative Development	R&D investment intensity	+
	R&D personnel full time equivalent	+
	Number of patents granted per capita	+
	Technology market turnover per capita	+
Coordinated Development	Share of tertiary sector added value in GDP	+
	Urban-rural income gap	-
	Elderly population dependency ratio	-
	The proportion of cultural expenditure to fiscal expenditure	+
Green Development	Electricity consumption per unit of GDP	-
	Harmless disposal rate of domestic waste	+
	Number of good air days in provincial capital cities	+
	Greening coverage of built-up areas	+
Open Development	Actual utilization of foreign investment as a percentage of GDP	+
	The proportion of total imports and exports to GDP	+
	Number of foreign-invested enterprises	+
	Number of international visitors received	+
Shared Development	Average number of students enrolled in higher education per 100,000 people	+
	Public library holdings per capita	+
	Highway miles per 10,000 people	+
	Number of health technicians per 10,000 people	+

High-quality economic development is a high overview of the development of all aspects of the economy, and this paper refers to the entropy method used by existing scholars to quantify the quality of economic growth [9][10]. The advantage of the entropy method is that it can objectively and accurately reflect the characteristics of the data, it can avoid the bias caused by personal subjective factors on the analysis results, and it can clearly and explicitly show the weight of each indicator. The specific steps are as follows.

(1) Standardization of indicators. The evaluation system involves several variables, and there are differences in the units between the variables. In the face of such a comprehensive evaluation system, since the units of the data selected for each indicator are different, it is necessary to standardize the units of the panel data consisting of  $M$  provinces,  $T$  years, and  $N$  indicators using the maximum-minimum method. The specific formula is as follows.

When  $X_{itj}$  is a positive indicator:  $Z_{itj} = \frac{X_{itj} - \min(X_{itj})}{\max(X_{itj}) - \min(X_{itj})}$

When  $X_{itj}$  is a negative indicator:  $Z_{itj} = \frac{\max(X_{itj}) - X_{itj}}{\max(X_{itj}) - \min(X_{itj})}$

In the above equation,  $i$  denotes the province,  $t$  denotes the year,  $j$  denotes the measure,  $Z_{itj}$  denotes the standardized value,  $X_{itj}$  is the actual value,  $\max(X_{itj})$  denotes the maximum value occurring in the  $j$ th indicator, and  $\min(X_{itj})$  denotes the minimum value occurring in the  $j$ th indicator.

(2) Calculate the weight of the province  $i$  indicator:  $P_{itj} = \frac{Z_{itj}}{\sum_{i=1}^M \sum_{t=1}^T Z_{itj}}$

(3) Calculate the entropy value of the  $j$ th indicator:

$$E_j = -\frac{1}{\ln(MT)} \sum_{i=1}^M \sum_{t=1}^T (P_{itj} \times \ln P_{itj})$$

(4) Calculate the coefficient of variation of the  $j$ th indicator:

$$G_j = 1 - E_j$$

(5) Calculate the weights of each indicator:  $W_j = \frac{G_j}{\sum_{j=1}^N G_j}$

(6) Calculation of the final composite index:  $Q_{it} = \sum_j W_j \times Z_{itj}$

### 3.2. Model Design

This paper intends to study the impact of digital inclusive finance on high-quality economic development. Based on the above theoretical analysis, the empirical model is constructed as follows:

$$hqd_{it} = \alpha_0 + \alpha_1 difi_{it} + \alpha_2 X_{it} + \varepsilon_{it} \quad (1)$$

In model (1), the  $hqd_{it}$  denotes the level of high-quality economic development, the subscript  $i$  denotes the region, the subscript  $t$  denotes the time,  $\alpha_0$  is the intercept,  $\alpha_1$  is the coefficient of digital financial inclusion,  $difi_{it}$  is the level of development of digital inclusive finance,  $\alpha_2$  are the coefficients of the control variables,  $X_{it}$  are the control variables, and  $\varepsilon_{it}$  is the random error term.

$$hqd_{it} = \beta_0 + \beta_1 (\text{breadth/depth/digit})_{it} + \beta_2 X_{it} + \varepsilon_{it} \quad (2)$$

In model (2), the variables breadth, depth, and digit denote the depth, breadth, and digitization of the development of digital inclusive finance, respectively.  $X_{it}$  is the set of control variables consistent with those in the model (1), and the meanings of the remaining variables and coefficients are also consistent with those described in the model (1).

### 3.3. Variable Description

(1) Explained variable: high-quality economic development ( $hqd$ ). In this paper, the entropy method is applied to measure the economic quality development index of 30 provinces in China from 2011 to 2019.

(2) Core explanatory variable: digital inclusive finance development index ( $difi$ ). The Digital Inclusive Finance Development Index ( $difi$ ) is selected from the Digital Inclusive Finance Index released by the Digital Finance Research Center of Peking University, which combines the new situation and new features of digital financial services with the availability and reliability of data, and constructs a digital inclusive finance index system in three dimensions,

including the breadth of coverage, depth of use, and degree of digitalization of digital inclusive finance business.

(3) Mediating variable: residents' consumption (exp). The level of resident consumption is a comprehensive indicator reflecting the level of economic development of a country or region and the material and cultural living standard of the people. In this paper, the proportion of per capita consumption expenditure of residents to per capita GDP, i.e. the consumption rate, is chosen to measure the consumption level.

(4) Control variables: To reduce the estimation errors caused by omitted variables, this paper selects the proportion of value added by the financial industry to GDP (TFS), the proportion of fiscal expenditure to GDP (gov), the logarithm of gross regional product (lngdp), the ratio of tertiary industry to secondary industry (ind), the logarithm of total regional population (lnpopular), the per capita urban road (lnpopular), per capita urban road area (road), and fixed asset investment (lnfixed) are used as control variables to reflect urban

characteristics such as traditional finance, government intervention, economic volume, industrial structure, population size, infrastructure, and capital stock.

### 3.4. Data Source

This paper takes 30 provinces, cities, and autonomous regions in China from 2011-2019 as the research sample. Among them, the digital inclusive finance data are selected from the Digital Inclusive Finance Index released by the Digital Finance Research Center of Peking University, and the rest of the data are obtained from the China Statistical Yearbook, China Environmental Statistical Yearbook, China Financial Statistical Yearbook, as well as the database of the National Bureau of Statistics and the EPS database website. To reduce the influence of heteroskedasticity on the results, all non-comparable values and unstandardized variables are logarithmically processed in this paper, and 270 observations are finally obtained, and the descriptive statistics of each data are shown in Table 2.

**Table 2.** Descriptive Statistics of Main Variables

Variable	Observations	Mean	Standard deviation	Minimum	Maximum
hqd	270	0.171	0.104	0.627	0.558
difi	270	2.033	0.915	0.183	4.102
breadth	270	1.836	0.902	0.020	3.847
depth	270	1.980	0.913	0.068	4.399
digit	270	2.784	1.180	0.756	4.622
TFS	270	7.020	0.941	4.323	9.078
gov	270	0.466	0.765	0.010	5.023
lngdp	270	9.802	0.850	7.421	11.587
ind	270	1.292	0.712	0.527	5.234
lnpopular	270	8.024	0.741	6.342	9.433
road	270	2.692	0.357	1.396	3.266
lnfixed	270	10.558	0.747	8.315	12.049

## 4. Empirical Results Analysis

### 4.1. The Impact of Digital Inclusive Finance and Its Sub-Dimensions on Quality Economic Development

The results in Table 3. show the impact of digital inclusive finance on economic quality development using a fixed-effects model on panel data. The results in column (1) show that there is a positive relationship between digital inclusive finance and high-quality economic development, and it passes the 1% significance level test, which indicates that digital inclusive finance can play a role in promoting high-quality economic development to a certain extent. Columns (2), (3), and (4) analyze the impact of the indices of the three dimensions of digital inclusive finance on high-quality economic development, and the results show that the breadth of coverage, depth of use, and digitalization of digital inclusive finance business can promote the high-quality economic development. H1 is verified by the above analysis.

### 4.2. Robustness Test

In order to test the reliability of the conclusions of this paper, this section will be tested for robustness, and the results are shown in Table 4.

First, considering that the impact of digital inclusive finance on economic quality development may have a certain time lag effect, the data of the lagged period of economic quality development is used instead of the current period of economic quality development indicators for analysis, and the results are shown in model (1), which shows that digital inclusive finance is positively correlated with economic quality development and passes the 1% significance level test, further confirming the relationship between the two.

Second, change the time period. Relevant research shows that digital finance has affected people's life and consumption since 2013, so the time interval of the research sample was changed to 2013-2019, the results of model (2) show that the regression coefficient of digital financial inclusion is still significantly positive, which is consistent with the findings of the baseline regression.

**Table 3.** Basic Regression Results

	hqd			
	(1)	(2)	(3)	(4)
difi	0.071*** (0.016)			
breadth		0.112*** (0.023)		
depth			0.040*** (0.009)	
digit				0.024*** (0.005)
Control	YES	YES	YES	YES
Constant	-1.332*** (0.366)	-0.187* (0.112)	-1.549*** (0.352)	-1.686*** (0.345)
Obs	270	270	270	270
Year	YES	YES	YES	YES
Province	YES	YES	YES	YES
R-squared	0.712	0.617	0.714	0.718

Note: t values are in parentheses, \* means  $p < 0.10$ , \*\* means  $p < 0.05$ , \*\*\* means  $p < 0.01$ . The table below is the same.

Third, endogeneity treatment. Since the actual levels of economic quality development and its six dimensions in the current period are largely influenced by the values of the previous period, i.e., there is the problem of serial autocorrelation, while there may be other omitted variables affecting economic quality development in addition to the control variables selected in this paper, and this can lead to endogeneity problems in the model. Therefore this part is estimated by introducing a systematic GMM model, and the regression coefficient obtained is significantly positive, which is consistent with the results of the fixed effects model, indicating that the findings of the previous study are valid.

**Table 4.** Robustness test results

Variables	hqd-1	hqd	hqd
	(1)	(2)	(3)
difi	0.054*** (0.018)	0.072*** (0.019)	0.0674* (2.19)
Control	YES	YES	YES
Constant	-1.326*** (0.418)	-1.817* (1.065)	-0.115 (14.21)
R-squared	0.658	0.987	-

### 4.3. Regional Heterogeneity Test

There is the problem of uneven economic development in each province of China, and to test the variability of digital inclusive finance affecting high-quality economic development in different regions, this paper divides the sample data into three regions: East, Central, and West. The results are shown in Table 5. The impact coefficients of the east, central and west regions are all positive, 0.060, 0.014, and 0.050 respectively, indicating that the impact of digital inclusive finance on high-quality economic development is the strongest in the east, the second strongest in the west, and the weakest in the central region. This may be because the eastern region of China developed digital economy earlier, and digital inclusive finance can be better integrated into the development of the eastern region, thus significantly contributing to the development of high-quality economy. In contrast, the economic development of the central and western regions is relatively backward, so the popularity of digital inclusive finance in this region is not as high as that in the eastern region, and some residents even have less

understanding of digital finance and have a certain rejection mentality about it, thus leading to the fact that digital inclusive finance in the central and western regions does not promote high-quality economic development as much as the eastern region. Digital inclusive finance has pro-poor characteristics, enabling less developed western provinces and low and middle-income groups to enjoy better quality financial services, strongly complementing the country's western development strategy and continuously promoting high-quality economic development. H2 is verified by the above analysis.

**Table 5.** Regional Heterogeneity Analysis

Variables	East	Central	West
	(1)	(2)	(3)
difi	0.060* (0.032)	0.014 (0.066)	0.050*** (0.014)
Control	YES	YES	YES
constant	-1.949*** (0.652)	2.237 (5.080)	0.597* (0.306)
Year	YES	YES	YES
Province	YES	YES	YES
Obs	99	72	99
R-squared	0.984	0.854	0.965

### 4.4. Mechanism Test based on Resident Consumption

In the previous part of this paper, we analyzed the transmission mechanism of digital inclusive finance on high-quality economic development from the perspective of resident consumption, and this part will test this theoretical mechanism using the mediating effect model, and the results are shown in Table 6. The results of model (1) are consistent with the estimated results of the benchmark regression above, and the regression coefficient of the core explanatory variable digital inclusive finance on economic quality development is significantly positive, indicating the existence of a direct effect, and the mediating effect can be further tested. The significant positive relationship between digital inclusive finance and residents' consumption level can be seen in model (2), indicating that the development of digital inclusive finance can lead to an increase in residents' consumption level. Specifically, for every 1 unit increase in the digital inclusive

finance index, the level of resident consumption increases by 0.699 units. Model (3) adds the mediating variable of residential consumption to the baseline regression, and the regression results show that the regression coefficients of both digital inclusive finance and residential consumption are significantly positive, and the coefficient of difi becomes 0.059, indicating the existence of the mediating effect of residential consumption. To a certain extent, digital inclusive finance promotes high-quality economic development by increasing the level of resident consumption. H3 is verified by the above analysis.

**Table 6.**Mechanism Test based on Resident Consumption

	hqd (1)	exp (2)	hqd (3)
difi	0.071*** (0.016)	0.699*** (0.148)	0.059*** (0.017)
exp			0.018** (0.007)
Control			
Constant	-1.332*** (0.366)	4.002 (3.322)	-1.402*** (0.363)
Obs	270	270	270
Year	YES	YES	YES
Province	YES	YES	YES
R-squared	0.712	0.687	0.720

## 5. Conclusions and Policy Recommendations

This paper takes the inter-provincial panel data in China from 2011 to 2019 as the research sample, discusses the impact of digital inclusive finance on high-quality economic development in terms of direct impact, regional heterogeneity, and mechanism testing, etc. The main conclusions of this paper are (1) digital inclusive finance and its three different sub-dimensions all have a significant contribution to high-quality economic development and pass the robustness test. (2) The vast territory of China and the differences in resource endowments of different regions lead to different degrees of impact of digital inclusive finance on the high-quality economic development of the eastern, central and western regions of China. Specifically, it has a significant and strong impact on the high-quality economic development of the eastern region, and a weaker impact on the central and western regions. (3) Resident consumption has a certain transmission effect, i.e., digital inclusive finance can promote high-quality economic development through the improvement of residents' consumption level.

The findings of this paper have certain reference significance for the formulation of policies. First, strengthen the construction of digital inclusive financial infrastructure. The government should focus on and support regions with low Internet penetration rates, promote full mobile Internet coverage, change the status quo of backward digital financial services in less developed regions and small and medium-sized cities, and make digital inclusive finance improve the imbalance of urban and rural economic development in China. Second, develop a digital inclusive finance development

strategy with regional differentiation. According to the development characteristics of each region, corresponding development strategies should be formulated according to local conditions. For regions with higher economic levels, more attention should be paid to R&D capital investment and talent training; for remote regions with relatively backward development, the implementation of network infrastructure construction should be accelerated to expand the feasible boundaries of inclusive finance, and digital financial services should be publicized and promoted to increase the participation and usage rate of inclusive finance among residents. Thirdly, the introduction of customized financial services. Since the service targets of inclusive finance are of various levels, to enable groups from all social strata to enjoy the convenience brought by inclusive finance, relevant financial institutions should combine the customers' situation and actual needs to launch product customization services. Fourth, build a perfect regulatory system. It is necessary to strengthen the diversified regulatory mechanism, warn the potential risks of digital inclusive finance, strengthen information disclosure, and incorporate the information of inclusive financial groups into the credit system. Relevant departments should improve the corresponding regulations and regulatory policies to enhance the effectiveness of the regulatory basis of financial regulators. Financial institutions should comply with the law to reduce the possibility of financial risks.

## References

- [1] Zhang J K, Hou Y Z, Liu P L, et al. Goal requirements and strategic path for high quality development[J]. *Management world*,2019,35(07):1-7.
- [2] Ren B P, Wen F A. The Criteria, Determinants and Ways to Achieve High Quality Development in China in the New Era[J].*Reform*,2018(04):5-16.
- [3] Ge H P, Wu F X. Digital Economy Enables High-quality Economic Development: Theoretical Mechanisms and Empirical Evidence[J]. *Social Sciences*,2021(01):24-33.
- [4] Wang X. A Study on Internet Finance Helping Relieve SMEs Financing Constraints[J].*Journal of Financial Research*, 2015 (09):128-139.
- [5] Bruhn M, Love I. The real impact of improved access to finance: Evidence from Mexico [J]. *The Journal of Finance*, 2014, 69(3): 1347-1376.
- [6] He Z, Song X. How Does Digital Finance Promote Household Consumption[J]. *Finance & Trade Economics*, 2020, 41(08): 65-79.
- [7] Li M, Feng S, Xie X. Heterogeneity effects of digital inclusive finance on urban-rural income gap[J]. *Journal of Nanjing Agricultural University*, 2020, 20(3): 132-145.
- [8] Jiang H, Jiang P. Research on the effect of digital inclusive finance on the improvement of household consumption level and structural optimization[J]. *Modern Finance and Economics-Journal of Tianjin University of Finance and Economics*, 2020, 40(10): 18-32.
- [9] Fang D C, Ma W B. Study on the Measurement of China's inter-provincial high-quality development and Its Spatial-Temporal characteristics[J]. *Regional Economic Review*,2019(02):61-70.
- [10] Chen J H, Chen Y, Chen M M. China's high-quality economic development level, regional differences and dynamic evolution of distribution[J]. *The Journal of Quantitative & Technical Economics*, 2020, 37(12): 108-126.