

Research on influencing factors of rural inclusive finance - A case study of Fujian in PRC

Yin-Pei Teng

School of Finance

Fuzhou University of International Studies and Trade

Fuzhou

China

Li-Zhen Lan *

School of Foreign Languages

Fuzhou University of International Studies and Trade

Fuzhou

China

Abstract

Since China's reform and opening up, the increasing imbalance between the development of urban and rural areas has profoundly made rural software and hardware facilities far behind. The gap between the rich and the poor is also widening. Therefore, rural revitalization has been a heated topic. In 2006, the concept of inclusive finance was introduced to carry out the deployment of rural revitalization. Based on the characteristics of financial development in rural areas of Fujian province and the availability of data, this paper collects data from 2007 to 2019 and calculates the inclusive financial index through eight indicators among the three dimensions: service penetration, contact degree and agricultural insurance of rural financial system by the method of the coefficient of variation. Then, the time series model is used to analyze the impact of six indicators such as urbanization level and informatization level on rural financial development. The result shows that there is a significant causal relationship among the three indicators of financial development, government support, and transportation convenience, and the development of inclusive finance.

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Keywords: Inclusive finance, Financial indicators, Rural revitalization, Rural finance.

* E-mail: lanlizhen@fzfu.edu.cn

1. Introduction

The rapid development of economy requires the support of steady capital under the strong and efficient financial markets (Levine (2005), Hsu, etc. (2014), Ductor and Grechyna (2015)). This is also an important reason why Europe and North America have always been the leading regions in the world since the Industrial Revolution. However, the extent of financial benefits is limited by operational costs (financial penetration) and risk management (credit reliability), etc. At present, many poor people in many regions are still excluded from traditional financial services (Xing Yi, 2021). In 2005, the World Bank put forward the call for “financial inclusion” for the first time, hoping to help the poor start their businesses to increase their income through an inclusive financial system, so as to reduce poverty and alleviate the phenomenon of inequality (Burgess and Pande (2005), Chen Jianwei and Chen Yine (2017), Huang Qian etc. (2019)). China also immediately introduced the concept and practice of inclusive finance in 2006, actively promoting financial services to expand the inclusion of vulnerable groups in rural areas, hoping to revitalize the rural economy and narrow the urban-rural income gap (Zhang Xun et al., 2019). In addition, China also integrates “financial inclusion” to the overall plan of national economic development in 2016, which has become a project of the 13th Five-Year Plan promoted vigorously.

Fujian is located on the southeast coast of China, connecting the Yangtze River Delta to the north and the Pearl River Delta to the south, which is exactly the convergence point of China’s two major economic plates. After the reform and opening up, Fujian has been one of the provinces with relatively advanced economic development in China. However, limited by the environmental characteristics of rolling mountains and dense hills, Fujian rural areas show the main shortcomings of Chinese agriculture, such as: lack of cultivated land area, low income, population scarcity, aging and other phenomena, so the widening gap between urban and rural income has become a major problem that needs to be solved (Wang Wenli, and Qiu Yansheng, 2020). In the process of creating wealth and increasing income of agricultural industrialization, inclusive finance has played a pillar role (Zhang Yuli, and Guo Yongqing, 2016). The inclusive finance in rural China develops from the stage of micro-credit, micro-finance to traditional inclusive development. Nowadays, driven by digital technology, some leading provinces have entered the stage of digital inclusive finance (Fu Qiong, and Guo Jiayu, 2021). However, in different rural areas of different provinces, the development degree of

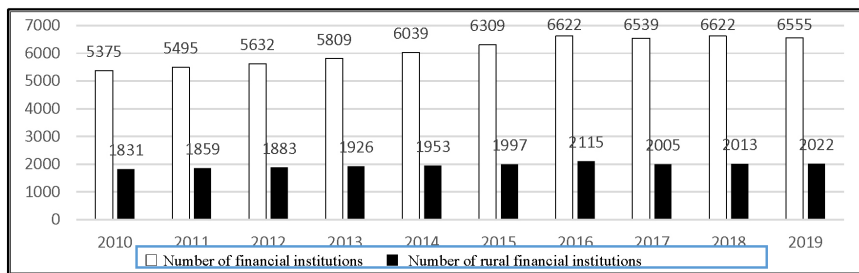


Figure 1

Comparison of total number and rural distribution of financial institutions in Fujian Province from 2010 to 2019

Data sources: Wind Database

inclusive finance shows diversities. As for Fujian, the representative of rural development indicators, the financial infrastructure required by inclusive finance is shown in Figure 1-1 below, from 2010 to 2019, the number of financial institutions in Fujian Province increased by 1,180, but the number of rural branches only increased by 191, and the rural branches even decreased slightly in 2017 and in 2018. A comprehensive investigation of Fujian's rural financial development reveals some problems, such as: low institutional coverage rate, insufficient investment in financing quota and the imbalance between the supply of financial institutions and the demands of the credit needs of farmers. These shortcomings are profoundly affecting the rural financial system, while delaying the revitalization of rural economy.

What financial inclusion advocates is that financial convenience is a basic right of people, and all social classes and groups should get access to financial assistance. In recent years, China has developed its economy in an all-round way, so it actively eliminates financial exclusion and regards inclusive finance as an important development policy (Mu Zhengshe, and Mu Bo, 2021). Through commercial innovation of finance as well as digital technology, rural residents should also receive better financial services to increase their income, develop agricultural industrialization and improve the unbalanced structure of urban-rural duality (He Jing, and Li Qinghai, 2019). In particular, China will promote the 14th Five-Year Economic construction Plan in 2021 to revitalize the countryside through the expansion, acceleration and high-quality development of the rural economy. Promoting "finance to the countryside" to expand the scope and strength of financial assistance has become a necessary preliminary work, so it is of great academic and practical significance for the calculation of

the degree of rural financial inclusion and the analysis of the main influencing factors.

2. Literature Review

So far, the construction of financial system has not been the strength of China. As for the concept and practice of financial inclusion, Western countries are earlier than China, so they have accumulated relatively rich experience and data on financial inclusion. The academic research on the development of inclusive finance is mainly in two aspects, one is the measurement of the development level of inclusive finance, and the other is the influencing factors and implementation results of the development of inclusive finance in countries or regions with different levels of development (Wang Wenli, and Qiu Yansheng, 2020).

Due to the actual needs of economic development, a relatively rich index system of inclusive finance has been formed in the research of inclusive finance. Beck (2007) used 8 indicators to measure the influencing factors of inclusive finance, which was the initial research of inclusive finance. Sarma and Pais (2008) constructed an index system of inclusive finance from three dimensions of financial product exposure, geographical penetration and service efficiency. Arora (2010) used the sample of 98 countries to explore the measurement in different dimensions of the service availability of formal financial institutions among different countries. Gupte, etc. (2012) expanded the scope of IFI index and measured the financial inclusion index more comprehensively. Ambarhane, etc. (2014) selected the service coverage of financial institutions, agricultural insurance and other dimensions to build a comprehensive inclusive financial system.

As for the influencing factors and implementation results of financial inclusion development, Thorsten, Kunt and Levine (2007) first pointed out from the perspective of financial poverty reduction that financial development can have a positive impact on poor households through economic growth and distribution effects. Chakravarty and Pal (2010) studied the actual development of India from the perspective of inclusive finance, and found that both the policies formulation and the implementation effect of the country would affect the development of inclusive finance. Dupas and Robinson (2013) and Kapoor (2013) both believed that by promoting household savings, financial inclusion can pool more financial resources to promote consumption and encourage productive investment by entrepreneurs, thus supporting economic

growth. Allen (2016) studied individual and national characteristics related to inclusive finance and found that the improvement of education contributes to the development of inclusive finance. Khaki, A. R. and Xiangmi M. D. (2017) found that government policies were conducive to the development of inclusive finance and alleviated the phenomenon of financial exclusion in rural areas. Kim, etc. (2020) suggested that social inequality and religious belief have a significant impact on the development of inclusive finance.

The path of China's economic development is different from that of most western countries, especially after the Internet has become increasingly close to the life of the Chinese people. The difference is more prominent in the construction of "the Financial + Internet" system. Therefore, there is a unique pertinence in the selection of inclusive finance measurement indicators with Chinese characteristics. At the same time, the method of selecting the proxy indicators of inclusive finance in academic research and practical application is not consistent. Generally speaking, the theoretical community will select relevant variables from various dimensions such as penetration, accessibility and utility of financial services. For example, according to the actual situation of financial development in Jiangsu Province, Zhai Shuai (2015) selected the number of branches of financial institutions, loan balance and other indicators as the basis for measuring its financial inclusion index.

Jiao Jinpu and Wang Tian (2015) constructed the index system of inclusive finance through the regional penetration rate of financial resources, the availability of financial resources and the use of loans. In practice, Wang Jing and Hu Guohui (2013) selected the indicators as the amount of deposits and loans and the number of highway miles to measure the financial inclusion index. He Xiaoxia and Liu Yanshan (2014) made an empirical analysis of the development of inclusive finance in rural areas of Yunnan Province by establishing financial exclusion evaluation indicators. Tian Yuan and Zhang Yang (2016) analyzed the level of inclusive finance from both the supply of financial resources and the demand for credit of rural households. Zhang Xiaolin and Dong Jigang (2017) selected the breadth and depth of financial services to construct an index system to measure the development level of rural inclusive finance in Shandong Province. Yuan Keke and Song Liangrong (2017) used the three dimensions of comprehensive indicators, availability of financial services and use of financial services to establish an index system to analyze the development of inclusive finance in Zhejiang Province and Anhui Province.

As China hopes to achieve the purpose of rural revitalization through financial inclusion, there are abundant studies on the implementation effect and influencing factors of financial inclusion. Through data comparison, Gao Xincui and Li Yang (2008) found that there exist differences in the development level of rural inclusive finance in the eastern, central, western and northeastern parts of China in terms of total amount, structure and efficiency, and believed that such differences are caused by differences in economic development level, marketization process and government behaviors among regions. Wang Xiuhua and Qiu Zhaoxiang (2010) made the same comparison and found that there are also large regional differences in rural financial exclusion. Ran Guanghe and Zhao Qian (2012) found that the overall efficiency level of China's rural financial system is not high, and the efficiency of rural financial system in the eastern region is higher than that in the central and western regions. Ding Zhujun and Zheng Xiaoyu (2016) verified the panel data measurement model and found that five indicators such as agricultural development level and travel convenience have a positive impact on the development level of inclusive finance in western rural areas. Yang Wenhua (2016) used variance decomposition analysis and other econometric models to obtain the result that the urban-rural income gap is greatly affected by self-information. Li Yun and Xiang Minhua (2020) applied the actual data of financial development in Tibet, selected appropriate explanatory variables to conduct multiple regression model, and concluded that indicators such as economic development level and loan scale could bring positive impact on the development of inclusive finance. Jiang Yuexiang and Fu Tao (2020) believed that the saving function of inclusive finance will widen the urban-rural income gap, while its credit function is conducive to narrowing the gap, but the data from 2006 to 2013 show that the former effect is greater than the latter, resulting in inclusive finance instead widening the urban-rural income gap. Zhang Xiaoyan (2021) analyzed the relationship between inclusive finance and the development level of rural revitalization through the unit root test, Hausman test and other econometric models, and the results showed that the development of inclusive finance is beneficial to the development of rural revitalization level. Zhao Jian (2020) used VAR model to analyze the relationship between urbanization and inclusive financial development, and found that the mutual influence of the two shows positively. Based on the panel data of 30 provincial administrative regions in China from 2006 to 2017, Zhang Cheng et al. (2021) found that inclusive finance has a significant spatial spillover effect on the improvement of agricultural

industrialization. With the development of the digital economy, the availability and convenience of financial services will continue to improve. Scholars began to pay attention to the role of inclusive finance in poverty reduction, income gap narrowing and economic growth (Chen Xiao, and Chen Xin (2018), Gu Ning, and Zhang Tian (2019), Xiao Duan et al. (2020)).

Taking a big country like China as an example, the economic and social development of each province has its own characteristics, but the current main weak development areas are the rural areas, so the measurement of the development level of rural inclusive finance is the basis for understanding the integrated development of the province's economy, which is of great research significance. According to the economic characteristics and development situation of each province, further analysis of the main factors affecting rural financial inclusion will be more conducive to promoting the development of inclusive finance.

The research design of this paper is divided into:

- (1) Based on economic development and geographical characteristics, Fujian Province, a moderately developed province, was selected as a representative province for the development level of rural inclusive finance in southeast China.
- (2) According to the rural characteristics and development situation of Fujian Province, the relevant data from 2007 to 2019 were collected to calculate the development indicators of inclusive finance.
- (3) The influencing factors of rural inclusive finance development in Fujian Province are further analyzed and conclusions are drawn.

3. The measurement of rural inclusive finance development index

(1) The selection of Dimension and Index

Referring to the research of Sarma and Pais (2008) and related scholars to construct indicators of rural inclusive finance, this paper selects two dimensions about rural financial services: the penetration degree and accessibility, together with the other dimension about agricultural insurance popularization. Three dimensions and a total of eight indicators are shown in Table 1 to measure the level of rural inclusive finance in Fujian Province.

For the three dimensions selected, relevant explanations are as follows:

1. The dimension about penetration degree of rural financial services:
It mainly depends on whether participants can enjoy financial services. The more popular financial services are, the broader the coverage will be, and the deeper the development degree of inclusive finance will be.
2. The dimension about accessibility of rural financial services:
The degree of financial services enjoyed by rural residents can be used to measure the degree of inclusive financial development in a region.
3. The dimension about agricultural insurance popularization:
The index of agricultural insurance popularization can be used to measure the positive impact of inclusive finance on the economic development of rural areas.

Table 1
Measure Indicators of rural inclusive finance

Dimensions	Indicators	Calculation Method
Penetration degree of rural financial services	Number of financial institutions per 10,000 people	Number of rural financial institutions/Number of rural population (ten thousand people)
	Number of financial institutions per square kilometer	Number of rural financial institutions/ The area of the countryside
	Number of employees in financial institutions per 10,000 people	Number of employees in financial institutions per / Number of rural population (ten thousand people)
	Number of employees in financial institutions per square kilometer	Number of employees in financial institutions/ The area of the countryside
Accessibility to rural financial services	Average savings per person	Deposits in rural financial institutions (100 million RMB)/ Population of rural residents (ten thousand people)
	Average loan per person	Loans from rural financial institutions (100 million RMB)/ Population of rural residents (ten thousand people)

Contd...

Popularization of Agricultural insurance	The purchase rate of agricultural insurance	Total premiums of agricultural insurance/Total premiums of property insurance
	The purchase depth of agricultural insurance	Per capita agricultural insurance premiums/Per capita GDP

2. Calculation Method of Rural Inclusive Finance Development Index in Fujian Province

This paper adopts the coefficient of variation method to objectively assign weight to each index to construct the rural inclusive finance index (IFI) as a measure of the development level of rural inclusive finance in Fujian Province from 2007 to 2019.

1. The coefficient of variation method

The coefficient of variation method is used to give weight to each indicator objectively, which can eliminate the dimensional differences among indicators. The empowerment situation is as follows:

The first step is to determine the coefficient of variation of each indicator. The calculation formula is:

$$V_i = \frac{\sigma_i}{\bar{x}}, i = 1, 2, 3, \dots, n$$

V_i is the coefficient of variation of the indicator, σ_i is the standard deviation of the indicator,

$\bar{x}$ is the mean of the indicators.

The second step is to determine the weight (W_i) of each indicator.

$$W_i \in [0, 1] \quad W_i = \frac{V_i}{\sum_{i=1}^n V_i}, i = 1, 2, 3, \dots, n$$

The third step is to measure the indicators value of the dimension.

Calculate dimension $d_i (i = 1, 2, 3, \dots, n)$ with weights,

$d_i \in [0, W_i]$, maximum is M_i and minimum is m_i . A_i is the actual value of the i th dimension.

The calculation formula is:

$$d_i = W_i * \frac{A_i - m_i}{M_i - m_i}$$

2. Calculate the Rural Inclusive Finance Development Index (IFI) of Fujian Province

This paper refers to the method of measuring financial inclusion index by Fan Zhaobin and Zhang Liuqing (2017). In the N-dimensional Cartesian space, point X represents the development level of inclusive finance, point O represents the extremely poor development level of inclusive finance, and point Y represents the high availability of financial services. The farther away from the origin O or the closer to point Y, the higher the development level of inclusive finance.

In this paper, it is assumed that X_1 and X_2 are the normalized Euclidean distances from the origin O and Y, respectively. Take the average value of X_1 and X_2 as the IFI. The measured index value range is [0,1]. The closer it is to 1, the higher the development of rural inclusive finance, and vice versa. The formula is as follows:

$$X_1 = \sqrt{\frac{d_1^2 + d_2^2 + \dots + d_n^2}{W_1^2 + W_2^2 + \dots + W_n^2}}$$

$$X_2 = 1 - \sqrt{\frac{(W_1 - d_1)^2 + (W_2 - d_2)^2 + \dots + (W_n - d_n)^2}{W_1^2 + W_2^2 + \dots + W_n^2}}$$

$$IFI = \frac{(X_1 + X_2)}{2}$$

In this paper, eight indicators used in the calculation of rural Inclusive Financial Development Index (IFI) and their descriptive statistics are summarized as shown in Table 2 below:

Table 2
Descriptive statistical results of indicators

indicator	Mean	Median	Maxi.	Mini.	Std. Dev.
Number of financial institutions per 10,000 people	1.296432	1.300473	1.519159	1.06492	0.166746
Number of financial institutions per square kilometer	0.022581	0.022777	0.023986	0.02168	0.000778
Number of employees in financial institutions per 10,000 people	13.44581	13.87238	17.05935	9.264237	2.850944

Contd...

Number of employees in financial institutions per square kilometer	0.23126	0.235071	0.260296	0.208668	0.015321
Average savings per person	2.429157	2.165429	5.279128	0.420661	1.672129
Average loan per person	1.543408	1.386907	3.299211	0.372358	0.963993
The proportion of agricultural insurance purchases	0.014324	0.015309	0.016703	0.007719	0.002979
The depth of agricultural insurance purchases	3.379856	4.051204	4.406833	1.177848	1.149348

Data sources: Statistical Yearbook of Fujian and Financial Operation Report of Fujian in relevant years.

Through the above methods, the IFI of Fujian Province's rural inclusive finance development is calculated as shown in Table 3 below:

Table 3
Rural Inclusive Finance Index of Fujian Province from 2007 to 2019

year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
IFI	0.02	0.04	0.14	0.2	0.28	0.37	0.45	0.53	0.62	0.7	0.78	0.88	0.97

As can be seen from Table 3, the overall Inclusion Financial Index in rural areas of Fujian Province shows an increasing trend from 2007 to 2019. In terms of time period, from 2007 to 2008, the index increased slightly. Since 2009, the IFI value of rural areas in Fujian has shown a phenomenon of stable growth. The main reason is that the national and provincial governments have introduced a series of policies to support the development of rural economy. At the same time, Fujian Province is also paying more and more attention to the introduction of rural talents and strengthening support for rural enterprises, which also provides a better business environment for migrant workers to return home and start their businesses.

4. Empirical study on the factors influencing the development of rural inclusive finance

(1) Data sources

The relevant data in this paper are mainly from official published data, such as Fujian Statistical Yearbook, Fujian Financial Operation Report, Fujian Financial Yearbook, Fujian Statistical Bulletin of National

Economic and Social Development, etc. Then, according to the actual development situation of Fujian Province and the availability of relevant data, this paper uses the data from 2007 to 2019 to build a time series model for empirical analysis.

(2) Model construction and variable selection

This paper selects the rural inclusive finance index (IFI) of Fujian Province obtained from the above calculation as the explained variable (Y). Then, according to the actual situation of financial development, the following six indicators are selected as explanatory variables, which are described as follows:

1. Urbanization level (X_1)

The higher the urbanization is, the greater the coverage of rural finance will be. The faster urbanization will inevitably promote the development of rural finance.

2. Informatization level (X_2)

In the information age, internet finance has become an important way of financial development. The number of mobile phones per 100 households is selected to represent the level of informatization. All operations related to financial services can be carried out through mobile phones. Therefore, the popularization of mobile phones in rural areas can expand the financial coverage and further promote the development of inclusive finance in rural areas.

3. Efficiency of financial development (X_3)

The higher the loan-deposit ratio is, the greater the financing demand is. The ratio of deposit and loan of rural financial institutions as the financial development efficiency is not only beneficial to the liquidity of banks, but also good for rural financial inclusion.

4. Government support (X_4)

The government's fiscal expenditure on agriculture, forestry and water conservancy indirectly reflects the subsidies for agriculture-related loans issued by financial institutions. Government support can greatly promote the development of inclusive finance, which is an iron law in China. That is why here selects the expenditure of agriculture, forestry and water affairs to represent the government supports.

5. Convenience of transportation (X_5)

The convenience of transportation promotes capital inflow, but in practice, the more backward the transportation is, the more inclusive

financial services are needed. Therefore, in this paper, per capita highway mileage is chosen to represent the situation of convenient transportation.

6. Proportion of agricultural output value (X_6)

If the proportion of agriculture in the region is too high, it means that the economic development of the region is relatively backward, which will seriously hinder the development of inclusive finance in rural areas. The proportion of agricultural output value in regional total output is selected to stand for the proportion of agricultural output value.

This paper empirically tests the relationship between Fujian Province's rural inclusive finance index and the above six explanatory variables. Therefore, excluding other interfering factors, the time series equation of factors related to rural inclusive finance is established as follows:

$$IFI = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \mu_i$$

IFI is the Inclusive Financial Index, β_i is the coefficient, u_i is the stochastic error term.

(3) *Descriptive statistics of variables*

Eviews.10 was used for descriptive statistics of variables, and the results are shown in Table 4:

Table 4
Descriptive statistics for variables

Variables	Mean	Median	Max.	Mini.	Std. Dev.
Rural inclusive finance index	0.4609	0.4522	0.9725	0.0168	0.3184
Urbanization level	0.5908	0.5960	0.6650	0.4870	0.0599
Informatization level	233.8538	238.8900	261.4900	186.4400	21.3238
Efficiency of financial development	0.6908	0.6405	0.8852	0.5848	0.1070
Government support	2831890	3122226	4477013	614904	1462932
Convenience of transportation	0.0058	0.0059	0.0070	0.0044	0.0009
Proportion of agricultural output value	0.078832	0.077550	0.102000	0.061239	0.013100

Data sources: Statistical Yearbook of Fujian and Yearbook of Fujian Department of Transportation for relevant years

(4) *The operation of Stationary Test*

In order to avoid the interference of heteroscedasticity, the 7 sequences including the selected explained variables and explained variables were logarithmized first. Then, ADF Test was performed on the logarithmic time series mentioned above. As can be seen from the test results in Table 5 below, the explained variable and the six explanatory variables are all stationary of the same order.

Table 5
Results of ADF Test

Variable	ADF Statistic	Critical Value of 5%	Critical Value of 10%	Result
LNIFI	-10.95628	-1.974028	-1.602922	Stationary
LN _{X1}	-3.287760	-1.974028	-1.602922	Stationary
LN _{X2}	-3.205965	-3.144920	-2.713751	Stationary
LN _{X3}	-3.968651	-3.212696	-2.747676	Stationary
LN _{X4}	-5.689602	-3.175352	-2.728985	Stationary
LN _{X5}	-8.008015	-1.974028	-1.602922	Stationary
LN _{X6}	-4.669857	-3.933364	-3.420030	Stationary

(5) *The operation of Stepwise Regression Method*

Stepwise regression analysis was carried out on the seven selected variables and the insignificant variable X_1 and X_6 was eliminated during the process. The final results are shown in Table 6.

Table 6
The results Stepwise regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
C	-74.57126	12.56896	-5.932970	0.0003
LN _{X5}	1.854413	0.488946	3.792671	0.0053
LN _{X3}	6.323546	1.870745	3.380229	0.0096
LN _{X4}	2.094435	1.103531	1.897939	0.0943
LN _{X2}	-2.422594	1.300195	-1.863254	0.0994
R-squared	0.985885	Mean dependent var	-1.160743	
Adjusted R-squared	0.978827	S.D. dependent var	1.213647	
S.E. of regression	0.176598	Akaike info criterion	-0.346158	
Sum squared resid	0.249495	Schwarz criterion	-0.128869	
Log likelihood	7.250025	Hannan-Quinn criter.	-0.390820	
F-statistic	139.6884	Durbin-Watson stat	2.159469	
Prob(F-statistic)	0.000000			

As can be seen from Table 6 above, R-squared is 0.986, indicating that the model has a good fitting effect and the regression equation results are:

$$\ln Y = -74.571 - 2.422\ln X_2 + 6.323\ln X_3 + 2.094\ln X_4 + 1.854\ln X_5$$

From the above Table 6 that the efficiency of financial development, government support and the Convenience of transportation are significantly positively correlated with the rural inclusive finance index (IFI), that is, the improvement of these three variables can promote the development of rural inclusive finance in Fujian Province. On the contrary, the Informatization level has a negative effect on the development of rural inclusive finance, that is, the greater the Informatization level, the less the need for the development of inclusive finance in rural areas.

(6) *The operation of Granger Causality Test*

Continue to construct Granger causality test for independent variables and dependent variables through Eviews10.0 software. The results of Granger causality test are shown in Table 7.

Table 7
Granger causality test

Null Hypothesis	Lags	F-Statistic	P-value	Result
X2 is not Granger Cause of IFI IFI is not Granger Cause of X2	2	0.08893 2.17557	0.9161 0.1948	Accept Accept
X3 is not Granger Cause of IFI IFI is not Granger Cause of X3	2	2.24203 33.4055	0.1874 0.0006	Accept Reject
X4 is not Granger Cause of IFI IFI is not Granger Cause of X4	2	15.9031 0.49840	0.0040 0.6306	Reject Accept
X5 is not Granger Cause of IFI IFI is not Granger Cause of X5	2	45.4998 0.69921	0.0002 0.5334	Reject Accept

5. Conclusion

Based on the above empirical results, it can be seen that under the condition of lagging two orders and a significant level of 1%, the test results reject the original hypothesis that two indicators of transportation convenience, government support are not the Granger Cause during the development of inclusive finance. The finding indicates that the past development of transportation convenience and government support can

predict the future development of inclusive finance in Fujian Province. In addition, the hypothesis that IFI is not Granger Cause of the efficiency of financial development is rejected, which indicates that the development trend of IFI can be used to predict the efficiency of financial development.

As for the negative relationship between informatization level and the development of rural inclusive finance in Fujian, the reason may be that the higher the density of mobile phone is, the more rapid and accurate financial information transmission will be. Thus, the traditional financial industry can give full play to its advantage. On the contrary, the development of financial inclusion is inhibited. Such finding is also supported by the Granger causality Test that there is no Granger causality between them.

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