Analysis of the Influence of Rural Financial Development on Rural Economic Growth

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Abstract: Since ancient times, agriculture has been the foundation of the country. The development of rural economy is inseparable from the promotion of rural financial industry. This paper analyzes the contribution of rural finance to rural economic development and the relationship between rural finance and rural economy. It analyzes the contribution of rural economy to the national economy; studies the causal relationship between rural financial development and rural economic development; and explains the necessity of rural financial development. Finally, it puts forward suggestions for accelerating the rapid development of rural finance in China and creating a good financial ecological environment. The study concluded that the development of rural financial industry is inseparable from the development of rural economy.

1. Introduction

As early as the middle of the 20th century, many scholars at home and abroad conducted a lot of research on the relationship between financial development and economic growth. However, due to the problem of how to measure the level of rural financial development [1], there has been no reasonable answer, so financial development and economic growth. There are also various views on the relationship [2]. In 1999, researchers first proposed the financial correlation ratio (FIR) to measure the level of financial development. This indicator has become the basis for many scholars to study and draws the conclusion that financial development is synchronized with economic growth. There are many studies on rural finance in developing countries abroad, and a very representative report is the comprehensive research report of the World Bank. In this report, they analyzed rural finance and argued that rural finance has two basic goals: to promote economic growth and reduce poverty [3]. However, they believe that the phenomenon of low level of financial development is widespread in developing countries. In particular, the efficiency of rural financial markets is relatively low, which is far from meeting the needs of rural economic development. Therefore, the reasons for the inefficiency of the rural financial market were analyzed. Chinese scholars have also studied the development of rural finance and rural economy. Especially after the government proposed the development strategy of building a harmonious society and building a new socialist countryside in the new century, rural finance has once again become a theoretical factor as a financial element of rural economic growth. And research hotspots in the field of practice [4].

2. Rural Finance and Rural Economic Development

Xiong Deping put forward the theory of economic and financial coordination by writing an article. In the book, he said that in essence, expanding “financial development” at the level of “rural finance” would result in “rural financial development”, in other words, “economic development” at the level of “rural finance”. It is not difficult to understand that the so-called rural finance is different from urban finance and is about agriculture and rural areas. Generally speaking, formal financial institutions such as informal microfinance companies and rural credit cooperatives and agricultural banks constitute a rural financial system [5], which has the functions of transferring accounts, withdrawing cash, issuing loans, and absorbing deposits. In order to promote rural financial progress, we must first improve the rural financial system, so that we can further stimulate

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rural economic growth [6].

Generally speaking, when measuring economic growth, it will be based on national income, national GDP, and so on. Based on theoretical analysis, the meaning of "economic growth" is extended and applied to rural areas. Therefore, the definition of rural economic growth is not difficult to understand. In one stage, the increase of services and products in rural areas is called rural economic growth [7]. .

3. The Impact of Rural Financial Development on Rural Economic Growth

3.1. Rural financial development promotes capital accumulation in rural economic growth.

Capital is a kind of production resource. The country's economic development cannot be separated from capital. If China wants to change the dual economic structure, it needs the promotion of capital. If the rural economic system includes rural finance and rural economy, it has the same technology, scale, structure, and complete competition characteristics. In addition, rural finance and economic development are determined by the stock of rural capital. If there is a certain amount of capital in the rural economic system, then there is a stock of rural economic capital including physical capital, financial capital, human capital, and social capital, which facilitates the smooth development of the rural financial system, and implements the financial supervision system and construction. Infrastructure and other aspects play an important role. Rural economic output reflects rural financial capital stock, which is an obvious feature.

3.2. Rural financial development promotes technological innovation in rural economic growth.

In the economic development stage, the economic structure is constantly changing, and technology has been rising, which has become an important factor for economic development, as has rural economic development. When we discussed above, there has always been a precondition that technology has not improved. In the theoretical analysis, the improvement of technical efficiency refers to the improvement of the quantity or quality of output when the production technology is applied, the organization and management form are the latest, and the production factors are the same. However, at this stage, China's rural financing system makes the real rich peasants not many. Basically all the peasants are very poor. For this reason, it is somewhat reluctant to implement technological innovation in rural areas. For financial markets, innovation can be achieved in this way, through stocks, bonds, certificates of deposit, and policies. Concentrate the funds scattered across the family and individuals, invest this part of the funds in large investment projects, and then optimize the allocation of financial resources to achieve technological innovation.

3.3. Rural financial development promotes industrial upgrading of rural economic growth.

The theory of economic development believes that economic development and its structural relevance are strong, and economic structure can be changed to achieve economic development. Correspondingly, when the economy develops to a certain stage, its structure will change. To this end, financial development is the result of structural changes. Therefore, the rural economy will be promoted by finance, and its structure will also be affected. We can think that if we want to develop the economy, we must optimize and upgrade the industry. Because the ratio of factor endowments (natural resources, labor, capital) determines the industrial structure, the amount of demand will be reflected in the financial structure. Therefore, economic growth is affected by the financial structure. A country has different factor endowments at different stages of development. The factor price is determined by the endowment structure, and the size of the enterprise, the nature of the risk, and the industrial structure depend on the factor price. Because different companies have specific scales, different risks are faced, and the funds required are different. The real economy has different needs at different times. If the industrial structure and financial structure of the local economy are similar, then the relevant functions of the financial system will fully reflect its role, so that the economy will develop more quickly and healthily.

4. Analysis of the Status Quo of Rural Loans and Rural National Income

4.1. Rural loan analysis

By analyzing the rural national income (RGDP), that is, the added value of agriculture, forestry, animal husbandry and fishery, we can easily find that the proportion of rural loans to national financial institutions' loans has changed abnormally in some years, but it is basically decreasing year by year. This is related to the change of loan policy. The linear relationship between rural national income and national income is very obvious, similar to the well-known situation, that is, the proportion of rural national income in GDP is decreasing year by year.

4.2. Regression analysis

If a linear model of rural national income and national income is established:

$$Y = \alpha + \beta X + \mu \tag{1}$$

(Y= national income,X= Rural national income, μ =Random disturbance)

Since the trend of data changes over time, the logarithm of the data can smooth the data. The final logarithmic model is:

$$LNY = \alpha + \beta LNX + \mu \tag{2}$$

Due to autocorrelation problems, direct regression will result in pseudo-regression. The correct regression results must be obtained by eliminating the autocorrelation process.

The regression equation after eliminating autocorrelation is:

LNY=9.246652+0.468188LNX

DW=1.759827

(n=19 k=1, dl=1.18, du=1.401. So this result is preferable.)

The results show that the elasticity of rural national income (X) to national income (Y) is 0.468, that is, for every 1% change in rural national income, national income will change by 0.468% in the same direction. The increase in national income is less than 1%. It shows that the rural economy has a relatively small impact on the national economy.

Establish a linear linear logarithm model directly between rural loans and rural national income:

$Z = a + bX + \mu$ (3)

(Among them,Z=LNRGDP,X=LNRL, μ is a random disturbance term)

Due to the particularity of the model, in view of this, a hybrid time series model is established. Finally, the model is established as the ARMA (2, 2) model through statistical, economic, and econometric tests.

The regression equation is: Z=3.926+0.6178X DW=1.55777

(n=19 k=1, dl=1.18,du=1.401, Therefore, there is no autocorrelation in this result.)

It can be seen that the elasticity of rural loans to rural national income is about 0.62, which indicates that when rural loans change by 1%, rural national income will change by 0.62% in the same direction. The change in rural national income is less than 1%, so the impact of rural finance on rural economic development is relatively small. This can also explain to a certain extent that rural finance cannot lead the development of the rural economy.

4.3. Granger causality test:

To fully explain whether rural finance plays a leading role in the rural economy, a causal test is needed. The basic idea of the Granger test is that “the past can predict the present.” If X is the cause of the Y change, then the change in X occurs before the Y change. If X is the cause of the change in Y, then X helps predict Y, that is, in the regression of Y with respect to the Y-lag variable, adding the lag variable of X as an independent explanatory variable should significantly increase the explanatory power of the regression. At this time, the Granger Cause is called X is Y. If the variable is added without significantly increasing the explanatory ability of the regression model, then X is not the Granger cause of Y. The following table shows the Granger causality test results.

Table 1 Rural national income is the cause of rural finance

Lag order	F	P	in conclusion
Lag=1	2.84242	0.11249	Refuse
Lag=2	4.46932	0.03543	Do not refuse
Lag=3	2.02452	0.18102	Refuse

Table 2 Rural finance is the cause of rural national income

Lag=1	0.45767	0.50902	Refuse
Lag=2	3.04347	0.08529	Refuse
Lag=3	1.79195	0.21846	Refuse

According to the results of the Granger causality test, rural income is the Granger reason for rural finance only when the lag order is 2nd. That is to say, the development of rural economy promotes the development of rural finance. Patrick, two models are proposed: “demand following” mode and “supply leading” mode, indicating that rural finance is demand-following. Therefore, it should seek to promote economic growth. At the same time, due to the influence of lagging effect, the development of rural economy in the current period can not immediately reflect the development of rural finance in the current period. According to the Granger causality test, the development of rural finance is based on the influence of the two phases of the rural economy. That is to say, the effect of rural economic development in the current period is relatively obvious for promoting rural financial development after two years, but has little effect on other periods.

5. Optimize Rural Financial Structure and Accelerate Rural Economic Growth

5.1. Optimizing rural financial structure

The rural financial structure is an organizational system for serving the rural areas. The optimized rural financial structure has a positive effect on economic growth. At present, China's rural financial structure has certain defects, and it does not fully play its functional role in economic growth. Therefore, optimizing the rural financial structure and forming a set of organizational systems to adapt to China's rural economic development is the top priority of China's rural financial development.

5.2. Promote the innovation of rural financial system and build a complete commercial operation mode of rural financial institutions.

At present, China's rural financial development level is relatively low, and rural financial institutions have relatively poor self-development capabilities. This is not suitable for a fully competitive market mechanism. Therefore, we must accelerate the development of rural financial institutions and form a complete system. The sustainable development of rural financial institutions operates to maintain the stable development of rural finance. Therefore, we must encourage rural financial innovation system and mechanism, and strive to establish a rural financial system with sufficient supply, efficient services, abundant products and smooth capital return to solve the shortage of funds facing agricultural development. We must benefit the people with efficient mechanisms and modern services, and promote the healthy and rapid development of new rural construction.

5.3. The monitoring system of rural financial institutions plays an important role in improving the efficiency of financial supervision

Because agriculture itself has unfavorable factors such as high risk and long cycle, it has low incomes for rural financial institutions that can invest in agriculture. This low-yield result has caused rural financial institutions to turn to some high-profit industries, and thus even less. Therefore, the government must adopt some broad measures to encourage rural financial institutions to enter the rural financial market, thereby expanding the scale of rural finance, improving rural financial efficiency, and promoting the development of the rural economy. At the same time, the government must improve the monitoring system for rural financial institutions, which plays an important role in improving the efficiency of financial supervision.

6. Conclusion

According to the knowledge of economics, the country's income from the agricultural industry is very small, and the government has set up rural financial institutions for the rural areas, which has a relatively small effect on the national economy. However, due to the basic status of agriculture, the potential consumption of rural residents is very large, so the use of rural consumption to promote the development of the national economy is the right choice. Based on the theory of financial development, this paper makes a simple analysis of rural financial development and rural economic growth, introduces the relationship between rural finance and economic growth, and finally writes the impact of rural finance on rural economy. The structure needs to be further optimized to establish and improve the rural financial system; the impact of rural financial efficiency on rural economic growth is urgently needed to accelerate the transformation of savings into investment..

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