

Internet Plus Industry Chain: Endogenous Approaches to Rural Finance in China

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Abstract—Rural financial reform in China has been carried out for many years, including the reform of rural financial institutions, functions, systems, operations, etc., but the effect of the reform is still far from its strategic goal. Financing is still difficult and expensive in rural areas. In the process of rural economic construction, improving rural financial services is the key to improving the level of the rural economic development in China. At present, the emerging rural "Internet plus industry chain" financial model is an "endogenous" rural financial model with weak government intervention, high financial efficiency and sufficient market competition, which is formed from bottom to top by various market participants. This paper analyzes the connotation and characteristics of the "Internet plus industry chain" mode, then finds out the factors affecting endogenous finance in rural China, and puts forward some countermeasures and suggestions on how to strengthen the implementation of the "Internet plus industry chain" mode to promote the endogenous finance in China.

Keywords—*Internet plus industry chain; internet finance; endogenous finance; rural finance*

I. INTRODUCTION

In the new era, China's rural economy began to closely integrate with the Internet. In particular, the innovation of "Internet plus" mode in rural finance is beneficial to rural economy, promoting the transformation of the development mode of agriculture-related enterprises and playing a positive role in the deepening of rural finance in China. Meanwhile, agricultural industry chain finance alleviates the information asymmetry between supply and demand of rural finance through the integration of logistics, commercial flow, information flow, capital flow and other information, and promotes the enterprises to obtain funds.

Compared with developed countries, the financial industry chain in China starts late, but fortunately, with the rapid development of the Internet era, the leading enterprises of rural industry chain began to construct the new financing mode by integrating financial institutions and exploring a new finance mode of "Internet plus industrial chain", hoping to achieve endogenous financial innovation and boost rural economy development. In fact, this rural financial model of "Internet plus industrial chain" is formed through market competition from bottom to top, with weak government intervention, high financial efficiency and sufficient market

competition. At present, this "endogenous" rural financial innovation model has begun to appear largely in rural financial market in China. Some renowned companies such as Nordson, Donghua Software, Huayu software, and New Hope have been expanding their business in rural financial area. Research on the financial model of "Internet plus industry chain" will promote the "endogenous" rural financial innovation model and have important practical significance in deepening the rural finance reform in China.

II. RURAL ENDOGENOUS FINANCE

A large number of scholars have conducted in-depth studies on endogenous finance. Weidong Hu (2011) believes that endogenous finance refers to the financial activities determined and induced by internal factors of the social and economic system, and becomes an organic part of the economic system after certain period of development. Chuanqu Yu (2008) argues that the bottom-up rural finance can well meet the financial needs of farmers and promote the development of rural economy. Jie Zhang (2003) believes that endogenous finance is a fund movement which is formed spontaneously by the folk under the stimulus of supply and demand. Zhongai Xu (2008) suggests that endogenous financial growth is a spontaneous, independent, and gradual evolution process, involving financial incentives, innovation, and constraint mechanism.

The above viewpoints provide a theoretical basis for us to define endogenous finance. Under the stimulation of market supply and demand, determined by internal factors of the social and economic system, and based on the participation and contribution of micro-economic entities, endogenous finance is the integration of the financial activities, financial organizations and financial system which can enhance the improvement of rural financial resources allocation efficiency and promote the balance between rural financial supply and demand. The formation of endogenous finance needs to be based on informal system rules, advocate orderly competition in rural financial market, and provide sufficient practice opportunities for rural financial entrepreneurs and farmers with a relatively long period. With the support of exogenous resources, the rural economy has realized a virtuous circle, and the rural areas have already had the necessary environment and conditions for the development of endogenous finance. Compared with exogenous finance,

endogenous finance cannot promote the increase of initial investment in rural finance in a short time, but it can protect the healthy development of rural economy by optimizing capital allocation and mobilizing savings.

III. RURAL FINANCIAL INTERNET PLUS INDUSTRY CHAIN MODEL

A. *Internet Plus Industry Chain*

"Internet Plus" was formally proposed in 2015, aiming to give full play to the advantages of the Internet, deeply integrate the Internet with traditional industries, enhance economic productivity through industrial upgrading and finally realize the increase of social wealth. Generally speaking, "Internet Plus" means "Internet plus various traditional industries", but this is not a simple addition of the two, but the combination and deep integration the Internet and traditional industries. On the other hand, "Internet Plus", as a whole concept, has a deep meaning of completing industrial upgrading through the internet-based development of traditional industries.

In the context of China's "Internet Plus" era, "Internet plus industry chain" is a very typical endogenous financial innovation mode, emphasizing on the leading enterprise guidance instead of the government, as well as reducing the information asymmetry between supply and demand of rural finance through measures such as big data credit investigation and industrial chain financial control.

B. *Characteristics*

1) *Being dominated by leading enterprises:* Under the mode of "Internet plus industrial chain", an excellent leading enterprise must be established to integrate the information flow, logistics and capital flow, etc. so as to effectively solve problems such as information asymmetry and uncontrollable risks.

2) *Integrating formal and informal financial institutions:* At present, due to inadequate mortgage rate, many farmers find it difficult to obtain loans from formal financial institutions such as banks. In view of this situation, leading enterprises can provide corresponding financial support for small and medium-sized enterprises and farmers through equity participation or holding, credit companies or P2P platforms. At present, banks are more likely to take the form of exogenous finance in rural economic development, while leading enterprises can integrate formal and informal financial institutions in various means to promote the endogenous development of rural finance.

3) *Matching supply and demand:* Both research and practical experience have shown that one of the key factors for leading enterprises to have made achievements in rural financial field is the use of big data credit investigation in promoting the matching and balance between financial supply and demand. Through the searching and sorting of data information, the financial demands of farmers can be

made clear and the pertinence of financing activities can be improved.

4) *Less government intervention:* The financial model of "Internet plus industrial chain" emphasizes on leading enterprise dominance, market innovation, and technology innovation. It adopts innovation method which is formed from bottom to top, which involves participation of micro-financial entities, without much interference from the government departments.

IV. FACTORS AFFECTING THE ENDOGENOUS DEVELOPMENT OF RURAL FINANCE

A. *Lack of Legal Protection*

As the relatively strict financial supervision system of CBRC does not conform to the reality of China's rural finance, small rural cooperative financial organizations that could have been established cannot be officially established due to the high threshold, and can only grow in the "non-sunshine" environment. Other financial institutions that have not obtained legal status are not standardized enough in the process of their operation, and there are certain risks and hidden dangers. The imperfection of the law and the irregularity of the system result in that many rural mutual aid organizations become nominal one and even actually usury institutions.

B. *Serious Loss of Rural Resources*

In the process of comprehensive urbanization, various resources in rural areas, such as rural labor force, rural capital and rural land, are rapidly lost. In the process of urbanization, lands are more and more occupied by the government and developers, and farmers get less income from land. In addition, a large number of rural labors enter and inhabit in urban areas every year. The loss of these resources seriously restricted the development of rural areas. As a result, rural financial institutions lack a sound growing environment, which hinders their endogenous development.

During the Spring Festival travel rush every year, there will be a large scale of population flow. Except for a few traveling families, most of them are migrant workers returning home for the Spring Festival. Under the dual economic system of urban and rural areas, although the household registration system restricts the migration of some rural population to urban areas, in order to obtain higher income and better education conditions for their children, many rural residents choose to go to cities for work, resulting in the loss of a large number of talents and labor force in rural areas.

TABLE I. NUMBER OF RURAL WORKERS IN CHINA IN 2017-2018

| | Number of people in 2017 | Number of people in 2018 | Increase in Number | Increase by Percentage |
|---------------------|---------------------------------|---------------------------------|---------------------------|-------------------------------|
| Migrant workers | 171.85 | 172.66 | 0.81 | 0.47% |
| Local rural workers | 114.67 | 115.7 | 1.03 | 0.90% |
| Total | 286.52 | 288.36 | 1.84 | 0.64% |

^aNote: Local rural workers refer to the workers who work in the villages and towns where their domiciles are located.

^bMigrant workers refer to migrant workers who work outside the villages and towns where their registered permanent residence is located.

^cSource: 2018 National Economic and Social Development Statistical Bulletin, National Bureau of Statistics

^dunit: millions

C. Slow Development Due to Administrative Control

Rural financial reform and rural market reform are mentioned in the No. 1 document of the central government every year, which highly proves that the central government attaches great importance to rural financial reform. However, in the actual reform practice, what is reflected is still the government's executive-led will, including the design of financial reform plan, reform implementation and reform effect assessment, which are all carried out under the government's administrative arrangements. As a result, the market-oriented reform of rural finance has not achieved its original intention: to improve the efficiency of rural financial market and provide financial services for rural population. Taking the reform of rural credit cooperatives as an example, since 2003, China has started a new round of reform of rural credit cooperatives, which decentralizes the management of rural credit cooperatives, establishes the management mechanism of provincial cooperatives, and puts forward market-oriented reform of rural credit cooperatives. However, in practice, the control of rural credit cooperatives has not been separated from the government, but has been transferred from the central government to the local government instead. The responsibility positioning is vague, with strong administrative color. For example, the chairman of the provincial association, the supervisor and the regional directors of credit cooperatives are appointed by the government, and the various systems of the provincial association are approved by the government. Therefore, the "market-oriented reform of rural finance under the administrative control of the government is difficult to realize the real market-oriented or endogenous development.

V. CONCLUSION AND SUGGESTIONS

For a long time, the main reason for the mismatch between supply and demand of rural finance in China is the shortage of endogenous finance, coupled with the local government intervention, the imperfect financial mechanism and other factors. The rural finance in China has been in a state of financial repression for a long period of time. In recent years, with the development of Internet finance and industrial chain economy, more and more attention has been paid to the endogenous financial model of "Internet plus industry chain". It can create new development model of rural finance by integrating various financial institutions, and effectively improve the supply and demand matching of rural

finance. In view of the existing problems in the "Internet plus industry chain" financial model, relevant departments and researchers need to take effective measures to ensure the smooth realization of rural financial endogeneity.

A. Improving Relevant Laws and Systems

Government departments need to establish relevant laws for the development of rural finance in order to determine the legal status of various types of rural endogenous financial institutions and ensure that the operation of these institutions and organizations are conducted in accordance with the law under the supervision of the government, creating a sound legal environment for rural finance. In order to attract farmers into the field of endogenous finance, the CBRC should lower the threshold for endogenous financial institutions in rural areas according to the specific local financial environment and the actual situation of rural financial development so that all endogenous financial institutions can be registered and is conducive to the government's supervision. In addition, standardized management system should be established for financial institutions to prevent farmers in need of loans from being charged of high interest rates.

B. Consolidating Soil for Endogenous Development of Rural Financial Institutions

According to the above analysis, the soil for the current endogenous development of rural financial institutions in China is weak. Top-level design should be carried out to prevent the loss of rural resources including rural capital, rural labor force, rural land, natural resources, etc. In terms of rural funds, it's necessary to encourage rural financial institutions to use more funds in rural areas instead of cities by means of interest subsidies and risk fund pools. For land expropriation, it is forbidden to expropriate farmers' land cheaply under the guise of "urbanization", and some high-quality land suitable for planting should be firmly reserved for large-scale planting operation to achieve large-scale benefits. For the rural labor force, training opportunities can be provided for farmers to improve their financial knowledge. Meanwhile college students and young adults should be encouraged to return to their hometowns to start businesses and find jobs. The government has set up a fund for college students to start businesses and a fund for migrant workers to start businesses in rural areas.

C. Giving Full Play to the Role of the Government on the Basis of Endogenous Development

The experience of foreign financial market development proves that the government's appropriate behavior choice is of great significance to guarantee the market operation of the financial market. When the rural financial market function is not sound, the government should increase the intervention and support to the rural financial market. In this case, the rural financial market development model is mainly government-oriented. With the support of the government, when the development of the rural financial market reaches a certain level, the government should choose to withdraw at proper time, and the government behavior should be turned from the previous administrative control intervention to the reasonable guidance of rural financial activities so as to promote the operation of rural financial institutions in accordance with market rules and improve the service efficiency of rural financial institutions. In China, some rural financial institutions in developed areas have had the conditions for market-oriented operation. The government should completely withdraw from its administrative intervention and mainly conduct guidance and supervision, encouraging healthy market competition among financial institutions. While for some rural financial institutions in backward areas, the government can moderately intervene and give guidance, cultivating and developing new type of rural cooperative finance.

REFERENCES

- [1] Ephraim Wadonda Chirwa. The development of rural finance institutions for the poor: The case of malawi mudzi fund. Working Paper, 1998.
- [2] Franz Heidhues, Gertrud Schriede. Rural financial market development [M]. Stuttgart Grauer, 1999.
- [3] Hong Chen, Yang Gao. "Internet plus value chain": a new model of endogenous finance in rural areas [J]. Academic Communication, 2016(5): 131-135.
- [4] Guoying Li. China's modern agricultural industry chain and business model in the context of "Internet plus" [J]. Rural Economy. 2015(9): 29-33.
- [5] Yangping Cai, Bing Xie. Study on the endogenous development mechanism, obstacles and countermeasures of endogenous finance in rural China [J]. Finance and Economics, 2016(2): 27-32.
- [6] Haibo Zhu, Xue Xiong, Xiangchen Kong. Path exploration of "Internet plus e-commerce" in promoting rural economic development in poor areas [J]. Rural Finance Research, 2017(8): 13-18.
- [7] Minyi Zhi. Path exploration of Internet finance serving rural areas and farmers [J]. Modern Finance, 2017(10): 41-43.
- [8] Yuyu Wu, Shan Yang, Weiyi Zhang. "Internet plus industry chain": a new path for the endogenous development of rural finance [J]. Western Forum, 201(5): 12-19.