



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Discussion about Shareholding Cooperative Development Road for Agricultural Cooperatives in China

Yongcai WANG *

Rongchang Campus, Southwest University, Chongqing 402460, China

Abstract Using modern economic theories, this paper analyzed drawbacks of Shareholding cooperative development of agricultural cooperatives in institutional design and expounded inevitable difficulties of development of agricultural cooperatives. Shareholding cooperative development provides a pass for many social forces entering and controlling agricultural cooperatives and making numerous non-agricultural cooperative organizations become formal cooperatives. Deep cause for Shareholding cooperative development of agricultural cooperatives involves how to recognize status and function of family producers of agricultural products in the drive of agricultural modernization and the problem of state policies choosing family producers of agricultural products or other participants in the agricultural industry chain. Shareholding cooperative development is only an expedient measure in certain period, and it should not change development laws of things and essential feature of agricultural cooperatives because of stressing national conditions.

Key words Agricultural cooperatives, Shareholding cooperation, Institutional design, Development road

1 Introduction

The basic principle of agricultural cooperatives is to organize agricultural product producers independent of agricultural production and complete functions that can not be performed individually by agricultural product producers. In this study, owners of specialized farmers cooperatives include agricultural product producers, and operators of processing and marketing links. Capital contribution of cooperative members will participate in allocation of residual income and control power, taking on Shareholding cooperative development road. The main difference between specialized farmers cooperatives and agricultural cooperatives of developed countries lies in allocation of various rights. Since the promulgation and implementation of the *Law of the People's Republic of China on Specialized Farmers Cooperatives*, specialized farmers cooperatives have been developing rapidly, but there is still a large gap with expectation of all parties. Surveys have shown that specialized farmers cooperatives are not recognized by vast farmers, and most farmers are indifferent to cooperatives. Even in areas where cooperatives have realized considerable development, still many farmers do not join in the cooperatives; some cooperatives fail to operate any more; many cooperatives show traits inconsistent with existing regulations. It proves low efficiency level of specialized farmers cooperatives. In the future development of cooperatives, whether specialized farmer households engaged in production or marketing of agricultural products can become benefit subjects of specialized cooperatives should be the touchstone for healthy development of specialized farmers cooperatives. Therefore, it is obvious to use this touchstone to evaluate development situation of

agricultural cooperatives in China. In No. 1 document of central government of 2013, it proposed revising the *Law of the People's Republic of China on Specialized Farmers Cooperatives*, reflecting all classes are pondering over development road of agricultural cooperatives in China.

2 Review of shareholding cooperative development road for agricultural cooperatives in China

2.1 Township enterprises practicing shareholding cooperative system According to modern enterprise theory, enterprise is the combination of contracts. Enterprise owners combine together with raw material suppliers, product consumers, fund providers, laborers, technology providers, and enterprise managers through contracts. The ownership of owners mainly includes control power and residual claim. When studying an enterprise organization, it is necessary to make clear who is the owner and how to allocate the ownership between owners. Owners of enterprises usually provide production element or preference (purchasing products, for example) for enterprises and allocate the ownership according to quantity of production elements or preferences provided. If the owner is capital contributor, the enterprise will be investor oriented enterprise and the ownership will be allocated according to contribution amount. If the owner is other type of customer, the organization will become a cooperative. If the owner is primary agricultural product producers, the organization will become an agricultural cooperative. Shareholding cooperative enterprises, different from the above enterprises, are characterized by the fact that their owners include different types of members and different members provide different production elements. For example, some owners provide capital, some owners supply labor, and some owners provide raw materials. Different owners have different methods of contribution to enterprises, and allocation of ownership in owners will adopt several standards. Shares in shareholding cooperation

refer to capital contributor participating in allocation of enterprise ownership as per contribution amount, while cooperation refers to other element providers participating in allocation of enterprise ownership as per quantity of production elements or preferences provided. In the *Notice about Implementing and Improving Shareholding Cooperation System of Township Enterprises* issued by the Ministry of Agriculture in 1992, a shareholding cooperative enterprise refers to a business entity or economic entity organized voluntarily by two or more laborers or capital contributors taking funds, material objects, technologies, and land use right as shares, conducting various production and operation and service activities in compliance with law, and implementing democratic management. In special conditions, owners provide two different elements and participate in allocation of ownership as per two standards. In the 1980s, the development of township collective-owned enterprises was restricted and investor-oriented enterprises became restricted area. This situation promotes appearance of shareholding cooperative enterprises in economically developed areas. These enterprises take the form of shareholding in capital composition, but capital contributors have combination of labor and belong to cooperation, thus are generally deemed as collective economic organizations and accordingly obtain power of survival and development. In the 1990s, there were two opposite opinions about existence of shareholding cooperative enterprises: one opinion is that shareholding cooperative enterprises keep reasonable core aspects of shareholding such as fund raising, allocation, operation and management as per shares, and absorb basic elements of cooperation such as shareholders participating in labor, distribution according to labor, and withdrawal of public accumulation, thus shareholding cooperative enterprise is a new socialist collective economic organization combining merits of shareholding and cooperation. The other opinion is that cooperation and shareholding are two different forms of enterprise properties. An enterprise may implement cooperation or shareholding, but can not implement cooperation and shareholding simultaneously, and can not combine shareholding and cooperation into one. Therefore, shareholding cooperation is an enterprise system evolved in certain conditions with transition feature. With the development of the times, shareholding cooperative enterprises become fewer and fewer. This proves reasonableness of the second opinion.

2.2 Agricultural cooperatives getting onto shareholding cooperative development road The basic operating system of China's agriculture experienced three stages. At the first stage, land was contracted by farmer households. At the second stage, part-time farmer households sprang up. At the third stage, specialized farmer households and other industrial specialized households appeared. When specialized farmer households spring up, the development of rural economic combination, association, and organizations will enter into a new stage. After the implementation of the household contract responsibility system, China has made outstanding achievements but there are also many problems. A major problem is how to connect small farmer households with big

market. This is also a major problem at the stage of combination. It is easy to realize separation, but the problem of integration always restricts development of China's agriculture. In this situation, organization of agricultural production is brought into agenda. The organization of agricultural production is also organization of agricultural product producers. It is urgent to solve the problems of who will be responsible for organization and how to realize the integration. Weak family producers of agricultural products at the combination stage make them unable to establish agricultural cooperatives with modes of developed countries, and small family households can not organize together to enter the downstream of production stage.

In the end of the 20th century and the beginning of the 21st century, there appeared some cooperatives organized spontaneously by farmer households, but most of them failed to develop and survive. In this situation, there are two possible solutions. Firstly, strengthen family producers of agricultural products from production scale and funds; secondly, introduce organizers and take weak family farmers to organizers for management and leadership. In reality, the second solution was selected and practice of township enterprise shareholding cooperation system was adopted. Combination of shareholding cooperation is not combination of producers of agricultural products, but combination of downstream capitals and sectors with producers of agricultural products. In weak situation, producers of agricultural products closely combine with downstream links such as capitals and sectors to adapt to agricultural marketization and avoid market risk. Such combination is not cooperative, just given the name of shareholding agricultural cooperative. The feature of such cooperative is combination of allocation as per turnover and allocation as per capitals, sharing profit according to contribution for external capitals (additional capitals input beyond the shares) and social capitals (capitals of non members). Within the cooperative, it adopts return as per transaction amount or the combination of both methods. In the *Regulations of Zhejiang Province on Specialized Farmers Cooperatives* formulated by Zhejiang Province in 2005, agricultural cooperative is a classical shareholding cooperative enterprise. According to these Regulations, cooperative members are divided into members engaged in production and other members, and members should subscribe shares, and voting right and allocation method are connected with transaction amount and share amount of members.

This regulation influences the *Law of the People's Republic of China on Specialized Farmers Cooperatives* implemented in 2007. Article 2 of Chapter I in the *Law on Specialized Farmers Cooperatives* stipulates that "A farmers' specialized cooperative is a mutual-aid economic organization, which is voluntarily formed by production and business operators of similar agricultural products or by providers or users of similar agricultural production and business operation services on the basis of rural household contractual management and which is subject to democratic management. Here, it mixes producers and operators together, and mixes pro-

viders and users of production and operation services. Since the criterion of member is "using services provided by specialized farmers cooperatives", all links including planting and breeding, processing, and circulation and operation of agricultural products can be deemed as using services provided by cooperatives. Cooperative members include providers and users from the perspective of service, and include upstream producers and downstream processors and marketing personnel from the perspective of industrial chain. Article 37 of the *Law of the People's Republic of China on Specialized Farmers Cooperatives*, the profits of the year left after the losses are made up for and the common reserve funds are drawn shall be the distributable profits of a specialized farmers cooperative. Therefore, the residual claim right is correlated with transaction amount and contribution amount, and contribution is a precondition for participation of ownership allocation. Also, contribution becomes a channel for other types of members entering cooperatives and obtaining rights. Although *Cooperative Law* does not set forth the concept of share, but the member structure and division of powers reflects basic characteristics of shareholding cooperatives. The *Cooperative Law* tries to limit non-agricultural product producer members through arrangement of power organs, voting method, and profit allocation method, and number of different types of members, but these measures perform practically no function in reality.

3 Institutional characteristics of shareholding cooperative development of agricultural cooperatives

In developed countries, common agricultural cooperatives include classical agricultural cooperatives and new generation cooperatives. Now, we discuss institutional structure of these cooperatives from capital contribution, control power, residual claim right, and power transition.

Except debts, assets of enterprises are provided by owners, forming the owner's equity, and assuming business risks. Enterprises connect with interested parties through contracts. For major matters not specified in contracts, owners have right to make decisions and choices. Such power is called residual right of control. Enterprise income deducting various expenses under contracts forms enterprise surplus. The surplus will be allocated among owners, and residual claim right must be possessed by the participants who possess the residual control right. Power transition refers to whether asset ownership, control right, and residual claim right can be circulated. The precondition for circulation is that the above rights can be separated. We summarized characteristics of different agricultural cooperatives. Classical agricultural cooperatives and new generation cooperatives are agricultural product producers oriented.

Specialized farmers cooperatives are contributors and agricultural product producers oriented, downstream parts such as processing and marketing generally appear in the form of contributors, thus specialized farmers cooperatives are also downstream part and agricultural product producers oriented. Classical agricultural co-

operatives are contributed by agricultural product producers, but contribution is not correlated with allocation of ownership. The allocation of control right can be one-man-one-vote, also can be made as per transaction amount. In comparison, new generation agricultural cooperatives are contributed by agricultural product producers, transaction amount is fixed in the form of contract, and ownership is separated as per transaction amount. The transaction amount of members is coupled with contribution amount, reflecting the development direction of clear ownership. In the aspect of contribution, the difference between specialized farmers cooperatives, classical agricultural cooperatives, and new generation agricultural cooperatives is introduction of downstream contributors, such as processing and marketing.

In the aspect of allocation of control right and residual claim right, the difference lies in whether contribution participates in allocation of control right and residual claim right. After introducing non-agricultural product producers, owners do not supply primary agricultural products, do not consume means of agricultural production, and fail to form patronage, and consequently have to obtain ownership in the form of contribution. These indicate that there is essential difference between specialized farmers' cooperatives in China and classical agricultural cooperatives and new generation cooperatives. Agricultural cooperative is an economic organization, and certain organizational form has certain development rules and essential characteristics. No matter agricultural cooperatives in China or those in foreign countries, the core aspects are the same. Simply, agricultural cooperatives are agricultural product producers oriented and agricultural product producer owned, controlled and benefited. In view of national conditions, it is reasonable for China not to adopt such agricultural production and operation system, but it is not proper to change the core aspects and give it the name of cooperative. There is the suspect of deceiving oneself as well as others. Domestic scholars have deviated understanding in shareholding cooperatives of developed countries. They thought cooperatives in developed countries have realized shareholding or shareholding cooperative, and considered that specialized farmers cooperatives conform to the development trend of international agricultural cooperatives.

Take the United States as an example, US Department of Agriculture has a complete set of methods for establishment of cooperatives. According to direct investment of members, cooperatives can be classified into shareholding and non-shareholding. In shareholding cooperatives, members should buy few common stocks as certificate of membership. Such stocks have voting right, and every member holds the same quantity of stocks, realizing the principle of "one man one vote". These stocks are issued only to members, free of interest, and do not participate in distribution of income. For members and non-members, it can issue preferred stocks. The preferred stocks are not provided with voting power. Non-members have no voting power and investment interest is limited. In fact, non-members are encouraged to invest and non-members are unwilling to make investment.

Cooperatives also provide asset certificate for members and non-members, which are equivalent to preferred stocks. There is no essential difference between shareholding and non-shareholding system. It depends on which is easier to understand and accept. Cooperatives have made various innovations, such as new generation cooperatives, cooperatives with joint stock subsidiaries, and cooperatives with investors holding preferred stocks, including member contribution requirements (according to transaction amount), determination of transaction amount, closed member system, transaction right and investment may not be recovered but can be circulated, and introduction of external investment with limitations, but sticking to the bottom line is the foundation for agricultural product producers controlling the cooperatives. In sum, cooperatives in developed countries have not realized shareholding or shareholding cooperative in usual meaning.

4 Theoretical thinking about shareholding cooperative development of agricultural cooperatives

4.1 Team production based enterprise theory According to the team production based enterprise theory, agricultural product producers should closely cooperate with downstream marketing and processing links. For example, agricultural product producers need providing acceptable primary agricultural products in quality and quantity, while downstream links need processing and marketing in time. In team production, effort and contribution of individual member are not measurable, and it is not able to establish the connection between payment, effort and contribution. Residual allocation as per certain proportion will generate externality, and input of members is lower than the optimum value, which will reduce efficiency of the organization. Shareholding cooperatives include agricultural product producers and downstream part. Efforts of agricultural product producers and downstream part will not be accurately observed and determined and it will be difficult to measure contribution of agricultural product producers and downstream part. Each member will only obtain the result brought about by his effort, then there appears externality and members' effort is lower than the optimum value, leading to problems of loafing on the job and hitchhiking, consequently reducing organization efficiency. In shareholding cooperatives, agricultural product producers share the cooperative surplus with downstream marketing and processing, allocated as per transaction amount and contribution amount. No matter what proportion of both allocation methods, it will lead to input lower than the optimum value and consequently reduce efficiency of economic organizations. According to team production based enterprise theory, a party shall enjoy the residual claim right and control right, become master of enterprise and supervise work of the other party, and make payment as per work conditions, but not make both parties enjoy the residual claim right and control right at the same time. Agricultural cooperatives choose agricultural product producers as supervisors to supervise downstream part, and make payment not lower than retained income. Agricultural product producers become residual

claimers, maximize their benefit through their efforts, and optimize overall efficiency of their team. Low efficient organizations with different participants enjoying rights are difficult to survive in competitive conditions. Therefore, it is impossible to realize the agricultural cooperatives envisaged in the Cooperative Law. They should be transformed to control by agricultural product producers or by downstream part. In reality, the major situation is control by downstream part. Such result deviates from original intention of specialized farmers cooperatives and goes against basic principle of agricultural cooperatives.

4.2 Transaction cost theory Coase (1937) firstly introduced the issue of enterprise boundary, and Williamson (1985) *et al* made analysis using the transaction cost theory. Transaction cost refers to the cost incurred in finding transaction objects, negotiation about contracts, and implementing contracts in the transaction process. It comes from opportunism action of transaction related parties. Transaction features uncertainty, frequency occurrence, and special assets. These features determine which kind of organization form should adopt. Efficient organization method and administration structure bring about minimum sum of production cost and transaction cost. The organization method and administration structure mainly include market, enterprises, and mixed organizations. Incomplete contract and special investment of agriculture result in higher transaction cost in agricultural production. Due to formulation cost of contract, unpredictable results, and limited rationality of participants, it is impossible to specify clearly various probable conditions in contracts. As a result, it results in incomplete contract. There are numerous incomplete contracts in agriculture, such as quality grade of agricultural products and harvesting time of agricultural products. It is very difficult to clearly describe these key issues. Special investment means value of transaction objects higher than value of non-trading objects, including special purpose of location, special purpose of human resources, and special location of assets, and value difference of different objects will form quasi rent. Investment of farmers is generally special-purpose investment, manifested in location, time duration (vulnerable to become perishable), and special equipment. The typical cases are decay of vegetable, melons, fruits, and milk if not sold. These products will become special-purpose investment. In other words, when farmers' products have to be sold to downstream enterprises for processing, these products will become special-purpose investment.

Investment of downstream enterprises also may have special purpose. For example, machines and equipment only process certain agricultural products and these machines and equipments become special-purpose assets. Superposition of incomplete contracts and special-purpose investment leads to re-negotiation of income allocation. Rational men will take opportunistic behavior and seek more benefits in re-negotiation through overcharging. For example, if agricultural products are not sold out, farmers will suffer a loss; similarly, if live pigs raised by breeders have to be sold to one slaughterhouse, breeders will also suffer a loss. If participants

realize they are overcharged, the investment level is lower than optimum value, forming investment blockage. Special-purpose investment is usually the effective production method, and investment blockage will hinder effective production, which is manifestation of transaction cost. Agricultural modernization and industrialization requires close cooperation of agricultural industry chain links, special-purpose assets of agriculture will become more and more important and widespread. Klein *et al* (1978) held that a solution to the above problems is integration, making transaction parties exist in an enterprise, implement level management, realize internalization of external transaction, lower level will not overcharge over the superior level, which will reduce transaction cost. Modern agricultural cooperative system is a kind of integrated organization system generated from incomplete contract, special-purpose investment, and overcharging background. It is expected to increase the organization efficiency through special-purpose investment of protecting agricultural product producers. Single producer of agricultural products is incapable of merging downstream parts. In this situation, agricultural product producers organize together to establish cooperatives. Agricultural cooperatives lead downstream parts into cooperatives, and assets of downstream parts are owned by cooperatives, managers of downstream parts are employees of cooperatives and obey command of cooperatives, which overcomes overcharging of downstream and protects special-purpose investment of farmers. Shareholding specialized farmers cooperatives include producer members and downstream processing and marketing members, these members are equal, so the cooperatives are not able to really control them. There are still opportunistic behaviors in market administration structure, which will not reduce transaction cost, fail to protect special-purpose investment of members, and basic advantages of agricultural cooperatives will not exist. In reality, there are often downstream links controlling upstream links, which reverses the direction of integration. Agricultural product producers certainly will not trust, get interested and be unwilling to get involved in such organizations. What's worse, development of agricultural product producers will be restricted.

4.3 Enterprise ownership theory Hansmann (1996) put forward enterprise ownership theory. According to this theory, economic organizations allocate ownership to a type of customers, which will form corresponding ownership cost and market transaction cost. Market transaction cost refers to the cost incurred due to incomplete competitive market structure, information asymmetry, special-purpose investment, and incomplete contracts in the process of communication between economic organizations and customers. The ownership cost includes collective decision-making cost, principal-agent cost brought about by separation between ownership and control right, and risk bearing cost. Efficient economic organizations should minimize the sum of ownership cost and market transaction cost. The success of cooperatives depends on whether the ownership cost can be lowered, while the ownership cost is mainly influenced by heterogeneity of members and clear-

ness of ownership. The main reason for few economic organizations with different types of customers sharing the enterprise ownership lies in too high cost of collective decision making. When there is inconsistency between owners due to heterogeneity, the collective decision-making mechanism will bring about collective decision-making cost, including the cost due to inefficiency and cost of decision-making process. The greater the difference between owners, the higher the cost of collective decision-making.

According to ownership theory, when economic organizations allocate the ownership, it is required to allocate the ownership to one type of customer, rather than two or more types of customers, and also to stress the homogeneity specially even if for one type customer. Historical experience indicates that influence of owner heterogeneity is one of essential reasons for failure of institutional design. Investor-oriented enterprises have strong homogeneity, which is a unique advantage. For non-investor-oriented enterprises, the greatest difficulty is the cost of decision-making brought about by member heterogeneity. Different types of farmers in agricultural cooperatives hope cooperatives make decisions favorable for them. For example, if there are farmers raising sheep and farmers breeding cows in a cooperative, sheep raising farmers hope to extend downstream market through cooperative investment, while cow breeding farmers want to extend downstream market through cooperative investment; young members of cooperatives hope to make long-term investment, while older members hope to make more allocation of surplus. Each party will suggest the cooperative to make decision favorable for him. This will disturb optimum and rapid making of decisions and accordingly influence the cost. To reduce ownership cost, members of agricultural cooperatives should have no obvious benefit conflict, their role should not be greatly different, influence of important decisions of cooperatives should be little, and it is difficult for some members to infringe upon benefits of other members. However, the owner heterogeneity of specialized farmers cooperatives rises from heterogeneity of agricultural product producers to heterogeneity of service providers, users, upstream producers and downstream operators. Benefits of two or more types of customers are generally confrontation. Service providers and users of cooperatives are zero and game in price. Farmers hope to raise price of agricultural products, while processing and marketing links are opposite. The confrontation between agricultural product producers and non-agricultural product producers is not weakened due to the same organization. Members of specialized farmers cooperatives are far to reach the requirements of heterogeneity.

Zhang Xiaoshan (2009) held that within cooperatives, how to establish close benefit combination mechanism between leading enterprises and farmer members? Such mechanism should fair and reasonable benefit combination mechanism. Such attempt will not be realized through sharing the ownership from the perspective of ownership cost. Shareholding development of agricultural cooperatives is low efficient organization because member heterogeneity generates too high ownership cost.

4.4 Property right theory Barzel (1989) pointed out property right of an individual consists of power and right through consuming these assets, obtaining income from these assets, and transferring rights and powers of these assets. Property right often has several dimensions and has difficulty in definition. Unclear definition often generally brings about public property right problem, and property right has exclusive feature. The property right theory of Hart *et al* (1990) and Grossman *et al* (1986) was expanded through property right of interested parties over a group of assets, and the function of property right lies in obtaining the residual control right, and obtaining other rights of economic organizations. The property right theory also applied the concept of incomplete contract and special-purpose investment. When using assets, interested parties need having special-purpose investment related to such assets, such as human capital. Only through combination of special-purpose investment and assets, they may be brought into play. Therefore, it will influence use efficiency of assets. The special-purpose investment is difficult to identify and can not be included into contracts. Once asset owner is separated from special-purpose investment, special-purpose investment will become investment of precipitation, and both parties will renegotiate allocation of cooperative income. In re-negotiation, special-purpose investors will stand to lose because special-purpose investment separating from assets will lose function, the income of external selection point is very low. Predicting about such results, special-

purpose investors will reduce input and deviate from the optimum value. Combination of asset owners and special-purpose investors will play the function of protecting special-purpose investment. The property right of assets is rare resource and exclusive. If the property right is given to a party, other party will not be able to obtain, and special-purpose assets of other party will not be protected. The ownership of assets leads to arrangement of property right. How to arrange the property right determines the bargaining power in re-negotiation. Related parties determine amount of special-purpose investment (maximizing their income), and special-purpose investment determines organization efficiency. Therefore, institutional design including property right arrangement determines efficiency of economic organizations. General principle for arrangement of property right: Property right should be assigned to the investor of special-purpose investment having the most important influence; assets should not have owners, and assets should not be owned jointly. Joint ownership of assets means a single party should not dispose assets independently, and income of parties is relatively low when bargaining and can not protect special-purpose investment. The joint ownership of assets is equal to no ownership. This wastes precious resource of the property right and is a manifestation of unclear property right. Shareholding development of agricultural cooperative is a system of joint ownership of assets, producers and downstream members jointly own assets of the cooperatives.

(From page 6)

- [25] TIAN J, LIU Y, TAO JP. The influence of rural banking structure on the rural economic growth –Based on the background of new type of rural financial institutions innovation [J]. *Economy and Management*, 2013, 27 (9):36–42. (in Chinese).
- [26] ZHU YL, LIU GH, LI XJ. Study on the measurement and causes of the financial exclusion in the center area [J]. *Financial Theory and Practice*, 2010(2): 70–74. (in Chinese).
- [27] TIAN J, TAO JP. Empirical analysis on spatial differences and convergence of the rural financial exclusion:Based on the data from 1728 counties and cities [J]. *Statistics & Information Tribune*, 2011, 26(12):97–102. (in Chinese).
- [28] TIAN J, TAO JP. Social economic characteristics, information technology and rural finance exclusion [J]. *Modern Economic Science*, 2012(1):58–65, 126. (in Chinese).
- [29] TIAN J, TAO JP. The impact of rural financial exclusion on the rural –urban income gap empirical analysis based on the panel data from our 1578 counties (cities) [J]. *Economic Issues in China*, 2011(5):56–64. (in Chinese).
- [30] TAN YZ, CHEN B, TIAN LP, *et al*. The factors and extent that have resulted in the rural financial exclusion problem: An empirical research based on the data of 667 counties from six central provinces of China [J]. *Economic Review*, 2014(1):25–37. (in Chinese).
- [31] HUANG WS, TAO JP. Innovating new type rural financing institution, breaking the “marginalization” of rural finance [J]. *Productivity Research*, 2009(4): 28–30. (in Chinese).
- [32] MENG F. Accessibility of financial service: Regulatory issues and institutional innovation [J]. *Finance and Economics*, 2009(8):18–24. (in Chinese).
- [33] TAN WP. On constructing the rural inclusively financial system from the perspective of “trinity” [J]. *Journal of Hunan University of Science &*

- Technology (Social Science Edition)*, 2013,16(6):85–88. (in Chinese).
- [34] ZHANG P. Vigorously developing micro-credit, promoting inclusive finance system construction in China [J]. *Productivity Research*, 2011(5): 51–52. (in Chinese).
- [35] ZHOU ML, LI MX. Group lending model and microfinance mechanism innovation: Based on inclusive finance perspective in China [J]. *Business Economics and Administration*, 2010(9):51–58. (in Chinese).
- [36] ZHOU ML, LI MX. The model and mechanism of big commercial bank’s involving in microfinance in the view of inclusive financial system [J]. *Reform*, 2011(4):47–54. (in Chinese).
- [37] WU XL. Develop micro-credit and promote inclusive finance [J]. *China Business and Market*, 2013, 27(5):4–11. (in Chinese).
- [38] MENG DF, LU YJ, FANG JB. Analysis on the influencing factors of the development of village banks from the angle of financial exclusion [J]. *Economics Information*, 2012(9):70–73. (in Chinese).
- [39] LENG TM. Study on the development path and risk management of community banks [J]. *Finance and Economy*, 2014(2): 48–50, 38. (in Chinese).
- [40] MENG F. Accessibility of financial service: Regulatory issues and institutional innovation [J]. *Finance and Economics*, 2009(8):18–24. (in Chinese).
- [41] YOU C, ZUO CX. Study on the rating system of micro finance institution in China [J]. *New Finance*, 2013(4):60–63. (in Chinese).
- [42] TAN YZ, CHEN B, TIAN LP, *et al*. The factors and extent that have resulted in the rural financial exclusion problem: An empirical research based on the data of 667 counties from six central provinces of China [J]. *Economic Review*, 2014(1): 25–37. (in Chinese).
- [43] TIAN J, JIA TY, TAO JP. Productivity effect of rural inclusive finance development in China—Empirical study on data from 1 867 counties (cities) [J]. *Journal of Huazhong Agricultural University (Social Sciences Edition)*, 2012(3): 28–32. (in Chinese).