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Social Network and Family Lending: Evidence from Rural Areas in China

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Abstract

This paper systematically study relationship between social network and credit constraints under background of financial dualism in the countryside. The survey of China Family Panel Studies (CFPS) in 2014, as an example, is used in this work. The results of the empirical analysis show that social networks can significantly increase the financing ability of formal finance and informal finance in the rural areas. The more richer the social network for farmers, the more higher they have obtained financial loans to formal financial and informal. The impact on the borrowing of friends is higher than the impact of bank lending in the social network of rural areas. The conclusions indicate that the credit market of rural areas from china, an imperfect credit system, should fully exert an important role of social network in the informal system for alleviated credit constraints of countryside better.

Keywords: farmer social network, family lending, rural credit market, endogeneity test

I. INTRODUCTION

The dual financial structure in which formal finance and informal finance coexist for a long time is one of the characteristics commonly enjoyed by developing countries. At present, the financial market environment in rural China is constantly improving, and the lending demand of farmers has undergone profound changes (Qin et al., 2011), but the dual structural characteristics is still an important feature of the Chinese financial system (Zhu and Li, 2009). This phenomenon is mainly due to information asymmetry. The long-term existence of information asymmetry in the rural credit market has triggered the problem of adverse selection and moral hazard. Individuals or financial institutions are often reluctant to engage in lending transactions with farmers, resulting in widespread credit constraints in rural areas. This has seriously affected the production and livelihood of farmers (Khandker and Faruqee, 2001), reducing the ability of farmers to obtain returns on human capital (Carneiro and Heckman, 2002) and inhibiting the ability to mitigate income risks and consumption fluctuations (Tan and Hu, 2017; Zhu, 2005), ultimately reducing the level of family welfare. Therefore, how to effectively reduce the credit constraints of farmers, reduce the information asymmetry between the borrowers and the lenders, alleviate the problem of credit rationing in rural areas, and improve the

financing ability of farmers, has become a social issue that scholars are generally concerned about.

There are many reasons for credit rationing in rural areas. On the one hand, because agricultural production has the characteristics of relying on the weather to eat, there are uncertainties in its operation; coupled with the low income level of the agricultural economy itself, the farmers lack the market-recognized collateral with higher value, resulting in Farmers cannot enter the credit market for a long time, so it is difficult to form the characteristics of repeated games (Zhu and Liu, 2009), which will undoubtedly aggravate the credit constraints of farmers. On the other hand, the basic information and loan information of farmers have typical fragmentation characteristics, and the scale of borrowing is small. Therefore, even if farmers are willing to pay a higher loan premium, they still cannot obtain sufficient loans, which makes credit in rural areas. The problem of rationing is difficult to resolve in the long run (Lin and Sun, 2005). It is worth noting that the current rationale for credit rationing has reached a consensus: the existence of asymmetric information in the rural credit market has led to a significant increase in the probability of adverse selection and moral hazard problems, resulting in credit rationing (Stiglitz and Weiss, 1981). The existence of this phenomenon has led to an increase in the transaction costs and uncertainties of both borrowers and lenders, and has also made the problem of farmers' loans difficult to be solved for a long time. This research conclusion has been widely recognized in China (Lin and Sun, 2005; Maet al., 2011; etc.).

Since information asymmetry is an important reason for farmers' financing difficulties and weak financing capabilities, solving this problem has become an important direction in this field. More and more researchers have found that although farmers lack the necessary collateral for various reasons such as the difficulty of borrowing, the uncertainty of income, the fluctuation of consumption, but the farmers have a very rich network of relationships, thus forming Relatively stable social network (Chenand Gu, 2016). At the same time, in many cases, credit contracts that cannot be signed according to the logic of neoclassical economics can be realized incredibly under the influence of social networks, and benefit both borrowers and lenders. So what is the mechanism of social network play in household lending?

With the deepening of research, some scholars have studied the role of social networks as informal institutions in lending, and have produced a lot of research results. The reputation mechanism and incentive effect of social networks can reduce the borrower's default motive for contracts (Krarlan and Morduch, 2010); social networks can alleviate information asymmetry and reduce supervision costs (Liu, 2016), smooth farmers' consumption, balance cash flow, reduce liquidity constraints. At the same time, under the premise of imperfect rural property rights, social networks still have important value to meet farmers' lending needs (Yang et al., 2011). Lin et al. (2016) found that social networks play different roles in different financing channels. The network that plays a central role in formal financial lending is a circle of friends, while in informal loans such as relatives and friends, more is clan networks play a role; Hu and Chen(2012) find that social networks play a greater role in formal financial lending. Tong et al. (2011) found that the political relationship and neighborhood relationship in the social network have positively promoted the farmers' access to loans by a survey of 1003 households. Farmers joining professionalized cooperative organizations and establishing contacts with the formal financial sector are conducive to obtaining more loan opportunities and lending quotas, which can significantly alleviate the difficulty of rural household loans.

In summary, the existing scholars have carried out some research on the credit constraints in rural areas and the

difficulty of alleviating the farmers' loans, and have given the research framework from the perspective of social network, which provides a good research for this research. Regrettably, first of all, in the study of social networks and farmers' lending behaviors, no specific research has been given on the proposition that social networks can improve the financing ability of farmers. Secondly, scholars' research on the relationship between social networks and household lending is more pay attention to the analysis of informal finance, and lacks the necessary attention for formal financial lending. In fact, with the continuous development of China's rural economy, farmers' lending demand will also undergo profound changes, and the scale of borrowing will also increase. Coupled with the acceleration of urbanization and the decline of the original rural customs, the degree of attention of the social network of relatives may be reduced, thereby reducing the demand for informal borrowing by farmers, and instead borrowing from banks, and promoting social networks to play a role in bank lending. Then, what role does social network play in rural household borrowing, and what is the difference between formal financial lending and informal financial lending? Based on this, this paper intends to use CFPS (2014) micro survey data for empirical analysis.

II. THE DATA DESCRIPTION AND VARIABLE SELECTION

2.1 Data Source

All data used in this paper were obtained from the China Social Science Survey Center (ISSS) of Peking University to implement the China Family Panel Studies (CFPS2014). The data includes three levels of individual, family and community. It uses computer-assisted survey technology to conduct interviews, which satisfies the diversification of design requirements, ensures the quality of data, and has a large sample size, which can meet the research needs of this paper.

2.2 Interpreted Variables

Based on the reference of scholars such as Yang et al. (2011), Hu and Chen (2012), family lending is mainly divided into formal bank lending and informal relative lending. For formal financial lending, that is, whether your family gets a bank loan or not, the acquisition is assigned a value of 1, and the absence is assigned a value of 0. For informal financial lending, that is, whether your family gets private loans such as friends and relatives, the acquisition is assigned a value of 1; otherwise, it is 0. Both variables are binary variables.

2.3Explanatory Variables

Referring to the definition of Bian and Qiu (2001), the definition of social network in this paper mainly refers to the ability to acquire resources based on various associations between actors and society, including human relationships, reputation, network of contacts, trust relationships, and so on. At the same time, combined with the views of Tan and Hu(2017), Yang et al (2011), Zhang and Lu (2009), they finally selected communication expenditures, major six indicators: event expenditures, human etiquette, frequency of worshipping ancestors, frequency of relatives and friends, neighborhood relations.

For the above six indicators, how to measure these indicators well to form a comprehensive measure factor is a realistic problem. Combining the data characteristics with the data dimensions, we used a highly applicable coefficient

of variation method. By calculating the weight of the indicator and performing weighted comprehensive processing, the social network under its comprehensive measurement is obtained. The larger the value, the richer the social network that farmers have.

2.4Control Variable

The control variables are mainly selected from three aspects: household economic status variables, farmer land characteristics variables, and household head household characteristic variables. Specifically: household economic characteristics have household disposable income, total household consumption, house value, total cash and deposits, and unreturned loans. Whether the land characteristic variable is engaged in agricultural production, income from working in the field, or whether the land is rented out to others. The household characteristic variable has the ability of the head of household to understand, the level of the person to be treated and the health status.

2.5Data Vrocessing

We first separated the rural sample through the household registration variable. Secondly, some singular values and missing values were deleted, and finally 6824 samples were retained. In order to reduce the estimation errors and heteroscedasticity of the model, we logarithmize some variables.Logarithmic variables are as following: household disposable income, total household consumption, house value, total cash and deposits, and income from work in the field.

2.6 Descriptive Statistical Analysis

Through the descriptive statistics of Table 1, we can see that the average social network of farmers is 0.2635, the minimum is 0, and the maximum is 0.9071. The difference between the minimum and maximum values is large, indicating that there is a difference in the richness of social networks between different levels of farmers. The average value is 0.2635, indicating that the social network of farmers is not high overall. The proportion of farmers choosing bank formal loans is 6.43%, which is less than 16.54% of private loans. This shows that private lending in rural areas is a more common way of lending by farmers.

Table 1 Descriptive statistical analysis

Variables	No. Obs	Mean	Std Dev	Min	Max
Social network	5788	0.2635	0.1864	0	0.9071
Formal bank lending	6824	0.0643	0.2454	0	1
Informal relative lending	6667	0.1654	0.3716	0	1
Household disposable income	6310	11136.72	18780.77	0.25	880552
Total household consumption	6213	35632.68	43791.14	0	1160600

House value	6824	32.5641	452.6069	0	10000
Total cash and deposits	6824	14037.07	37407.11	0	500000
Unreturned loans	6824	0.1675	0.3742	0	1
Agricultural production	6824	1.9484	1.7014	1	5
Income from working in the field	6824	13376.38	21395.68	0	200000
Land rented	6824	0.6427	2.4025	0	1
The ability of understand	6824	5.5500	1.2077	1	7
The level of the treated relationships	6667	5.5623	1.1302	1	7
Health status	6667	5.5182	1.1817	1	7

III. EMPIRICAL ANALYSIS AND ENDOGENOUS TESTING

3.1 Model Setting

In the regression of farmer financing ability, we use the probit model because the interpreted variable is a binary variable. Since the credit risk of farmers has typical truncated data characteristics, we use the classic tobit model to deal with it. Details as follows:

$$P(y_i = 1) = \Phi(\beta_0 + \beta_1 socialnet + \beta_2 money_i + \beta_3 land_i + \beta_4 feature_i + \beta_5 province + \mu_i) \quad (1)$$

among them, y_i A value of 1 indicates that a bank loan is obtained. β_0、β_1、β_2、β_3、β_4、β_5 Represents the equation estimation coefficient, $socialnet$ representing social networks, $money_i$ five economic characteristics control variables, such as household disposable income, $land_i$ indicate whether to lease three land characteristics variables such as land, $feature_i$ three control variables, such as the health status of the head of the household, $province$ indicates the provincial fixed effect, μ_i it is a residual term and follows a normal distribution. For the financing ability of farmers in informal financial lending such as relatives and friends, the probit model is also established. The model is similar to (1) and will not be described here.

3.2Discussion on Endogenous Issues

There may be significant endogenous problems between the social network and the financing ability and credit risk of the farmers, which makes the model estimation results have a large bias. There are three reasons for this. One is the problem of missing variables. In the regression analysis of social network and farmers' borrowing behavior, we have added the household economic characteristics of the farmer, the household's land characteristic variables and the household's personal characteristic variables, and controlled the provincial effect, which largely guaranteed the

reduction of the missing variables. The possibility, but still unable to exhaust all the relevant influencing factors between the variables being explained, this will undoubtedly increase the possibility of endogenous problems. Second, there may be some measurement error. For example, the CFPS (2014) questionnaire directly adopts a subjective evaluation method for such problems, which inevitably leads to evaluation errors, which also increases the endogenous problem of the model to some extent. Finally, there may be a two-way causal relationship. The social network contains the geographical, blood and friendship of the farmers, and has rich resources and value, which can greatly enhance the financing ability of the farmers. Second, the financing ability of farmers will also significantly affect the richness of social capital. The reason is that the stronger the ability of farmers to raise funds, the stronger their ability to carry out agricultural production and economic activities, and their economic level will be significantly enhanced, which is more conducive to accumulating more contacts and related resources, which is a significant increase. The social network of farmers. There is also an endogenous problem between social networks and credit risks.

In view of the endogeneity problems in the above three situations, this paper intends to use the tool variable method for processing. The selected tool variables are: whether to use Mandarin to communicate[①]. This variable satisfies two basic requirements of instrumental variables: correlation and exogenous. Language is an important tool for communication. Farmers with high levels of mandarin are more conducive to building relationships with people around them, thus enriching the social network. Nowadays, the heterogeneous social network centered on the circle of friends is playing an increasingly important role in the social relations of farmers, and the importance of Putonghua is self-evident (Lin et al., 2016), so it satisfies its relevance. Secondly, the number of Putonghua levels of farmers is often the result of a combination of long-term factors such as family environment and educational experience. In the short term, there seems to be no necessary connection with family lending, and thus it has its exogenous nature. Whether the choice of tool variables is reasonable, we will give a specific inspection process below.

3.3Social Network and Farmers' Formal Lending

From the regression results in Table 2, we can find that in the regression analysis of (1), the social network can positively promote the bank borrowing ability of the farmer at the level of 1% significant significance. However, statistical significance was lost in the regression results of (2) and (3). In the case of considering all the control variables and the provincial dummy variables, the coefficient of the regression result is still positive, but its significance is 10%, which indicates that there may be a model bias in the estimation result of the endogenous test without the instrumental variable method. Mistakes, resulting in model biases in the estimation results of (1) to (4). Through the endogenetic test results of (5), we can find that the one-stage F value of the endogeneity test is 11.48, which is greater than the critical value of F of 10, indicating that we make the user-level Putonghua level tool variable suitable, and there is no weak instrument variable problem. The Wald endogenous test results showed that the p-value was 0.034, indicating that the endogenous test was passed at the 5% level.

The endogenous test results show that the social network of farmers can significantly increase the possibility of farmers obtaining bank loans at the 10% level. This may be because the social network of farmers can reduce the information asymmetry between the two parties, thus effectively alleviating the adverse selection and moral hazard

[①]It should be noted that the CFPS (2014) design for the exchange of Mandarin can be used as follows: Which of the following languages is used in the interview process? 1. Mandarin; 0. Dialect

problems in the loan, which is beneficial to reduce the borrower's motive of default, and thus is more conducive to the improvement of financing ability. Secondly, when the formal financial sector such as banks are making loans, they are more concerned with the repayment ability of the farmers. The reliability of the information is high, and just the social network has this advantage, so the social network can promote the farmers. It is not surprising that the increase in capacity in bank loans.

From the regression results of the control variables, we can get: the increase in household consumption level can significantly increase the financing capacity of the farmer's bank at the 1% confidence level. This is mainly because the increase in the consumption level of farmers is an important manifestation of the economic strength of farmers' families. The families with higher consumption levels tend to have higher economic levels, their repayment ability is higher, and the credit risk is relatively low, which is beneficial to Get loans in formal lending. The higher the level of household cash and deposits, the stronger the ability to obtain loans. In the regression results of the household's characteristic variables, we find that the increase in farmers' understanding ability is conducive to improving the ability of bank financing. This may be related to the human capital effect. Compared with poorly understood farmers, farmers with better understanding have a stronger level of financial knowledge and a higher level of cognition, so they are more conducive to obtaining bank loans. The variables such as house price, whether to rent land, and health level did not significantly affect the possibility of farmers obtaining bank loans.

Table 2 Social network and bank loans

	(1)	(2)	(3)	(4)	(5)
	probit	probit	probit	probit	IV- probit
Social network	0.5596***	0.2905	0.2780	0.3042*	3.2197*
	(0.1203)	(0.1971)	(0.1981)	(0.2000)	(1.7260)
Household disposable income		0.0371	0.0392	0.0107	0.0129
		(0.0567)	(0.0572)	(0.0583)	(0.0488)
Total household consumption		0.1926***	0.1894***	0.1882***	0.3328***
		(0.0535)	(0.0538)	(0.0538)	(0.0597)
House value		-0.0578	-0.0626	-0.0484	-0.0282
		(0.0419)	(0.0425)	(0.0431)	(0.0399)
Total cash and deposits		0.0485***	0.0497***	0.0473***	0.0379***
		(0.0096)	(0.0096)	(0.0097)	(0.0145)

Unreturned loans		0.1032	0.0902	0.0715	0.1508*
		(0.1061)	(0.1061)	(0.1079)	(0.0929)
Agricultural production		-0.0181	-0.0173	-0.0127	-0.0248
		(0.0321)	(0.0322)	(0.0325)	(0.0273)
Income from working in the field		-0.0470**	-0.0459*	-0.0520	-0.0314
		(0.0239)	(0.0239)	(0.0236)	(0.0279)
Land rented		-0.0056	-0.0071	-0.0125	-0.0144
		(0.0306)	(0.0308)	(0.0311)	(0.0256)
The ability of understand			0.1622***	0.1638***	0.1259**
			(0.0549)	(0.0560)	(0.0633)
The level of the treated relationships			-0.1445***	-0.1493***	-0.1211**
			(0.0536)	(0.0538)	(0.0589)
Health status			0.0009	0.0130	0.0194
			(0.0543)	(0.0558)	(0.0463)
Provinces	NO	NO	NO	YES	YES
Constant	-1.6569***	-2.4800***	-2.5359***	-3.1275***	-3.3124***
	(0.0428)	(0.6591)	(0.6693)	(0.6992)	(0.7005)
No. Obs	5788	2279	2279	2279	2279
Pseudo R^2	0.0067	0.0477	0.0568	0.0658	
First stage F value					11.48
Wald endogeneity test p value					0.034**

Note: (1) to (4) are regression results by adding explanatory variables step by step. (1) is the estimation result using only the explanatory variables and the explained variables, (2) is the regression result of adding the family economic characteristic variable and the land characteristic variable, (3) is the estimation result without controlling the provincial effect, (4) is All the control variables in this paper and the regression results that control the province effect were added.

(5) The endogenous test results obtained by using the instrumental variable method. ***, **, and * are shown to be significant at the 1%, 5%, and 10% levels, respectively. The first number in the table represents the regression coefficient, and the numbers in the parentheses indicate the robust standard error. The same below.

3.4Social Network and Farmers' Informal Lending

The estimation results of the core explanatory variables in Table 3 can be found that whether the variables are gradually added or the regression results of the province's fixed effects are controlled, there is no significant change in the positive and negative and significantness of the estimated coefficients, so the estimation results are better. Robustness and endogenous testing at the 10% significance level. It can be seen that after using the instrumental variable method to examine endogeneity, the social network can still significantly improve the availability of informal loans for farmers, indicating that the social network can positively affect the financing ability of the informal finance of farmers. The underlying logic behind it is that in rural areas where the local customs are relatively strong, farmers are familiar with each other and can easily identify borrowers with high risk of default, which is beneficial to obtain informal financial loans such as relatives and friends. Second, social networks have a punitive mechanism, especially in rural areas where sanctions against defaulters are usually extremely harsh. For borrowers who default, not only may they be accused behind, but they may not be infamous, it is difficult to obtain borrowed funds again, or even isolated by the market, and their long-term accumulated human relationships and social resources may be destroyed. This has largely led to a reduction in the opportunistic motives of farmers and incentives for lenders to perform normally. This is also an important reason why social networks can promote farmers' access to informal financial loans.

Table 3 Social network and farmers' informal lending

	(1)	(2)	(3)	(4)	(5)
	probit	probit	probit	probit	IV- probit
Social net	0.7271***	0.5026***	0.5064***	0.4998***	0.0069***
	(0.0974)	(0.1558)	(0.1559)	(0.1561)	(0.0026)
Household disposable income		0.1056**	0.0982**	0.1081**	0.0032
		(0.0468)	(0.0474)	(0.0482)	(0.0061)
Total household consumption		0.2485***	0.2540***	0.2549***	0.0517***
		(0.0437)	(0.0437)	(0.0437)	(0.0057)
House value		-0.0847**	-0.0800**	-0.0840**	0.0017
		(0.0364)	(0.0366)	(0.0371)	(0.0046)

Total cash and deposits		0.0652*** (0.0070)	0.0652*** (0.0713)	0.0662*** (0.0071)	-0.0008 (0.0009)
Unreturned loans		-0.0027 (0.0862)	0.0084 (0.0865)	0.0134 (0.0867)	0.0305*** (0.0108)
Agricultural production		-0.0197 (0.0247)	-0.0198 (0.0248)	-0.0206 (0.0249)	-0.0032 (0.0031)
Income from working in the field		0.0206 (0.0222)	0.0190 (0.0223)	0.0215 (0.0227)	0.0008 (0.0029)
Land rented		0.0239 (0.0256)	0.0221 (0.0256)	0.0235 (0.0257)	-0.0015 (0.0028)
The ability of understand			-0.0748* (0.0428)	-0.0767* (0.0428)	0.0013 (0.0056)
The level of the treated relationships			0.0308 (0.0429)	0.0347 (.0427)	-0.0028 (0.0056)
Health status			-0.0080 (0.0468)	-0.0123 (0.0466)	0.0026 (0.0059)
Provinces	NO	NO	NO	YES	YES
Constant	-1.1669*** (0.0337)	-2.4555*** (0.5455)	-2.2858*** (0.5601)	-2.1220*** (0.5714)	-0.3017*** (0.0713)
N	5788	2279	2279	2279	2279
Pseudo R^2	0.0101	0.0744	0.0767	0.0774	
First stage F value					11.48
Wald endogeneity test p value					0.085*

3.5Robustness Test

In the previous research, we have conducted a comprehensive measurement study on social networks, thereby minimizing the information loss of indicators and increasing the explanatory power of the model. Secondly, in the econometric analysis, we carried out stepwise regression analysis and controlled the provincial fixed effects, which made the model's estimation results more stable. Finally, the article also uses the instrumental variable method to analyze the endogeneity of the model and obtain reliable results. These treatments have largely demonstrated that the model has good robustness. Therefore, in the robustness test section, we mainly test from the measurement form of the social network. The specific test results are shown in Table4.

Change the measurement method of social networks. We refer to the method of Chai (2016) to re-measure the social network using principal component analysis, and then perform regression analysis. The results are shown in Table 4.

Comparing the main research conclusions above, we find that the regression results of the core explanatory variables have not changed significantly, which fully demonstrates that the measurement results in this paper are robust and the research conclusions have good promotion value.

Table 4 Robustness test

	(1)	(2)
	PCA	
	Formal lending	Informal lending
Socialnetwork	0.1815***(0.0335)	0.0617**(0.0282)
Household disposable income	-0.0492 (0.0561)	-0.1440***(0.0464)
Total household consumption	0.1488***(0.0560)	0.2476***(0.0438)
House value	-0.0876**(0.0422)	-0.0949***(0.0353)
Total cash and deposits	0.0467***(0.0096)	0.0648***(0.0068)
Unreturned loans	0.0440(0.1087)	0.0479(0.0835)
Agricultural production	-0.0208(0.0320)	-0.0182(0.0234)
Income from working in the field	-0.0544**(0.0225)	0.0373*(0.0217)
Land rented	-0.0211(0.0309)	0.0119(0.0244)
The ability of understand	0.1571***(0.0543)	-0.0592(0.0404)
The level of the treated relationships	-0.1269**(0.0508)	0.0287(0.0404)

Health status	-0.0021(0.0525)	-0.0136(0.0429)
Provinces	YES	YES
Constant	-2.2672***(0.7195)	-1.7783***(0.5768)
No. Obs	2535	2535
Pseudo R^2	0.0921	0.0724

IV. CONCLUSIONS AND RECOMMENDATIONS

This paper systematically studies the impact of social networks as informal institutions on formal lending and informal lending, and makes up for the current shortcomings in this area. Although the Chinese economy has undergone various degrees of transformation and upgrading, which has led to a great development of the rural economy, the concept of the importance of human relations has not changed dramatically. The role of social networks in the rural credit market is still not ignored. Through empirical analysis, we find that in the current rural market environment, social networks can significantly increase the financing ability of farmers in the formal financial sector and the informal financial sector. The higher the intensity of social networks, the farmers get bank loans and private loans such as relatives and friends. The likelihood will increase significantly.

According to the analysis of the full text, we give the following suggestions: First, pay attention to the role and value of social networks in the rural credit market. The Chinese nation's traditional concept of empathy and relationship with thousands of years and cultural customs between different villages have made social networks still have great effects. Financial institutions can absorb the beneficial parts of the social network and appropriately supplement the transaction contracts, so that the credit constraints of the households can be alleviated to a greater extent, and the financing ability of the farmers can be improved. Second, financial institutions should pay attention to the social network to credit risks and the impact mechanism. Through the assessment of the social network of farmers, financial institutions can further screen out farmers with high credit level and low credit risk, which is conducive to their risk management.Third, accelerate the establishment of a credit evaluation system for farmers. The basic information of farmers has the characteristics of fragmentation, which makes it more difficult to accurately assess the strength of farmers' social networks. Therefore, the establishment of a reasonable credit evaluation system plays an important role in alleviating the difficulty of farmers' loans and improving the financing ability of farmers.

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