論 文 の 内 容 の 要 旨

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論文題目　Empirical Study on Microfinance Contract Change in China
–Cases of RCC in Guizhou and FPC in Hebei

（中国マイクロファイナンスの貸出形態変化に関する実証研究
－貴州省農村信用合作社と河北省扶貧経済合作社の事例－）

Group lending has long been a major innovation in microfinance and widely replicated and adopted in developing countries. It claims to overcome the imperfect information in rural financial markets by using joint liability contracts. However, in recent years, many theories suggest that the benefits of group lending might be exaggerated and the method is often too rigid to meet borrowers' needs. In addition, joint liability may lead to excessive tensions among peers and even worsen the dropout rates.

Today, many famous micro-lenders worldwide like Grameen Bank, Association for Social Advancement (ASA) and BancoSol have moved away from joint towards individual liability. In China, microfinance also has come to the crossroad. The choice between further expanding group lending, and focusing more on individual lending becomes an important question for MFIs. Although the past empirical research has not provided any clean evidence, a part of MFIs in China have stepped in the process of contract transformation, and many are preparing to change soon. This study used two MFIs to discuss the problems and challenges of group lending in China, as well as the process and reasons that they decide to change the credit contract from group to individual liability. In one case, MFIs have closed the group lending businesses in some areas due to the high default rates. In the other case, although group lending is still working effectively with good repayment performance, the micro-lenders also have considerably decreased the scale of group loans. Through the investigations of these two cases, this study tries to find factors that can explain the recent tendency of credit contract change in rural China, and give policy implications for better microfinance design in future.

In Chapter 3, a Logit regression was adopted to explore why joint liability contracts did not achieved a high rate of success as theories claimed in RCC in Guizhou province. At the end of 2008, the group lending program in the survey area was closed after 8-year operation. In order to examine borrowers' repayment behaviors, a theoretical model was constructed. It proposed that the factors such as household income, intra-group monitoring costs, social sanctions, and borrowers' expectation of getting new loans from RCC would affect borrowers' decisions on the repayments. The empirical results from 245 households indicated that the failure of RCC's group lending program was mainly from the strategy default, negative income shocks and ineffectiveness of dynamic mechanisms. It is found that the joint responsibility was not welcome by borrowers in the survey area. They considered that bearing others' debts was troublesome and unequal for good clients. Therefore, when other members suffered negative shocks, they were more likely to strategically default rather than provided help for the peers. Moreover, one important dynamic mechanism, threatening to cease defaulters' future access to RCC credit also did not work. The reasons can be attributed to two factors. First, RCC group loans were mainly used for one-time investment rather than series of sustained investments. Many borrowers there could not find new investment opportunities to retain in RCC's program. Second, it might be related to the failure of some subsidized microloan programs in 1990s. Borrowers treated RCC's group loans as doles from the government and had no incentive to perform well. In addition, availability of informal borrowing, such as access to loans between relatives, neighborhoods or friends also increased group members' default possibilities.

However, group lending had achieved success in particular group of borrowers, as well as those in particular areas. Households that had higher migrant income, better education and a stronger sense of following the law usually tended to repay the loans on time. Besides, in the poor and remote villages with limited opportunities for migration as well as limited access to finance, strategic defaults did not come up. Group homogeneity in terms of acquaintanceships and cooperation experience also significantly decreased the possibility of repayment.

Chapter 4 and 5 analyzed the case of contract change in another MFI, the FPC. In 2010, after 18 year operation of group lending, they began to shift away from joint liability and rapidly increased the scale of individual loans in all branches. This study visited Yi branch and explored the process and the reasons of the change. The analysis indicated that even group lending could achieve good repayment performance, there were still many motivations, such as pursuing lower transaction costs or operating risks, *etc*., influenced MFIs to move away from group-based loans. Yi FPC had spent more than 10 years for the evolution. During this period, due to the limited loan size and rigid credit terms, borrowers had been facing serious credit constraints and difficult to sufficiently finance their micro-business. This inefficiency in credit allocation forced FPC to admit the borrowers to use "intra-group lending transactions" to eliminate the gap between borrowers' financial demands and their provisions. But, these intra-group credit activities led to other challenges: One challenge is that borrowers had excessively depended on the intra-group lending, the other is that after each loan cycle, many clients chose to exit the program, no longer retained in FPC. These two problems had been troubling FPC until they decided to introduce individual lending in 2010. In the survey data of 111 households, only about 30% of the group members in Yi had actually used group loans in practice, while other members (70%) had been playing the roles of inside-lenders and guarantors. At the same time, 23% to 46% clients had exited FPC after the repayment. Maintaining group lending business became hard works in Yi.

In Chapter 5, in order to explain under the limitations on small loans and "five-person" requirements, how difficult it was for borrowers to construct on-going groups, a theoretical model was constructed. It is supposed that group formation is a costly process and such costs vary with the available social networks of money-users. Only those families that can easily find enough partners without paying special costs could keep the repeating transactions. By using the field data, the social networks structure emerged in FPC's group lending was described, and it showed that the problems of "intra-group transactions" and "client dropout" led to a very weak basis of partner-relationships in the groups. Most money-users failed to build trustworthy and on-going relationships with their peers. About 90% of the borrower-guarantor combinations had been broken or dissolved after the first borrowing, while only 10% had constructed long lasting cooperative relationships. These stable combinations were mostly established among the family members (67.4%) and close neighbors (22.8%). Until 2010, FPC introduced co-signing lending and changed the credit contracts from group to “one to one” co-signing lending, the transaction costs for both borrowers and FPC decreased. Under the new contracts, borrowers were required to provide only one co-signor. Thus, many farmers that were excluded from FPC before participated in the program, and the social networks among the borrowers became denser and stronger.

Concerning the future of group lending in China, it is expected that contract change is an inevitable trend. More MFIs will step in the transition form joint to individual liability, and group lending is only attractive for poorer areas with few migration opportunities and limited financial provisions. In such areas, trust between households is easier to build and people are more willing to provide mutual help. In the richer villages, individual action may be more effective. In addition, providing a broader range of products with more flexible designs in term of credit terms, collateral, price settings, *etc.* are equally important.

However, the survey areas in this study covered only a few regions in China. Do the findings have the generality, and hold in other districts with different cultural background, or serve in areas where other types of MFIs? Concerning these questions, it is considered that cases of RCC and FPC present the typical problems of group lending in rural China and the findings can fit to most areas and MFIs. Another constraint is the problem of endogeneity in Chapter 3. In the future, it is advisable to introduce well-designed laboratory experiments to test the effectiveness of joint liability contracts. In addition, use detailed demographic and social network data to provide more evidence on social networks structure in microfinance program.