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Improving Micro-credit System in Rural China with Credit Insurance

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With its new design and operation, micro-credit has been becoming more and more helpful and popular in the world, especially in rural or undeveloped areas. And it does make much meaningful improvement in the outreach and relevance of credit for the poor. The similar thing happened in rural China. Under the monitoring of the People's Bank of China (PBC), Rural Credit Cooperatives (RCCs, installed in 1950s) are the main institutions that supply rural households with loan in the forms of individual micro-credit and group lending micro-credit. The latter form comes from Grameen Bank mode. Except its obvious positive effect on the development of rural China, there still are some insufficiencies about RCCs. One of them is the unsuccessful repayment induced by credit risk, mis-farming, disability, accident, death, natural disaster and so on. As we know, the unsuccessful repayment will damage the sustainability of RCCs because the cost of capital and even the capital itself will not be gotten back. That is not good for RCCs to supply peasants with long-term micro-credit. And without long-run loan support, rural households can not make cropping or animal production continue.

For solving above embarrassment, this paper introduced the credit insurance to RCCs' loan. As its definition, credit insurance is some special insurance related with some special loan which will pay back some or all of the owed money if something such as disability, death or unemployment happens to borrower. So we can say that credit insurance is helpful to reduce unsuccessful repayment mentioned above.

For simplifying the analysis, we supposed one two-period and two-scene model in which we have three parties: RCCs, insurance company and rural households. Under the first scene, rural households will get micro-credit loan from RCCs without credit insurance in the first period and pay back the loan and interest in the second period if the unsuccessful repayment does not happen. Under the second scene, rural households will get micro-credit loan from RCCs with full credit insurance (supplied by insurance company) in the first period and pay back the loan and interest (through insurance company if the unsuccessful repayment happens) in the second period.

Based on above model, we found that the credit insurance will improve RCCs' sustainability without changing the sum of expected income of RCCs and rural households. This system design makes it sure that RCCs will get back loan and interest by transferring the expected income from rural households to RCCs.

For the future work, we are planning to do the following considering: how to classify man-made risk and natural risk that induce credit risk, how to involve adverse selection and moral hazard factor in the model and how to make commercial credit insurance possible.