Role of Trust and Network in Accessing Business Credits

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Abstract

Financial trust in the social-economic network helps in accessing business credits. Sometimes, it is very costly for the lender to get creditworthiness information of the borrower from the network. The thesis develops a model that takes care of this scenario and designs a dynamic calculative trust measure inter-temporarily which helps the borrower to access credit over time with low collateral. The proposed model has been compared with a benchmark model. The simulation result shows that in 80 per cent cases the proposed model has been outperforming the benchmark model.

In case of credit default in a network, borrowers loose social insurance which deters their future borrowing. In the thesis, we call this social cost of default. This acts as a collateral which cannot be measured through money, we call this as invisible collateral. Although this cost is not publicly measurable, but it reduces credit risk. Using India’s household indebtedness survey data we provide evidence for the existence of the invisible cost. Further, we suggest its utility in credit risk evaluation.

From the lender’s perspective, when the information from the network is less costly, then the lender can collect this information from the network and forms a belief about repayment of the credit of the respective borrower. We propose a methodology to aggregate financial trust in the borrower’s network to an individual trust of the borrower. Taking account the aggregate trust, the lender decides on the interest rate it will charge. Since the borrower is staying in a social-economic network, its default on credit will cost her socially. We call this as the social cost of default. Thesis shows that social cost of default and the riskiness of the project the borrower that she undertakes are two important factors that decide about the repayment of the credit. Moreover, individuals with higher level of trust enjoy lower interest in the competitive credit market environment, in turn, it improves the welfare.

In the last part of the thesis, the study discusses the role of trust from borrower’s perspective. In this part, we have designed a model motivated by Household Indebtedness Survey of India, which says more than 30 percentage points of borrowers rely on informal credits. The model has been built to explain the above phenomenon. In the model, we have incorporated financial trust and how it helps in getting business credits from informal lenders. The high level of financial trust helps in getting credits in less time and low interest rate risk premium. In the later part, the model discusses welfare loss due to constrained or limited information about the lenders for the borrowers. Model concludes that higher financial trust in the society helps in reducing the welfare loss due to constrained or limited information.