Report Type

Mid Term Award Report

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Faculty/Department

Economics

Project Title

Financial contagion in dynamic networks

Project Start Date

Jul 31, 2018

Project End Date

Jul 31, 2020

Project Abstract

The ability of individuals and institutions to lend funds to each other to pursue investment opportunities is crucial for the efficiency of the financial system, but, at the same time, it augments its fragility by increasing everyone's exposure to an isolated shock. The aim of this project is to investigate this trade-off in an experiment. A particular focus is on how changing (i) the tightness of the lending environment, (ii) the attractiveness of investment opportunities and (iii) the size of shocks hitting the system affect the structure of the emerging financial network and its consequent robustness to systemic risk.

Activities and Achievement

This initial period has mainly been devoted to working on a theoretical model to generate the hypotheses to be tested in the experiment. The theory is an extension of a model by Jackson et al. 2012 (AER) and it has now been completed. We have also finished the design of the experiment and we expect to finish the coding and run pilots by November. I am planning to travel to NTU (Singapore) to help running the experiment in January 2019. Dissemination

No plans yet

Outputs

Not available yet

Major Difficulties and Any Other Issues

This project is a natural continuation of the work I have undertaken during my prior CERF Fellowship which examined financial contagion in exogenous networks. I have now received feedback from reviewers on the working paper, which has been very useful in designing the new experiment. In particular, most reviewers suggested to simplify the experimental set-up in order to construct a theoretical model to formulate precise hypotheses to test in the lab.

Following up on this suggestion, I have worked on an extension of a theoretical model by Jackson et al. 2012 that shows how a specific class of networks is robust to shocks because the impact of a given shock remains limited to a local part of the network. While this simplified model will not allow an investigation of all the dimensions mentioned in the proposal, it will nonetheless be the first experimental investigation of contagion in dynamic networks and therefore it will fulfil the central aim of the original proposal.

Web Links

None yet

Additional Information

Declaration

This award has not yet produced any relevant outputs, but details of any future publications will be submitted to the CERF database as soon as they become available.