

Title and Abstract Provided at Application

Title:

1. Networked Markets and Relational Contracts (joint with Ben Golub, Harvard and Matt Leduc, Marseille).
2. Endogenous Financial Networks: Efficient Modularity and Why Shareholders Prevent It (joint with Co-Pierre Georg, Bundesbank and Jonathon Hazell, MIT).

Abstract:

Networked markets and relational contracts

We seek to better understand the dynamic structure of networks of business relationships. We empirically investigate the market for freelancers to gather data on the role of relationships between freelancers and their clients and on which freelancers rely more on strong relationships. We find some surprising results but are able to reconcile them with a relational contracting theory of networked markets. This model provides a new mechanism that can account for slow recoveries---the quick destruction and slow accumulation of social capital. An important application of the model is to bank relationships.

Endogenous Financial Networks: Efficient Modularity and Why Shareholders Prevent It

Banks face different but potentially correlated risks from outside the system. Financial connections can help hedge these risks, but also create the means by which shocks can propagate. We examine this tradeoff in the context of a new stylised fact we present: German banks are more likely to have financial connections when they face more similar risks---potentially undermining the hedging role of financial connections and contributing to systemic risk. We find that such patterns are socially suboptimal, but can be explained by risk-shifting. Risk-shifting motivates banks to correlate their failures with their counterparties even though it creates systemic risk.

Project Update

Networked markets and relational contracts

This project is still relatively new. Over the last few months we have made substantial progress in designing and beginning to implement an empirical component of the paper. Towards this end we have designed a field experiment in which we collect self-reported information through an incentivized survey from freelancers on the platform Upwork, and have these same freelancers collect public profile information on each other. Thus we have four sources of information on each freelancer. Their self-reported answers on the questionnaire, their performance regarding how diligently they completed the questionnaire, their performance on the data collection task, and information from their profiles.

Combining this information we believe we can get a much more complete picture of business relationships in a networked market that has been possible before.

We have just finished a pilot study with unincentivized questionnaires and the results look very promising. For example, it seems like freelancers with higher failure rates due to things beyond their control (illness, internet outages, etc) have stronger relationships with their clients, at least insofar as they trade more frequently with them. On the face of it, failure rates should proxy for quality and the relationship is surprising. Higher quality freelancer might be expected to have stronger relationships. However, this can be explained by a relational contracting model of networked markets we are developing. In such a model a binding incentive compatibility constraint can account for the result.

We presented a preliminary version of the paper, using the empirical exercise from the pilot, at a workshop in Paris last week.

Endogenous Financial Networks: Efficient Modularity and Why Shareholders Prevent It

Since the last report we have continued to update the paper in response to our new empirical findings. The main changes we have been are through adjustments to the theory that bring the theory more in line with the new empirical section. In addition after presenting the paper at EUI in the summer, we received some valuable feedback that has led us to prove some new theoretical results emphasizing the importance of the risk-shifting friction. We now show that when banks maximize the sum of equity and debt holder value, despite being able to choose the correlation profile of their exposures to other banks and their financial connections, the social planners' solution is an equilibrium. Thus, it is only when banks switch to maximizing their equity values that inefficiency is a necessary feature of the equilibrium. In this case banks are incentivized to form homophilous relationships, connecting to other banks exposed to more similar risks, to engage in risk-shifting and transfer losses onto debt holders in bad states of the world.

Externally this project has been presented at EUI since the last report. It is currently submitted to Restud. The latest version of the paper is available at the link below:

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2658249