

Financial Intermediation and the Macroeconomy: An Experiment

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Existing experiments of the economy, either study the financial side in isolation, or model the real sector in reduced form (parametric). Here, we innovate by constructing a two-sector platform that makes explicit the links between real and financial sector. We bring this platform to the lab to uncover behavioral aspects of the macroeconomy that theory cannot capture. We are interested in understanding what type of market design is most effective at supporting the real market by mitigating financial risk that are inherent to financial activity.

The financial sector is inherently risky as it exposes the economy to a level of risk beyond what is socially optimal. The internal incentives of the financial sector are misaligned with the real sector. Financial profits originate from risky investments, and do not depend on surplus generated in the real sector. Hence, the financial sector necessarily suffers some insolvencies. These disrupt the flow of liquidity to the real sector and hence impair transactions.

The customary analysis of real markets assumes an extreme situation in which the financial sector is frictionless. Trader do not need any cash advance to sign a contract. In other words, they have no liquidity constraints: all transactions that are profitable are also feasible. Now contrast this to the other extreme when there is no financial sector. Under this situation, a trader can sign a contract only if it can be settled upfront with her own cash endowment. Generally, this generates liquidity constrained for the traders: some profitable transactions will not be feasible if cash endowments are low. In this situation the only contracts that are signed are those that can be settled upfront. However, field economies are usually in-between these two extremes. A way to capture this reality is to endogenize intermediation as we do in our paper. We explicitly build a two-sector economy where traders can take advantage of financial services to remove liquidity constraints, while intermediaries can earn profits from investing traders' liquidity. Because investments are risky, intermediaries can become insolvent, and this disrupts real sector economic activity.

We study how two prototypical institutions - one that facilitates the monitoring of intermediaries' activities and another that imposes collateral requirements on financial activity - can reduce this externality and increase overall efficiency by insulating the real sector from disruptions in trading activity. Observed performance is weak for the monitoring institution and strong for collateral requirements.