Counterparty Net Worth Externality and Inefficient Risk Sharing

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Summary:

The author extends the model from Holmstrom and Tirole (1998) to examine how the net worth of

investors affects the investment decision of a firm. Specifically, the author extends the model to include

two liquidity shocks and risk averse entrepreneurs and investors. He finds that if investors are randomly

matched with entrepreneurs prior to the two liquidity shocks, then the wealth of the entrepreneurs is not

affected by the liquidity shocks, because the investors act as insurance against the high liquidity shock

case. The author contrasts the competitive equilibrium with the second best solution from the social

planner's problem and finds that the competitive equilibrium case is not constrained efficient. In the

social planner's case, the author finds that entrepreneur's wealth is state contingent, since the social

planner can coordinate the actions of firms and investors based on the outcome of the liquidity shocks.

The author's policy recommendation to overcome the effects of the competitive equilibrium random

matching is to require state contingent loss sharing between entrepreneurs and investors.

Comments:

- The main conclusion of the author, that the net worth of future counterparties can lead to

  inefficiencies in the level of investment, relies on a random matching assumption that might limit

  the model's applications in extending this financial friction to describe a real world setting. In the

  model, the number of positive NPV projects is equal to the number of investors. Usually it is

  assumed that the number of positive NPV projects is scarce and the number of investors plentiful.

  If this is the case, although search costs exist, an investor with a positive NPV project can seek

  out future funding from investors with sufficient liquidity to fund the project or who can pool

their resources to fund the project optimally. How well does the model work if the number of experts is scare? What about if firms have to search for an investor with higher net worth?

- What would happen if you added financial intermediaries into the model? Could they pool the wealth of individual investors and loans to firms to smooth out idiosyncratic liquidity shocks, i.e. a venture capital fund?

- If you had financial intermediaries, it might be interesting to see how correlated liquidity shocks change the model

- Are your results driven by the risk aversion of investors and experts? What happens if they are risk neutral and savings is still present?

- How much of your results are driven by the certainty of the return? How would the change if there was uncertainty about the investment outcome?

- What would happen if the project could be terminated if there is a liquidity shock and the investment is partially recoverable? It might be interesting to examine this feature if the project only pays at the end of the second liquidity shock? How would the primary and secondary claims of different investors following the two liquidity shocks affect the contracting problem?

- The author might want to discuss what types of industries/firms are most likely to face the kind of financial frictions described in his model. Firms with tangible assets that rely on bank loans and credit lines might not be as subject to these frictions, while tech firms with intangible assets that require the expertise of a subset of venture capitalists to properly value might be more exposed to this financial friction