

Discussion of

When Do Firms Risk Shift? Evidence from Venture  
Capital

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# What is this paper about?

- Do managers invest in riskier projects as firms go into distress? How important are agency costs of debt?
- The empirical evidence is limited because of:
  - Mechanisms that arise to mitigate agency costs of debt, such as
    - Covenants restrict managerial actions when a firm becomes distressed. Covenant violations transfer control rights to lenders.
    - Cost of financing adjusts to reflect risk-taking incentives.
    - Reputation concerns.
  - The difficulty of measuring risk-taking - altering investment policies is costly and individual investment decisions are not directly observable.

# What is special about this setting?

- Small Business Investment Company (SBIC) program provides debt financing to participating venture capital funds.
- Funding is at low rates and with few restrictions.
- What do managers of VC funds do as these SBIC funds become distressed? Do they make riskier investments?

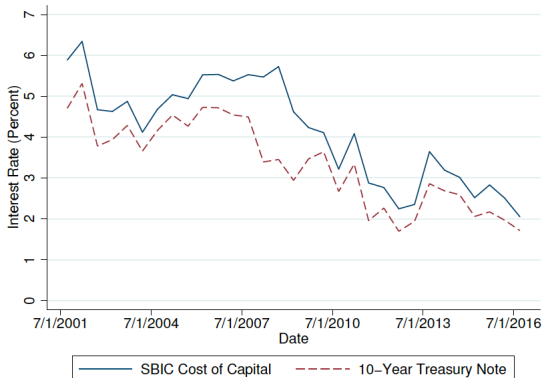
## Comments: What question are we answering?

- Government as a lender or agency costs of debt in normal commercial transactions?
- Government as a lender: It will help to have more documentation on contractual features of government loans.
  - Few restrictions on borrowers. (?)
  - No restrictions on investment and operations even when control rights shift to the lender. (?)
  - Cost of financing does not adjust in response to risk-taking incentives. (?)
  - Financing is not staged (But, funds drawdown in stages.)
  - Borrower reputation is unimportant. (?)

# Cost of Funding

Figure 1: Cost of Capital for SBIC Funds

This figure plots the interest rate charged to licensed venture capital funds in the Small Business Investment Company (SBIC) and the 10-Year Treasury Note. The cost of capital for funds is based on the 10-Year Treasury Note plus a spread, which has ranged from 34 to 227 basis points since 2001. Data on the cost of capital and the comparable Treasury rate is provided by the SBIC program website from September 20, 2001 to September 14, 2016.



# Comment: Role of the “Office of Liquidation (OL)”

- The Office of Liquidation
  - Funds are transferred to OL “when their capital is below a specific threshold or for regulator violations” .
  - Funds are classified as financial distressed at the time they “are transferred to the Office of Liquidation” .
- So, what happens after transfer? Nothing.
  - While the funds are transferred to OL, VC managers continue to operate and invest them as if nothing happened.
  - Transfer appears to be unanticipated by funds.
- This is puzzling.

# Comment: Test design depends on the question being asked

- Various possible questions can be raised:
  - Funds in distress versus funds not in distress (both funds are leveraged).
  - Leveraged funds in distress versus non-leveraged funds in distress.
  - Leveraged funds in distress with government lenders versus leveraged funds in distress with commercial lenders.

## Comment: Main tests

- Main tests: Distress is endogenous - the unobserved factors that cause funds to go into distress also cause worse credit scores, lower sales and employment growth, fewer patents, and greater use of equity.
- SBIC funds with poor investments are transferred to OL.
- Thus, relative to other SBIC funds not transferred to OL, transferred funds (or distressed funds in the paper) have investments that are not doing well.
  - Further investments would be in firms that exhibit worse credit scores relative to the average scores of investment prior to being transferred to OL.
  - Sales and employment will be declining.
  - Patenting activity will slow down.
  - Further investments will be equity investments.



## Comment: Tests that compare SBIC funds to private funds

- The definition of distress is not the same. For the SBIC funds, transfer to OL is the distress event.
- For private funds, the distress is defined based on top decile of the sum of failed investment relative to total investments. This is not the SBIC definition. SBIC has a more complex method of figuring out distressed funds.
- What is the leverage of private funds that go into distress versus those of SBIC funds that go into distress?
- It is unclear how to interpret these results.

## Comment: Do VC firms engage in risk shifting?

- Equity returns are positive at the announcement of the investment.
- But, we don't have debt returns at the announcement.
- It is difficult to interpret the loss to the government in distressed funds as wealth transfer.
  - No counterfactual: How much the government would have lost if VC firms did not engage in risk shifting? We cannot attribute distress itself to risk shifting.

# Conclusions

- Excellent idea. The paper is well-written.
- It raises many questions.
- Comments in the spirit of getting more clarity on the research setting, which would be helpful in interpretation of the findings.