Discussion of Ye Li's "Fragile New Economy: The Rise of Intangible Capital and Financial Instability"

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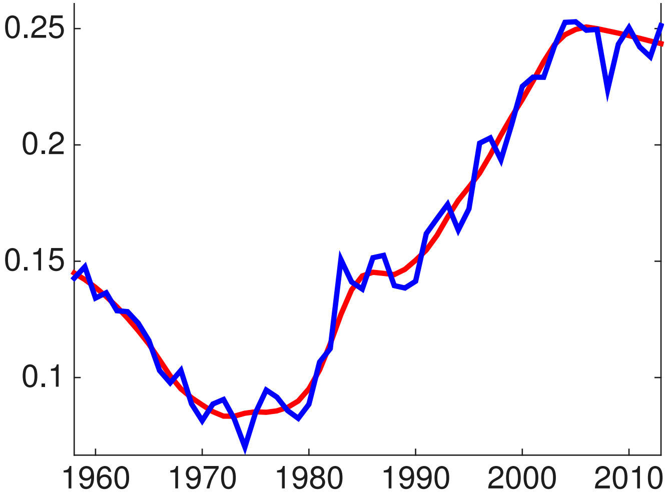
Rise of Corporate Cash Holdings



Summary: continuous time GE model

- Entrepreneurs
  - Linear production technology
  - Capital: pledgeable tangible & non-pledgeable intangible
  - Investment tech. enforces constant share of capital types
  - Non-pledgeable capital needs to be cash funded
  - Implies "money" demand $\Rightarrow$ liquidity premium

- Banks
  - Fund tangible investment
  - Issue deposits: serve as cash storage technology for intangible investment

- Frictions
  - intangible capital not pledgeable
  - banks cannot issue equity

Mechanism & Experiment

- Mechanism
  - Pos. shock to bank capital raises tang. assets demand
  - Entrepreneurs meet demand by producing more capital
  - Requires also intangible capital $\Rightarrow$ requires cash
    $\Rightarrow$ bank funding costs $\downarrow$ $\Rightarrow$ bank tangible demand & levg. $\uparrow$

    $\Rightarrow$ raises asset prices

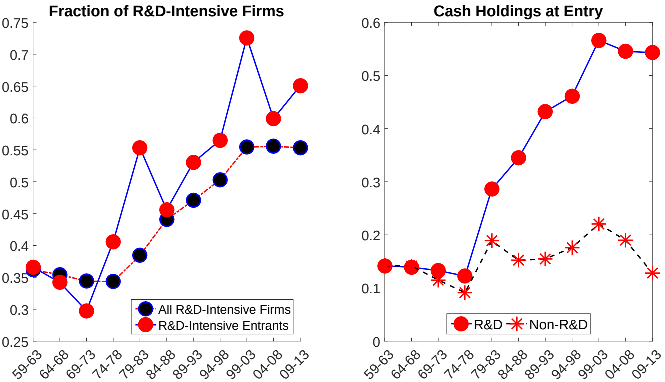
    $\Rightarrow$ bank demand for tangible $\uparrow$ & leverage $\uparrow$ $\Rightarrow$ risk in economy increases via levered liq. premium

- How does intangible rise lead to more financial instability
  - Assume intangible capital more productive
  - Increase productivity further
  - Higher demand for intangibles increases demand for deposits $\Rightarrow$ liquidity prem $\uparrow$ $\Rightarrow$ bank fund. costs $\downarrow$ bank demand for tangible $\uparrow$ $\Rightarrow$ .... loop ....

Discussion

- Very clever mechanism that combines two important strands of the literature
- Are assumptions & key effects supported by data?
  - Model implies productivity increase
  - Model requires constant intangible/(intangile + tangible)
  - Liquid liabilities of fin. institutions $\approx$ Liquid assets of firms

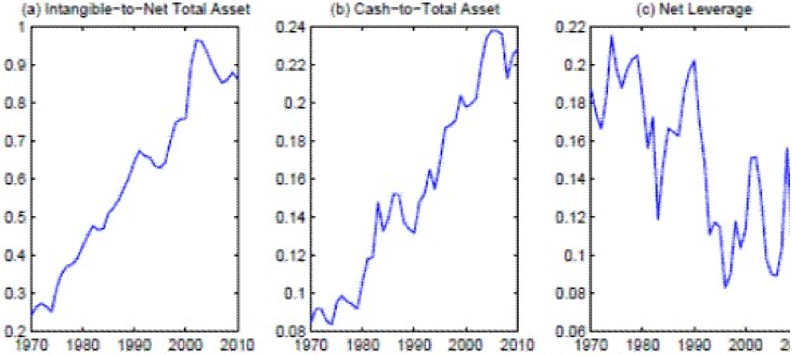
Model vs. Data
Rise of intangibles & productivity increase ϕ?



- R&D firms (intangibles) on the rise - consistent with model
- No productivity increase: Gordon, Summers, Haltiwanger

Model vs Data
Investment function not consistent

Figure 1: Intangible Capital, Cash Hoardings and Leverage



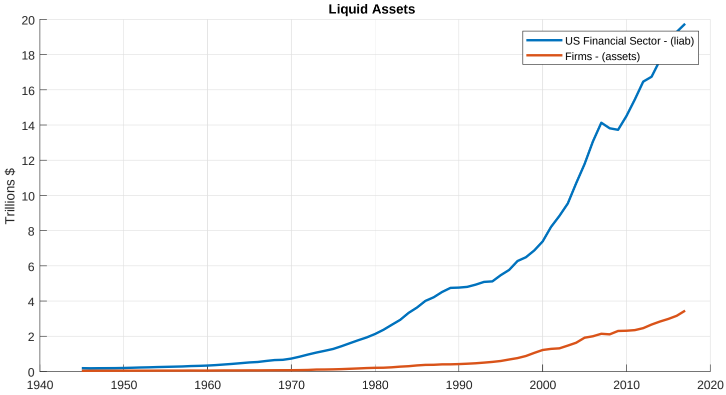
Note: Panel (a), (b) and (c) show intangible capital ratio relative to total (tangible) assets, cash-to-tota tangible) assets and net-debt-to-total (tangible) assets, respectively. The sample includes all Compusta irm-year observations from 1970 to 2010 with positive values for the book value of total assets and sale evenue for firms incorporated in the United States. Financial firms (SIC code 6000-6999) and utilitie SIC codes 4900-4999) are excluded from the sample, yielding a panel of 176,877 observations for 18,53 inique firms. Variable definitions are provided in the Appendix.

Model vs Data

Rise in liquid bank liabilities due to firms?

Financial sector liquid liabilities dwarfs firms' liquid assets

Points to alternative mechanism outside U.S. production sector



Take Away

- Very nice paper!
- Future research suggestions
  - Mechanism hinges on a few counterfactual assumptions $\Rightarrow$ confront & discuss
  - Calibrate model & estimate how much of increase in safe asset demand can be explained by your mechanism as opposed to others (e.g., foreign savings glut, financial regulation, irrational beliefs, etc)