Discussion: Christiano and Ikeda’s “Leverage Restrictions in a Business Cycle Model”

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Summary

- Leverage restrictions welfare improving when frictions influence banks’ loan making decisions

- This paper:
  - Builds DSGE model with banking sector
  - Key friction: bankers’ unobservable effort
  - Implication of banks’ borrowing restriction for economy

- Literature on optimal bank capital regulation in quantitative models
Key Friction

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- MF need higher return in good state to be compensated for occasional losses.
- Lower net worth banks lead MF to charge higher spread leading to less effort.
Outline of comments

1. Modeling of bank liabilities
2. Taking the model to the data
Modeling bank liabilities
Bank Liabilities

- Traditional banks
  - mostly funded by deposits (fixed claim)
  - most deposits are insured / considered safe by investors
  - government guarantees add to “safety” of liabilities
  - Traditional banks borrowing rate largely independent of state
  - Evidence for banks’ monopoly power in deposit markets
    (Drechsler et al and Matvos et al)

- Shadow banks (SBD, Finance companies)
  - only sometimes deposit-like
  - generally not safe (though not always priced as such)

- Leverage restrictions for whom?
Banks’ role for liquidity provision

- Here: welfare trade-off about banks’ lending choice efficiency

- Bank deposits special
  - safe & liquid
  - demand for these assets (e.g. Gorton, Lewellen, Metrick (2012); Bernanke (2005), Krishnamurthy & Vissing-Jorgenson (2012))

- Cost of borrowing restrictions
  - reduction in liquidity provision
  - provides incentives to shift liquidity production into shadow banking sector
Taking the model to the data
Which banks?

Graph from Begenau, Bigio, Majerovitz (2015). Flow of Funds data
Book Equity and Market Capitalization of BHCs

Graph from Begenau, Bigio, Majerovitz (2015). Call report data on bank holding companies (FR-Y-9C reports) and Compustat/CRSP

\(^2\)
Equity Issuance Levels

Graphs are from Begenau, Bigio, Majerovitz (2015). Call report data on bank holding companies (FR-Y-9C reports) and Compustat/CRSP.
Calibration of effort function

- Probability of success

\[ p(e) = \bar{a} + \bar{b}e \]

- Welfare effects depend on \( \bar{b} \)
- How to calibrate \( \bar{b} \)?
- Depends which fin. inst is modeled
• Quantitative model that takes modeling the inefficiency seriously

• Comments

  1. Bank liabilities
     1.1 mutual funds as capital providers
     1.2 banks’ role as liquidity providers

  2. Taking the model to the data
     2.1 which banks are calibration targets
     2.2 equity facts depend on equity measure
     2.3 equity issuance