Discussion of “Credit Booms, Financial Crises and Macroprudential Policy” by Mark Gertler, Nobuhiro Kiyotaki & Andrea Prestipino

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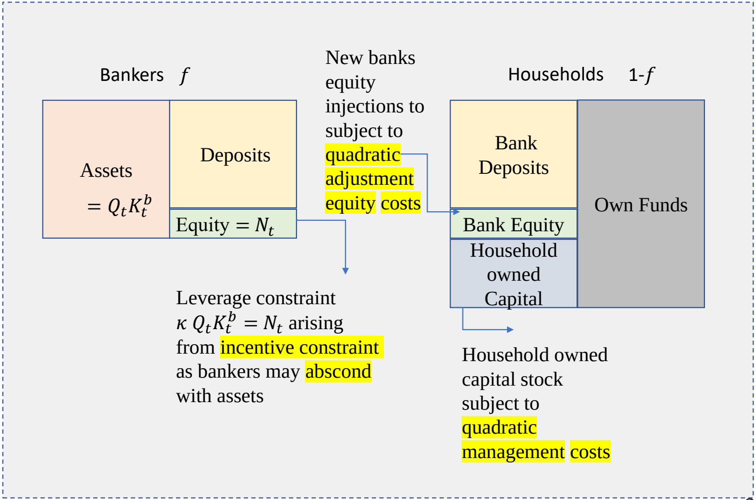
Summary

- Goal is to explain why some credit booms result in a banking crisis while others don't (extend Gertler, Kiyotaki, Prestipino 2019)
- Key mechanism
  - Optimistic beliefs lead to more leverage and intermediation
  - Optimistic beliefs sometimes warranted sometimes not
  - Bank runs more likely to happen when banks are highly levered
- Study optimal bank capital regulation
  - Countercyclical capital req trades off the costs of stopping a good credit boom against benefits of preventing a crisis
- Discussion
  - Contribution to the literature
  - Calibration comment
  - Implication for financial reg.

Model Overview (1)



Model Mechanism

- Due to cost, less bank intermediation results in lower output
- Banks can default on deposits (thus incentive constraints)
- Run on bank deposits possible if
  - Asset value falls below deposit obligation
  - & some households decide to run (not roll over) on banks (exogenous probabality)
- Banking crisis occurs when households run on bank
  $\Rightarrow$ Shuts down bank intermediation
  $\Rightarrow$ Resource cost due to more household "intermediation"

Belief mechanism to generate booms and busts

- Bankers receive shock of optimism about asset values
- Probability that optimistism is warranted
- Fixed period over which optimistic belief can be sustained
- Increased optimism leads to higher debt build-up and credit provision (boom)
- Moves banks closer to potential run region
- Small shocks / or run shock can trigger a crisis
- During run, banks cease to exist
  $\Rightarrow$ assets have to be owned by households suject to intermediation cost

Contribution

Mechanisms to connect credit booms and crises

- Behavioral stories: e.g., diagnostic expectations (Bordalo, Gennaioli, Shleifer, 2018)
- Fundamental exogenous shock drive banks' franchise values and thus credit (Gomes, Grotteria, Wachter, 2019)
- Booms and crises based on potentially endogenous information cycles about collateral (Gorton and Ordonez (2014, 2019))

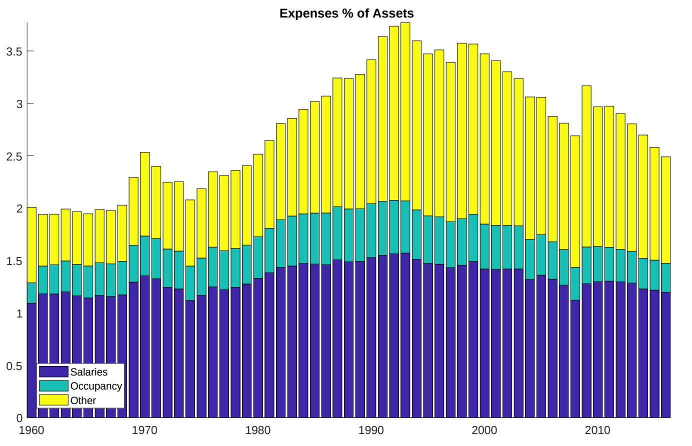
This paper

- Combines ideas of belief driven credit booms with effects from fundamental shocks to create booms/busts and booms without bust
- Macro-prudential capital regulation
- Calibrated model finds countercyclical cap reg optimal

Calibration: households' intermediation costs

- During crisis, households have to hold the previously bank intermediated capital stock at a cost, α
- The higher this cost, the larger the deadweight loss in a crisis
- Common to assume that assets are more cost efficiently managed by banks, i.e., $\alpha^{B} = 0 < \alpha^{HH}$
- Data: banking quite expensive (Philippon, 2015)
- Show banks' operating expenses as % of assets

Operating costs of banks are high



- With $10\times$ leverage, $2.5\% \times 10 = 25\%$
- Compare to cost of “direct financing” of households, via capital market portfolios 0.2%

Belief parametrization

- Beliefs consistent with micro-data?
- Existing evidence on managerial beliefs based on survey evidence (e.g., Ma, Sraer and Thesmar (2018), Barrero 2019)
  - Managers are not optimistic
  - Managers overextrapolate, i.e., believe good shocks are followed by goods (true in model) and bad shocks are followed by bad shocks
  - Managers are overconfident, i.e., believe their forecasts are more precise

Implication for Financial Regulation (1)

- Model makes no distinction between shadow banks (i.e., no deposit insurance, perhaps no government bailout etc) and regulated banks
- Run problem in the model leads to crises
- $\Rightarrow$ Would deposit insurance in conjunction with simple capital requirement be optimal?

Implication for Financial Regulation (2)

- Regulating banks may help expansion of shadow banks
- Theory (e.g., Plantin 2014, Begenau & Landvoigt 2018)
- Evidence (e.g., Buchak, Matvos, Piskorski, Seru 2018)
- Constraining traditional banking activity in booms could push activity into possibly unregulated shadow banking sector, increasing vulnerability in upcoming crisis

In sum

- Nice paper!
- Useful to think about unintended consequences of implied optimal capital regulation
- Look forward to a new iteration