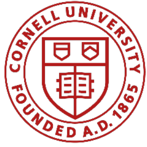

Johnson
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"Dissecting Mechanisms of Financial Crises: Intermediation and Sentiment"

Bank of Italy & Bocconi conference
March 2022

Discussion by:
Matthew Baron (Cornell)

Summary of paper

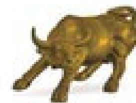
- Merger of:
  1. Macrofinance models with financial frictions
     - e.g., Bernanke, Gertler, Gilchrist (1999); Brunnermeier and Sannikov (2014), He and Krishnamurthy (2012)
  2. The behavioral-finance view of crises
     - e.g., Gennaioli and Shleifer (2018)

- The **belief fluctuations** help explain the pre-crisis evidence:
  - Credit booms, low risk premiums
  - Beliefs are backward looking:
    - Either Bayesian (Moreira and Savov 2017) or Diagnostic (Bordalo, Gennaioli and Shleifer 2018)

- The **financial frictions** help explain the post-crisis evidence:
  - Downside amplification, persistent output gap and credit crunch
  - Net wealth is the key state variable

A CRISIS *of* BELIEFS

INVESTOR PSYCHOLOGY *and* FINANCIAL FRAGILITY



NICOLA GENNAIOLI *and* ANDREI SHLEIFER

Main strength: grand synthesis of banking crises literature

At the forefront of modeling many recent findings (many countries, 1870-present):

1. Credit booms predict banking crises (e.g., Schularick and Taylor, 2012)
   - Credit booms mainly fueled by real estate lending
2. Credit booms are driven by overoptimism, neglect of default risk
   - e.g., Greenwood and Hanson (2013), Baron and Xiong (2017)
   - Sharp revision of beliefs leads to crisis: Gennaioli and Shleifer (2018)
3. Credit spreads are "too low" during the credit boom, then spike at the crisis
   - e.g., Krishnamurthy and Muir (2020)
4. Large bank equity declines predict persistent output gaps and credit contractions
   - e.g., Peek and Rosengren (2000); Baron, Verner, and Xiong (2021)

One quibble…

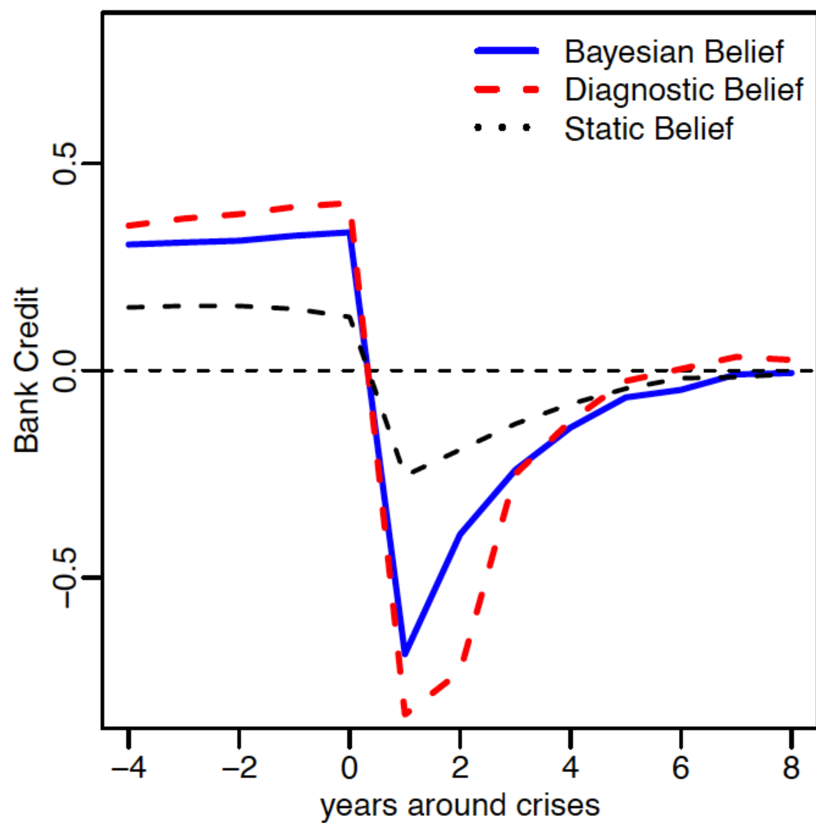
- In the model, beliefs not needed to explain the output contraction after the crisis
  - Agreed that downside amplification can be *mainly* driven by financial frictions

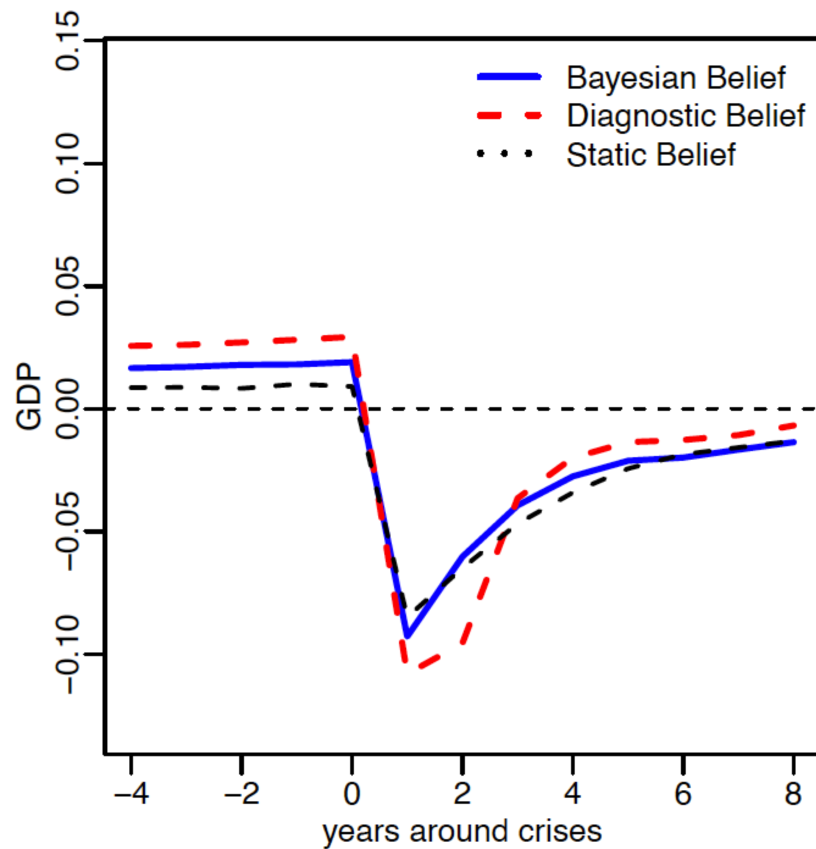
- **This is by assumption:** one of the targeted parameters is the "average 3-year output drop in crises"
  - So the model is mechanically forcing the "static" and "beliefs" models to have similar output contractions

- But if I were designing the model, I would allow beliefs to create a bigger boom (relative to a model without beliefs), which would then lead to a bigger GDP crash
  - Let the model determine the magnitude of the output drop in crises

Distorted beliefs → Bigger credit boom → Large bank losses → Larger output gap

Beliefs have little effect on output contraction in model:





Future directions for macrofinance theory research

1. In this model, credit booms serve as purely amplification mechanisms
   - Do credit booms also increase the probability of negative shocks?
   - Credit booms are associated with higher NPLs, lower return on assets, etc., suggesting that they are not merely amplifiers

     Bank equity losses = leverage * loan losses

   - Jorda, Richter, Schularick, Taylor (2021): bank leverage does not predict crises, but credit booms do

2. Post-crisis recessions after crises are highly persistent
   - Many economies stuck in a decade-long “undercapitalization trap”
     - Japan 1992-2004; Europe 2008-
     - Banks do not seem to recapitalize on their own
     - Economy does not mean-revert (even after many years) to steady state
   - Need to incorporate “Zombie” banks/firms (negative feedback loop between undercapitalized banks and stagnating corporate productivity growth)
     - Acharya, Lenzu, and Wang (2021)

Conclusions

- Important paper that expands the scope of microfinance models
  - By jointly considering financial frictions and role of beliefs
- Rational and behavioral models are not incompatible but can work together
  - We need more papers like this one that join the two approaches and quantitatively assess the strengths of each
- In general, macro theory should be guided by all these new empirical findings from historical banking crises research
  - This paper leads the way