

Discussion of  
**The Growth of Emerging Economies and  
Global Macroeconomic Stability**

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## Introduction

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- Popular narrative:

*The high rate of **foreign investment** in the United States also likely played a role in the housing boom. For many years, the United States has run large trade deficits while some emerging-market economies, notably some Asian nations and some oil producers, have run **large trade surpluses**. [...] International investment position statistics show that the excess savings of Asian nations have predominantly been put into U.S. government and agency debt and mortgage-backed securities, which would tend to lower real long-term interest rates, including mortgage rates.*

Ben Bernanke, September 2010

## This Paper

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- Formalize this insight in a macro model:
  - increase in supply of funds from emerging markets increases leverage
  - leads to fragility in the banking/intermediation
- Quantifiable and can evaluate the strength of the mechanisms at play

## Ingredients

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- Entrepreneurs - production sector:
  - Supply funds - for precautionary reasons
    - subject to idiosyncratic shocks
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  - Emerging: high productivity growth; low borrowing limit
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  - Emerging: high productivity growth; low borrowing limit
  - Industrial: low productivity growth; high borrowing limit
- Other model of saver/borrower works: this model is particularly nice and tractable

## Banks

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- Sit between savers and borrowers
- Possibility of shock to the value of bank liabilities
  - tail i.i.d. event: If leverage is high enough value of bank liabilities could be low → banks renegotiate down their liabilities (at a cost proportional to their size and depending on leverage)
  - leverage = liabilities/loan
- For intermediate values of liabilities: low spreads (between borrowing and lending rate) leads to low leverage. high spreads leads to high leverage.



## Banks

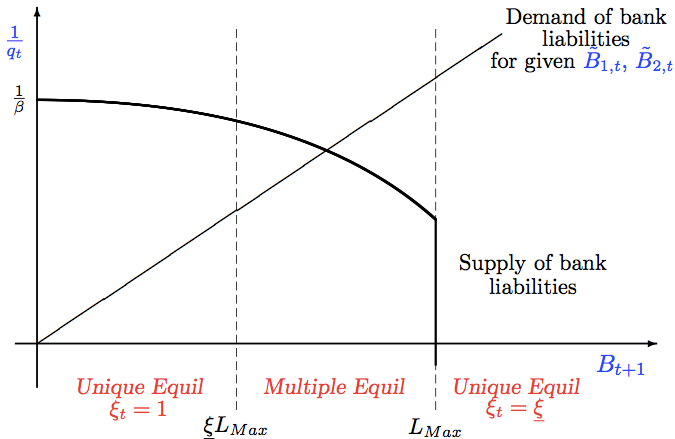
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- Coordinate on the tail event as a sunspot

# Banks

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## Mechanics of the main channel



## Growth from Emerging Markets ---

- EM country: low ability to borrow by households; high demand for saving → saving glut
- saving glut → high leverage → fragility

## Comments - part 1

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- Would be useful to highlight the precise mechanism behind the multiplicity
- Obviously without the valuation shock there is no multiplicity + no renegotiation ever occurs in equilibrium
- Disentangle their effect: Valuation shock also plays the role of the sunspot. They don't have to be the same. Dynamics could be potentially different.

## Comments - part 2

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- The model does well with a probability of 4% for the tail event
- Absent the EM growth, the economy barely responds to the tail event
- Two observations:
  - NFA in industrial country declines by 15% of GDP - in line with the data
  - leverage (Bank Dep./Loans) calibrated to around 85% - why?

## Comments - part 3

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- Part of the decline in NFA: accumulation of government debt specially U.S. (liquidity premium, etc.)
- Again acts as lowering interest rate but perhaps a different mechanism
  - Maybe low interest rate combined with perverse incentives: taking risk with other people's money and being subject to limited liability is easier when interest rates are low!
- Would be interesting to see which of these competing theories works better

## Conclusion

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- Very interesting paper to relate the fragility of the intermediaries to international capital flows: tractable model allows for quantitative and qualitative exercise
- More quantitative work needed to disentangle against competing theories