Using new data, methodologies, and approaches to understand risk in the financial system

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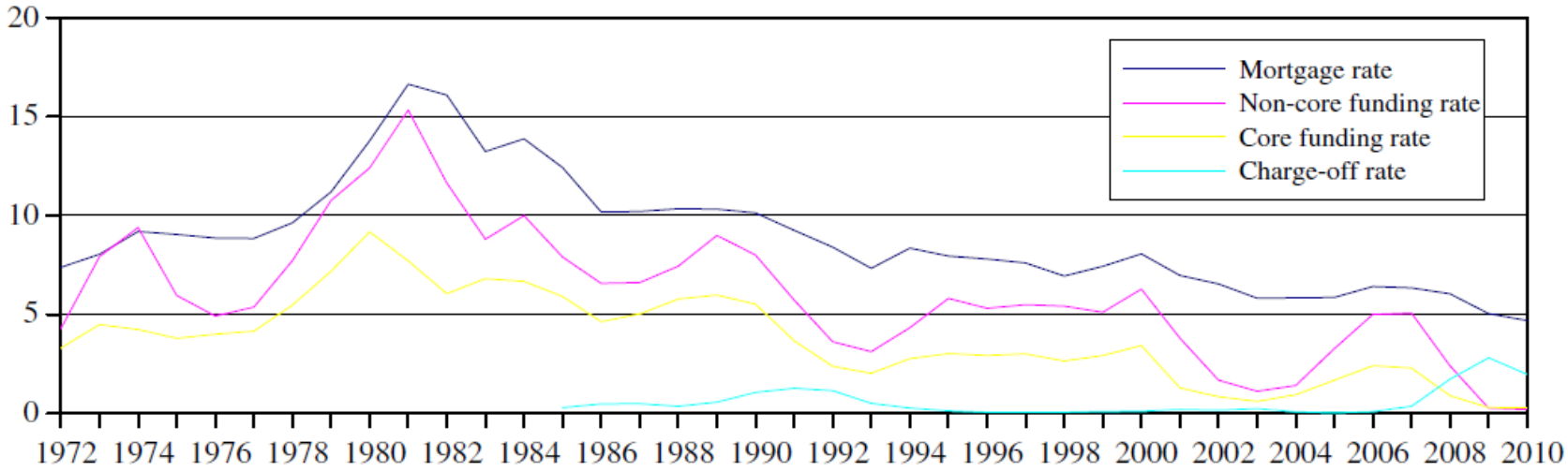
Themes

- Lots of data and computational capability everywhere but is that all a good thing?
- Interactions across markets and innovations create complexities that can make simple policies ineffective and complex policies unimplementable (and potentially dangerous)
- Actions need to consider the understanding and capabilities of decision makers and adjudicators

Interactions: Bank Rates



- Traditional challenge:

Balancing long assets and short term liabilities

- Complex dynamics interacting with charge-off

Policy Simulations

- Simulates rate dynamics and adjustment policies triggered by ratio violations
- Controls based on:
  - Leverage ratio: equity to loans
  - Funding ratio: core deposits to loans
- Measures:
  - Return: average earnings
  - Risk: discounted measure of recapitalization needs

Simulation Results

- Returns and risk (in parentheses) at various target ratios

Return and risk metrics

Lev. ratio \ Funding ratio	100%	50%	20%	0%
50%	6.1	4.9	4.2	3.7
	(0.0)	(0.0)	(0.0)	(0.0)
20%	9.4	6.4	4.5	3.3
	(0.0)	(4.0)	(55.3)	(74.1)
10%	14.9	8.8	5.3	3.0
	(7.8)	(93.8)	(146.8)	(210.3)
5%	25.9	13.9	6.9	2.5
	(76.8)	(231.6)	(354.8)	(480.4)
3%	40.7	20.8	9.1	1.7
	(154.9)	(413.7)	(641.2)	(826.7)

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Implications

- Need to consider multiple sources of risk and their dynamic risk characteristics
- Simple static capital requirements can lead to propagation of systemic risk
- Dynamic requirements and additional core-funding ratio constraints can help reduce systemic risk propagation
- Next speakers: what about the data, issues in dynamics and the people to carry things out?