

Macroprudential Regulation and Systemic Risk: New Challenges

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A Theoretical View

- A systemic event results from macrofinancial fragility, contagion and a trigger, but different types of financial crises are possible.
- Combination of a time dimension and a cross section dimension
- Absence of a holistic model
- Two main approaches:
 - Microeconomic Foundations
 - DSGE

What are the sources of systemic risk?

- Bank Runs
- Asset price falls
- Foreign exchange mismatches in the banking system
- Contagion

Empirical evidence :

What do we (think we) know?

- Credit booms increase the probability of a systemic crisis
- Business and financial cycles do matter

Confronting the theory with the empirical results

Credit is endogenous

1. What is it that triggers the increase in the demand for credit? What triggers the increase in its supply?
2. How do banks fund their credit expansion?

1. What drives credit booms?

- Bubbles justify the increase in credit demand
- Business cycles justify the increase in the credit supply
 - Collateral
 - Capital inflows

Bubbles: Diamond, 65; Tirole 85; Blanchard Watson, 82

- Necessary condition $n > r$; sufficient condition $r < 0$
- Firm bubbles provide liquidity when firms are collateral rationed (Farhi-Tirole(2012), Martin Ventura (2012, 2014))
- House bubbles (Freixas and Pérez-Reyna, 2017) reduces dynamic inefficiency

Fueling Business Cycles

- Change in credit standards
- Change in collateral prices
- Political Economy
- Divergence between rate of growth and real interest rate

Preliminary Empirical Results

Table 7: Golden rule ratio

Specification	(1)	(2)	(3)	(4)	(5) Baseline
Estimation method	OLS	OLS	OLS	Logit	Logit
Fixed effects	None	Country	Country+year	none	Country
L.grr	-1.008* (0.593)	-0.752 (0.613)	-1.304* (0.700)	-23.04** (9.822)	-25.65** (12.66)
L2.grr	0.870 (0.620)	1.012 (0.630)	0.439 (0.759)	19.82** (8.892)	33.24*** (11.53)
L3.grr	1.216** (0.615)	1.366** (0.624)	0.608 (0.754)	31.40*** (9.409)	42.17*** (13.39)
L4.grr	0.198 (0.613)	0.334 (0.623)	-0.445 (0.750)	1.583 (9.001)	5.988 (11.29)
L5.grr	0.239 (0.544)	0.453 (0.563)	0.732 (0.652)	0.148 (7.634)	8.542 (12.32)
Observations	447	447	447	447	447
R-squared	0.031	0.051	0.392		
Floans	2.796	3.400	1.087		
pF	0.0169	0.00504	0.367		
AUROC	0.800	0.839	0.972	0.797	0.832

Implications

- The wedge between GDP growth and real interest rates is also a good explanatory variable for systemic crises.
- Consistent with credit expansion, credit standards, collateral values, banks capital, and capital inflow.

Back to the question 2 : how do banks fund their expansion?

- Stein(2012): private liquidity

On Private Liquidity

- Market liquidity as a self fulfilling prophecy, (related to herding).
- Coordination on safe and quasi-safe assets
- Liquidity destruction is consistent with bubble bursting, fire sales, repo runs, haircuts and sudden stop crises.
- The Dang, Gorton and Holmstrom view.
- Implications regarding contagion

The Macroprudential Challenges

- Clear objectives?
 - The standard view: « no more Lehmans »
 - The business cycle view
 - Choosing the right instrument and the right timing
 - Consider the complementarity with other policies
 - Find the right institutional design
 - Design the communication policy

Macroprudential policy trade-offs

- Financial stability vs. Economic growth in the “no more Lehmans” view.
- Ex ante intervention vs. Ex post mopping up (Jeanne and Korinek)
- Type 1 vs. type 2 errors.

Good news! Macroprudential Policies are effective!

- Country studies
- BIS (2017)
- Gambacorta and Murcia(2019) for Latin America

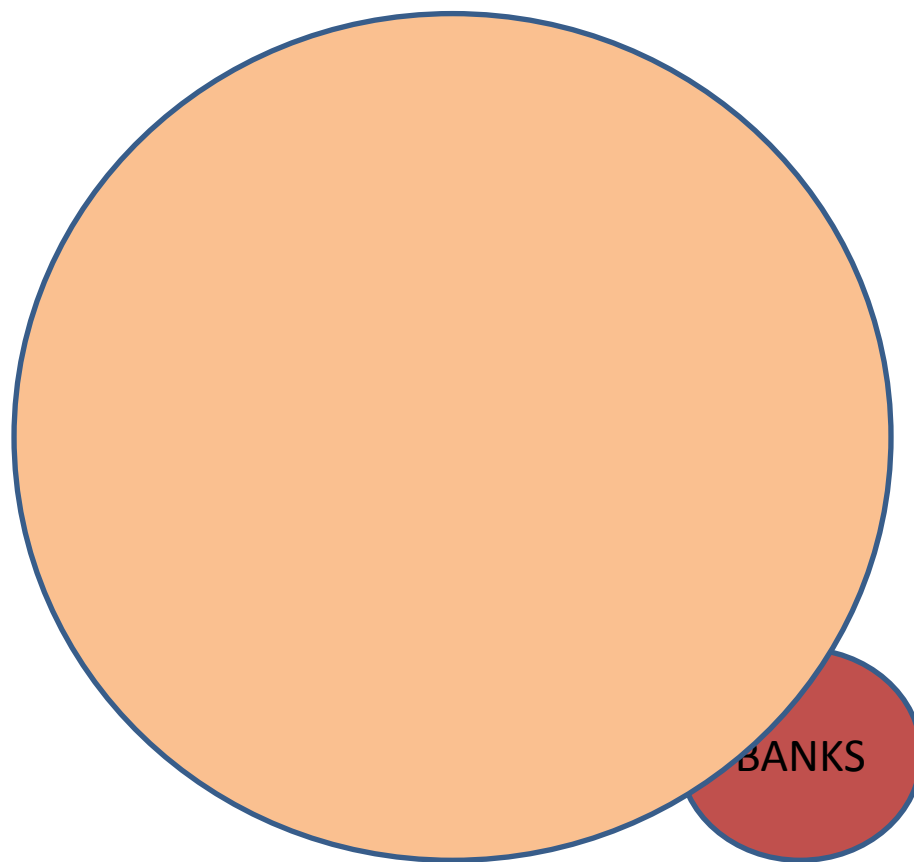
The International Coordination

- Regulatory «race to the bottom » (Dell’Ariccia and Marquez 2006)
- Capital flows
- Ongena, Popov and Udell(2013) exporting risk.

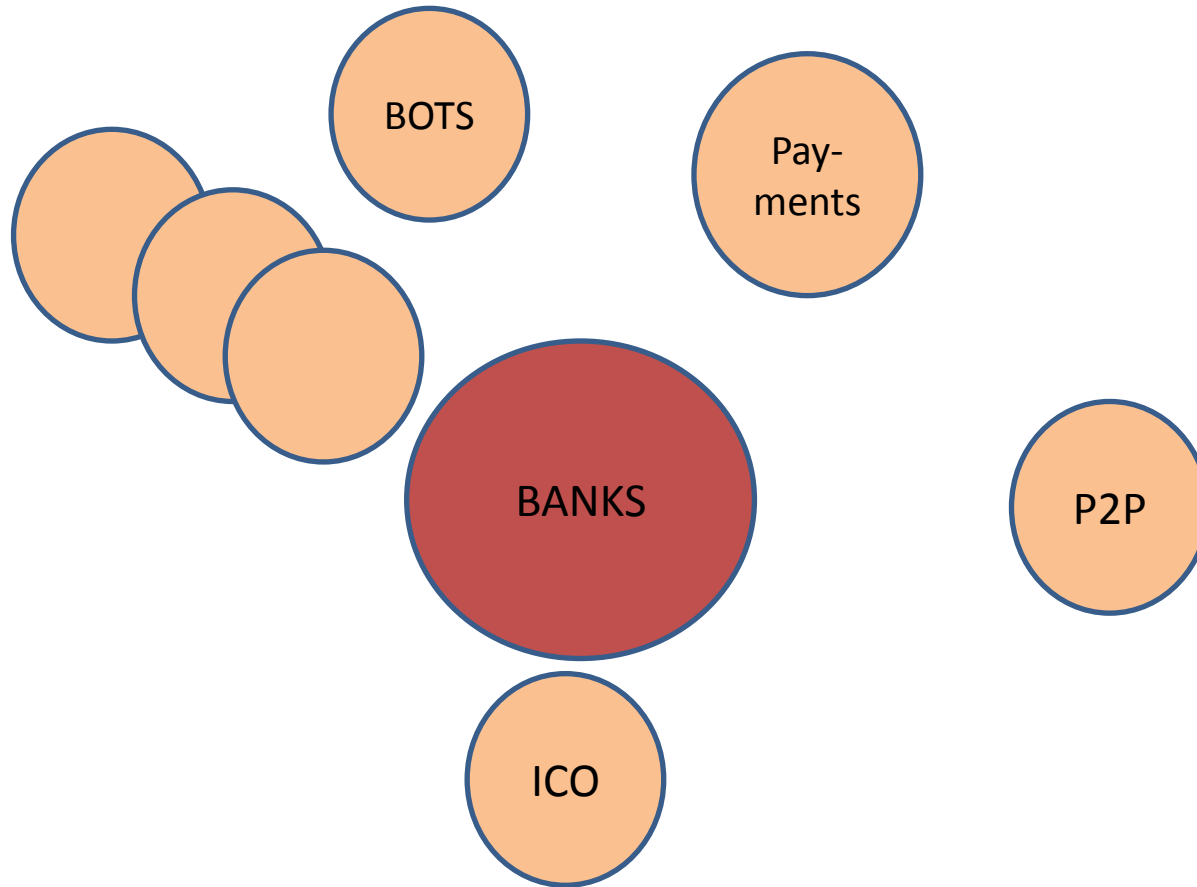
New Challenges: new environment

- Competition
- The Political Economy dimension

Bigtechs



Fintechs



What challenges?

- The standard bankers answer: « Fintechs are not a threat !» is wrong.
- Increased banking regulation increases shadow banking
- The liquidity dimension is unknown

The political economy dimension

- Stigler-Pelzmann capture theory
- The assessment of costs and benefits of regulation may react to political immediacy.
- If so, excessive regulation today will lead to inefficiently low levels of regulation tomorrow.
- Checks and balances? Accountability?
Independence from the Government?

Should Macroprudential policy be rules based or discretionary?

- The political economy framework implies rules based are desirable

To conclude

1. Macroprudential policy should consider credit growth, but should not disregard the business cycle also matters.
2. The creation of private liquidity matters
3. The banking environment is changing and the macroprudential policy framework should adapt in a credible, realistic way
 - Consider the equilibrium level of shadow banking
 - Consider the political economy equilibrium