CEPR Financial Regulation Initiative: Banking supervision and regulation

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Based on joint work for COEURE with Thorsten Beck and Itay Goldstein

Starting point

- The recent crisis has renewed intense discussions on
  - Role of financial system – growth versus stability
  - Role of financial innovation - risk sharing versus risk taking
  - Regulatory reforms – need, scope, effects

- “Traditional” tension in the debate on regulatory reforms
  - Important market failures in the financial systems
  - High costs of bank failures for real economy and society

  But…
  - Potential overregulation and less intermediation

How to achieve the “right” balance?

- How to *reduce* financial fragility and costs of bank failures
  …while *maximizing* efficiency of financial intermediation?

- Tendency to regulatory super-cycles
  - Tighter regulation after (major) crises - emphasis on restrictions
  - Relaxation over time - emphasis on market forces and self-regulation

- Intrinsic problem in design of regulation
  - Regulatory reforms tend to be **backward** looking
  - Financial innovation (and markets) are more **forward** looking

Further issues in the design of regulation

- Recent crisis has raised further doubts on the **nature** of regulation
  - Focus on stability of *individual* financial institutions is **not** sufficient to guarantee stability of the *overall* system
  - Credit boom-bust cycles suggest (unexplored) **link** between *monetary* and *prudential* policy
  - Shift from *bail-out* to *bail-in* to avoid burden on taxpayers and public sector
  - Global dimension of crisis and (cross border) financial institutions/ activities suggest need of more *cooperation* among regulators and *more international* regulatory perimeter

Array of new regulatory reforms

- Tighter capital requirements
- New liquidity requirements
- Resolution framework and bail-in instruments
- Banking union
- Activity restrictions
- …other (numerous) reforms…

…what do they respond to?

Micro-foundations of financial regulation

- Basic failures in the financial system
  - Coordination problems and panics
  - Moral hazard and incentives
  - Interbank connections and contagion
- In the survey vast use of theoretical and empirical research
- Our stance: regulation should preserve systemic stability
  - But this should be seen as a *condition* for the sustainability of an efficient and market-supporting financial system

Coordination problems and panics

- Typical feature of financial crises is the massive withdrawal of deposits by depositors – *bank runs*
- Reasons behind runs
  - Coordination problems among depositors (Diamond and Dybvig, 1983) – multiple equilibria and *panics*
  - Information-based response by depositors (Jacklin and Bhattacharya, 1988) – *fundamental* crises
- Global game approach (Goldstein and Pauzner, 2005) offers a reconciliation of the two views
  - Fundamentals of the bank uniquely determine probability (and *type*) of runs

Coordination problems and panics (cont.)

- Reason behind runs is important for the design of regulation
  - Panics are inefficient: measures like deposit insurance and guarantees can prevent them
  - Fundamentally driven runs may be efficient – market discipline to curb banks' risk taking
- Global game approach allows more extensive policy analysis
  - Deposit insurance and guarantees (Allen, Carletti, Goldstein and Leonello, 2015)

Moral hazard and incentives

- Provision of guarantees may lead to bank moral hazard
  - Capital requirements/activity restrictions to curb it

- External credit and agency problems are pervasive
  - May lead to asset price bubbles (Allen and Gale, 2000)
  - Recent crisis originated from the burst of real estate bubbles in different countries (US, IR, ES)
  - Financial liberalization and credit expansion are common precursors of financial crises (Reinhart and Rogoff, 2011)

Interbank connections and contagion

- Banks exert externalities on each other
  - Intervention/regulation is needed to achieve better outcomes
- Interbank markets and liquidity provision
  - Various frictions have been considered
    - Asymmetric information (Bhattacharya and Gale, 1987)
    - Monopoly power (Acharya et al., 2011)
    - Aggregate uncertainty and fire sales (Allen et al., 2009)
    - Strategic complementarities and freezes (Bebchuk and Goldstein, 2011)
  - Role for a central bank (liquidity provision, monitoring, etc)

Interbank connections and contagion (cont.)

- Contagion: spread of shocks from one bank to others leading to a systemic crisis
- Propagation mechanisms
  - Interbank connections (Allen and Gale, 2000) and payment systems (Freixas et al., 2000)
  - Information spillovers (Chen, 1999))
  - Fire sales and common exposures (Allen and Carletti, 2006; Parlour and Winton, 2009)
  - Portfolio readjustments (Cifuentes, Ferrucci and Shin, 2005; Goldstein and Pauzner, 2004)

Some open questions

- Recent crisis has spurred considerable research but much more is needed
  - Systemic risk and macroprudential regulation
    - Relationship micro-macro prudential regulation (e.g., capital)
  - Link between monetary and prudential policy (and fiscal?)
    - A few empirical works, little on theory
    - Effects of prolonged period of low interest rates?
  - Bail-outs versus bail-in instruments and resolution procedures
    - A "real" paradigm shift?
  - New financial architecture (in particular, in the euro area)
    - Regulatory incentives?
    - Governance structure?

Some open questions (cont.)

- Analyze effects of new regulations
  - Liquidity regulation
  - Interaction with other regulations (e.g., liquidity and capital)
  - Activity restrictions
- …and not only on banks
  - Banks versus shadow banking
  - Regulatory perimeter
- Both theoretical and empirical research is needed
  - Can policy makers help conducting controlled experiments?
  - Or sharing information/data/etc?

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Florence School of Banking & Finance

Elena Carletti
Scientific Director

Fabio Canova
Head of Training

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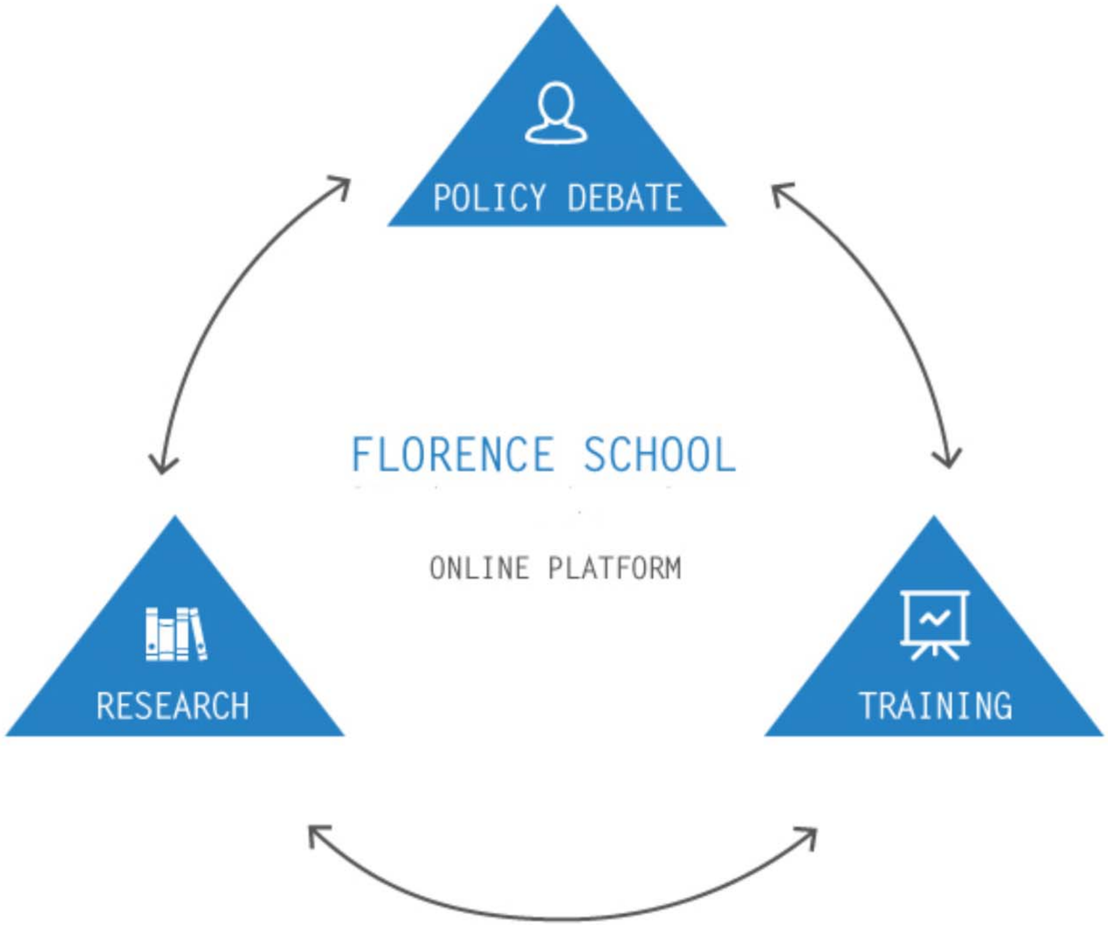

Training

- **ECONOMETRIC METHODS FOR THE ANALYSIS OF BANKING DATA**
  JANUARY 13-15, 2016 Course Director: Fabio Canova, Head of Training Florence School of Banking and Finance

- **BANKING AND FINANCIAL STABILITY**
  MARCH 9-12, 2016 Course Director: Ernst-Ludwig von Thadden (University of Mannheim)

- **RISK MANAGEMENT AND THE ECONOMICS OF BANKING**
  MARCH 30-APRIL 2, 2016 Course Director: Gianni de Nicoló (International Monetary Fund)

- **STRESS TESTING METHODS**
  APRIL 25-27 2016 Course Director: Till Schuermann, (Oliver, Wyman & Company, LLC, Management Consultants)

- **THE MICRO AND MACROECONOMICS OF BANKING**
  JUNE 1-3, 2016 Course Director: Dean Corbae (US Bank Professor in Banking; University of Wisconsin Madison)

- **CREDIT RISK MODELLING**
  JUNE 20-22, 2016 Course Director: Arturo Ormeno, (Credit Suisse)