Bank Resolution Regimes and Systemic Risk

Thorsten Beck, Deyan Radev and Isabel Schnabel

Discussion

Elena Carletti
Bocconi University and CEPR

Bundesbank-ECB Spring Conference

14-15 May 2019

Università Commerciale
Luigi Bocconi

The paper

- How does **systemic risk** at **bank level** changes in response to “**shocks**”, depending on the prevailing bank **resolution regime**?
- **Shocks**:
  - System-wide versus bank-specific
  - Positive (i.e., ↓ systemic risk) versus negative (i.e. ↑ systemic risk)

- **Resolution regime:**
  - 22 member countries of the Financial Stability Board
  - Various characteristics (1 to 22)
    - General framework for bank resolution (**1**-3)
    - Powers available to the resolution authority (0 to 8)
    - Tools available to the resolution authority (0 to 4)
    - Frameworks to conduct a bail-in (0 to 3)
  - Strength of the resolution measured as a **simple** sum

Università Commerciale Luigi Bocconi

Main results

1. **Systemic risk** **increases more** in countries with **more** comprehensive resolution after **negative** system-wide shocks (e.g., Lehman Brothers)
2. **Systemic risk** **decreases more** in countries with **more** comprehensive resolution after **positive** system-wide shocks (e.g., Draghi)
3. **Systemic risk** **increases less** in countries with **more** comprehensive resolution after **negative** bank-specific shocks (e.g., Deutsche Bank)

Shocks	Systemic risk	More resolution
Negative S-W	↑	+
Positive S-W	↓	+
Negative B-S	↑	-
Positive B-S	?	?

More specific results on the single components of the resolution regimes

Università Commerciale Luigi Bocconi

Main results

1. Systemic risk **increases more** in countries with **more** comprehensive resolution after **negative** system-wide shocks (e.g., Lehman Brothers)
2. Systemic risk **decreases more** in countries with **more** comprehensive resolution after **positive** system-wide shocks (e.g., Draghi)
3. Systemic risk **increases less** in countries with **more** comprehensive resolution after **negative** bank-specific shocks (e.g., Deutsche Bank)

Shocks	Systemic risk	More resolution
Negative S-W	↑	+
Positive S-W	↓	+
Negative B-S	↑	-
Positive B-S	?	?

More specific results on the single components of the resolution regimes

Main take away:

Bank resolution rules are **effective** in dealing with bank-specific shocks,

but

they can exarcebate (**negative**) system-wide shocks

Università Commerciale Luigi Bocconi

Comments

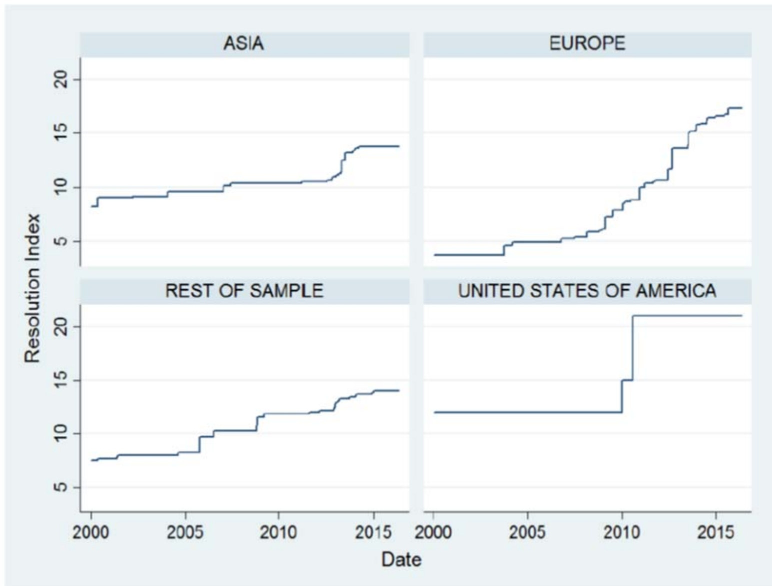
- **General comments**
  - First-order question, with important policy implications
  - First study with a systematic and formal analysis on the link between resolution and systemic risk

- **Specific comments – related, at least partly**
  1. The context
  2. The econometric set up and measure of systemic risk (SR)
  3. The shocks and the story

1. The context

- **Resolution** = orderly restructuring of a bank in contrast to liquidation or bail out using taxpayer resources
  - Systemic perspective, minimize fiscal costs and preservation of critical functions
- **Data set**: Resolution regimes in 22 advanced and emerging countries in the period 2000-2015 (e.g., USA, UK, 5 EU, etc.) based on FSB (2013)
- **Questions**
  - **When** were they introduced in the various countries?
  - Is there a particular **pattern** in the introduction (e.g. within/across regions)?
  - How do they **differ** across countries?
  - Is the (**unweighted**) **sum** appropriate to measure their strength?

Some more information and descriptive statistics (also for sub-indexes) would be very useful



Università Commerciale Luigi Bocconi

2. The econometric set up and measure of SR

- **Panel difference-in-differences** model at **daily** frequency (80 days before the even and 7 days after)

$$\begin{aligned}\Delta CoVaR_{i,c,t} = {} & \gamma_i + \beta_1 \cdot Event_t \\ & + \beta_2 \cdot Resolution\ Index_{c,pre-estimation\ period} * Event_t \\ & + \beta_3 \cdot Bank\ Controls_{i,c,year-1} * Event_t \\ & + \beta_4 \cdot Macro\ Controls_{i,c,year-1} * Event_t + \epsilon_{i,c,t},\end{aligned}$$

Questions:

- **Diff-in-diff** approach and **endogeneity**
  - Cross-country comparison: are the resolution regimes the only difference?
- **Bank controls**: total and assets and leverage
  - How about CET1, NPL, liquidity, measures of network/interconnectedness?
- **Macro controls**: GDP growth, domestic credit to GDP and inflation
  - How about asset volatility, financial openness?
- Why **CoVaR**? Robust to other measures of SR? e.g., SRISK?

3. The shocks and the story

- **8 shocks**
  - 4 **negative** system-wide (subprime crisis, Bearn Stearns, Lehman Brothers, Greece bailout)
  - 2 **positive** system-wide (Greece sovereign debt swap (PSI), Draghi speech)
  - 2 **negative** bank-specific (Resolution Banco Espirito Santo, Deutsche Bank announcement)

Questions

- These shocks are very **different** from one another
  - Different in **scope** and **geography** (sovereign vs banks, small vs large, time period also in relation to strength of the resolution regimes)
- Are we sure they do **not** capture something else? What is the **story**?
  - Application of bail-in and contagion (through exposures or information contagion?)
    - But, isn't PSI also a form of bail-in?
    - Deutsche Bank and Banco Espirito Santo are very different
  - Useful to analyze the reactions for the **different countrie**s, especially for bank specific shocks?
  - Try to use the results on the sub-indexes of resolution to teese out the story more?

Conclusions

- Very interesting idea, a pleasure to read
- Highly relevant policy question
- Potential improvements
  - Try to provide (and use) more information on the resolution regimes
  - Strengthen empirical analysis (e.g., other SR measures, other controls, etc.)
  - Think of the story more and whether the different shocks capture it

Thank you