The economics of bank resolution

by

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Outline of survey

1. General economic principles of bank resolution
2. Analysis of EU Bank Recovery and Resolution Directive and Single Resolution Mechanism
   - Single resolution fund
   - Bailing-in of creditors
3. Weaknesses of BRRD and SRM
4. Conclusions

1. General economic principles of bank resolution

What is bank resolution? (EC 2014)

- No unique definition
- Resolution occurs at the point when authorities determine that a bank is failing or likely to fail …
- … that there is no other private sector intervention that can restore institution back to viability within a short timeframe and
- … that normal insolvency procedures would cause financial instability
- Resolution means restructuring of bank by resolution authority, with use of resolution tools

Aim of bank resolution

- To ensure the continuity of bank critical functions (deposits - money-like features; payment systems)
- Preserve financial stability
- Restore viability of all or part of that institution.

Minimize costs of bank resolution 1/4

White, P. and Yorulmazer, T. (2014)

1. Disruptions to the customers of the bank: loss of soft info from relationship banking
2. Disruptions to other financial institutions through contagion
   - direct exposures through interlinkages (Allen-Gale 2000, Freixas et. 2000),
   - information contagion (Acharya and Yorulmazer 2008)
   - fire-sale externalities (Brunnermeier and Pedersen 2009)

Minimize costs of bank resolution 2/4

3. Distorted incentives and moral hazard:
   - Time inconsistency leading to excessive risk taking
   - Ex ante regulators would like to be tough to prevent excessive risk taking
   - During systemic crisis costs associated with not providing assistance can be so high that regulators may feel compelled to provide assistance (Mailath and Mester 1994, Acharya and Yorulmazer 2007, 2008)

Minimize costs of bank resolution 3/4

4. Fiscal costs associated with bailouts of failed banks
   - According to the IMF estimates, crisis-related losses incurred by European banks in 2007-2010 are ≈ €1 trillion or 8% of EU GDP (EC 2014)

Minimize costs of bank resolution 4/4

4. fiscal costs associated with bailouts of failed banks
   - October 2008 -October 2011, EU Commission approved € 4.5 trillion (37% of EU GDP) in state aid measures to financial institutions, of which € 1.6 trillion (13% of EU GDP) was used in 2008-2010. (EC 2011)
   - October 2008-December 2012, EU Commission approved €591.9 billion or 4.6% of EU 2012 GDP in state aid **recapitalization** and asset relief measures (EC 2014)

In EU Public Bailouts generated unsustainable burden for public finances

Brunnermeier, Garicano, Lane, Pagano, Santos, Thesmar, Van Nieuwerburgh and Vayanos (2011)

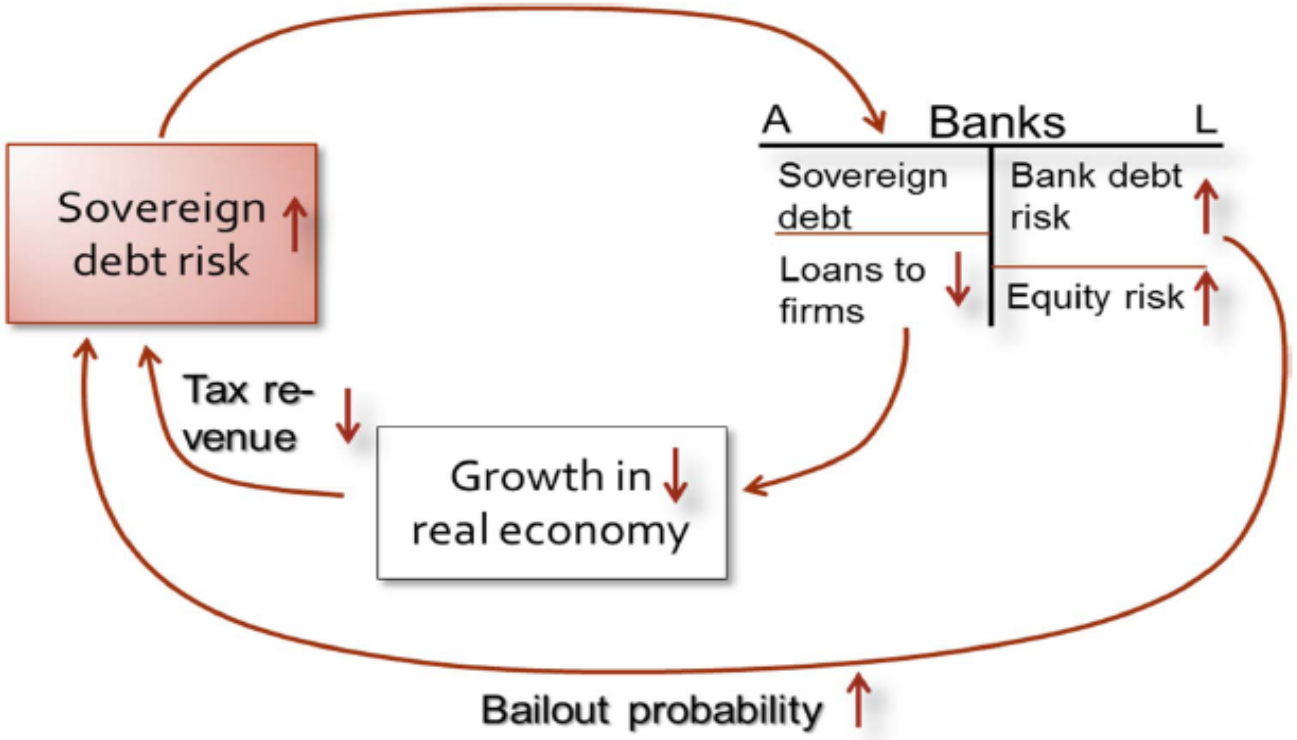


Figure 5: Feedback effects between sovereign and financial sector risk ("diabolic loop").

Why are normal insolvency procedures unsuitable for banks&large Fin. Inst.? (EC 2014)

- In normal insolvency procedures objective is to max value of assets of failed firms in interest of creditors; may take years and destroy confidence
- Primary objectives of resolution of banks (Large Fin. Inst.)
  - to respond with speed to distress
  - to maintain financial stability

2. EU Bank Recovery and Resolution Directive and Single Resolution Mechanism

Bank Recovery and Resolution Directive; Single Resolution Mechanism

- Bank Recovery and Resolution Directive (April 2014): uniform rules for whole EU to deal with failing banks at national level, and cooperation arrangements for cross-border banking failures
- SRM establishes institutional and funding architecture for applying BRRD rules

Bank resolution part of EU banking union

- Banking union has 4 pillars
  1. Single regulator: BRDD; deposit-taking banks and Large Fin. Institutions in EU
  2. Single supervisor: November 2014 ECB will take over banking supervision after Comprehensive Assessment in euro-area
  3. Single Resolution Mechanism: ECB-led procedure to deal with failing banks in euro-area + participating states
  4. Common system of deposit insurance: missing; national schemes ≤ € 100K

Single Resolution Mechanism

- SRM responsible for closing or restructuring
  - 130 biggest euro-area banks if they run into trouble,
  - 200 or so cross-border banks
- It will also have the right to intervene in any of the about 6,000 euro-area lenders.
- Principle: Banks that are supervised at European level cannot be expected to be resolved at national level

Tools of SRM: Single Resolution Board

- SRB (activated by ECB); prepares + monitors resolution decision
- **Speed**: SRB 24 hours + EU Commission 12 hours to object (unlikely) and send issue to European Council
  - Individual resolution decisions by SRB in executive session (8 members); plenary (23 members) required only if use of SRF > €5 billion
  - Limits interference by individual countries

Tools of SRM: Single Resolution Fund

- SRF is financial arm of SRM
- SRF is centralized pool of financial resources
- Insurance mechanism to absorb idiosynchratic banks shocks
- Deemed better at providing insurance + protect taxpayers than national funds

Single Resolution Fund

- Funded with €55bn at capacity (≈ 1% of insured deposits)
- Funded ex ante with risk-based fees paid by banks + investment firms, proportional to liabilities and risk profile
- EU Commission stresses that SRF is not a bailout fund, but provides funds to recapitalize sound banks + ensure financial stability

SRF as a last resort

Resolution of failing bank has first

1. Sale of (parts) the bank to other viable institutions without consent of sharehoders
2. Bridge bank to which to transfer temporarily resolved institution to preserve continuity of essential functions
3. Separation of assets between “good bank” and “bad bank”
4. Bailing-in creditors of the bank: imposing losses to shareholders + bondholders + other creditors + depositors (> €100K deposit guarantee)

Tools of SRM: Early intervention powers

(EC 2014)

- BRRD gives supervisors expanded set of powers to intervene in distressed banks before situation is irreversible
- Powers:
  - ability to dismiss the management
  - appoint temporary administrator
  - convening meeting of shareholders to adopt reforms and requiring bank to draw debt restructuring plan

Bailing-in creditors 1/4

- The term bail-in seems to have been invented by Credit Suisse banker, D. Wilson Ervin in 2008 (Sommer 2014)
- Bailing-in of creditors mechanism to cancel or reduce liabilities of failing bank,
- … or to convert debt into equity, to restore institution's capital position (EC 2014)

Bailing-in creditors 2/4

- **Increase loss absorbing capacity of banks, above equity**
- Bailing-in regime introduced to avoid public bailout and associated moral hazard + reduce TBTF subsidy + “diabolic loop” + systemic disruption + increase incentives for early intervention and closure
- based on the penalty principle: cost of bank failures shifted to where they belong: bank shareholders and creditors

Bailing-in creditors 3/4

- Before SFR is used (in temporary phase, national resolution funds) shareholders and creditors must bear losses ≥ 8% of liabilities (8% based on historical losses)…
- … and SRF can contribute ≤ 5% of bank liabilities
- Big shift from Geithner (2014) core principle followed during 2008 crisis in US: **during a crisis creditors of large financial institutions should not suffer any losses**

Bailing-in creditors 4/4

- Previous examples
  - Cyprus 2013
  - Spain: under bankruptcy reorganization of Bankia and 4 other banks over 1 million small depositors were sold preferred stocks in exchange for deposits with initial write down of 30-70%.

One theory behind Bail-in 1/6

Sommer (2014)

- Bail-in implies that some creditors protected at expense of others, regardless of seniority
- Why?
- Not all liabilities are alike
- Some, like deposits, repo and derivatives are finanacial products: provide liquidity, shift risk

One theory behind Bail-in 2/6

- These liabilities may be credit products, but credit is incidental to services they provide
- Liquidity and risk shifting are valuable services in themselves
  - Insurance policies cost more than their presesnt value
  - Liquid debt pay less than illiquid ones

One theory behind Bail-in 3/6

- Other bank liabilities are mere stream of incomes
- Hence cost of impairing them is smaller than cost of imparing financial liabilities
- This stands regarldess of systemic risk that their impairment may cause

One theory behind Bail-in 4/6

- This notion of financial liabilities as a product has implications for insolvency laws behind priority
- Freezing performance on a financial product (automatic stay) is akin to prohibiting a car maker in reorganization procedure (e.g. Chapter 11) from selling cars, or an airline from selling tickets and flying planes.

One theory behind Bail-in 5/6

- This turns a standard bankruptcy argument inside out
- Bankruptcy scholars may argue that reorganization is more efficient than liquidation because reorganization preserves value of firm-specific assets …
- … but financial firms have firm-specific liabilities, that need to be protected at expense of other liabilities

One theory behind Bail-in 6/6

- Implications for capital regulation
- All liabilities serve the same function in a bail-in …
- … to protect bank financial liabilities: deposits, money like instruments, risk shifting instruments
- Thus all liabilities subject to bail-in are capital, wether or not recognized by Basel
- Hence bail-in may have already done to debt of parent in a BHC what Admati and Hellwig (2013) advocate through increase in equity

Supervisory Comprehensive Assessment

EEAG (2014)

- Comprehensive Assessment conducted by ECB < Nov 2014
  1. Supervisory risk assessment
  2. Asset quality review: legacy assets
  3. Stress test

Legacy assets 1/2

- Countries have incentive not to reveal banks problems before banking union, so that costs are mutualized
- SRM wants to know before being in charge
- Legacy problems should be met by countries where located

Legacy assets 2/2

- Similar to pre-existing medical conditions which a new private medical insurance policy would refuse to cover (EEAG 2014)
- But if legacy problems require massif recapitalization, loop between banks and sovereign not broken

3. Weaknesses of BRRD and SRM

Weakness of SRM + SRF 1/5

- SRM + limited capacity of SRF (€55bn) make them suitable to address individual bank crises but pales with respect to size of previous interventions (several % points of EU GDP)
- Political/National desire to put a cap to debt mutualization =>
  - SFR does not have unlimited capacity
  - does not have government guarantees
  - cannot borrow from ESM (European Stability Mechanism)
  - national resolution funds can borrow from each other

Weakness of SRM + SRF 2/5

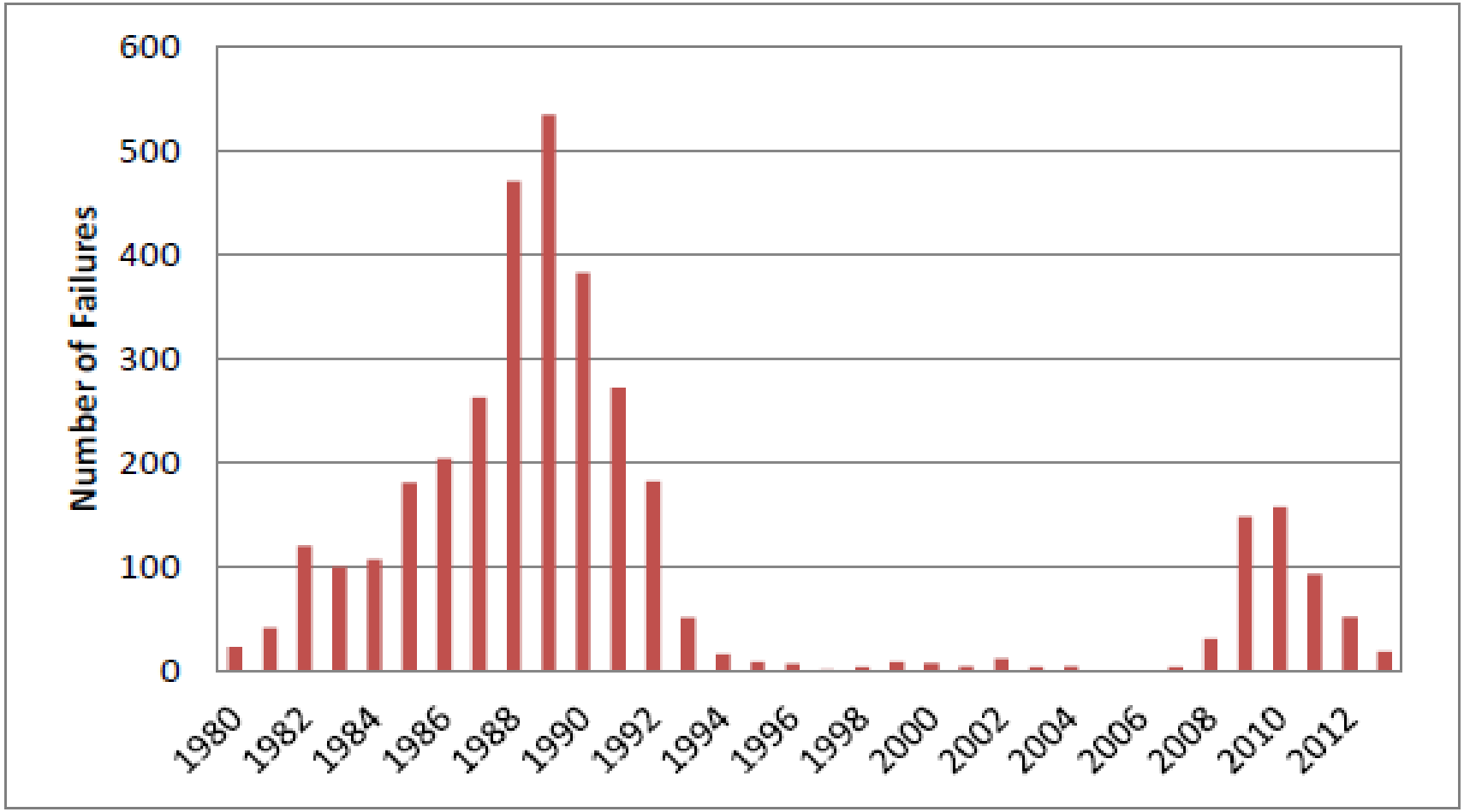
- If initial capacity is exausted SFR must borrow from mkt, can securitize cash flows
- Lack of public backstop limits its credibility
- Crucially different from FDIC which enjoys US Treasury support
- Politics always intrude in Banking regulation; even in national banking systems (Calomiris and Haber 2014) and more so when national interests matter

Weakness of SRM + SRF 3/5

- Problem in the design of SRF
- Bank crises are not uniformly distributed over time…
- … but tend to cluster in same periods (White and Yorulmazer 2014)

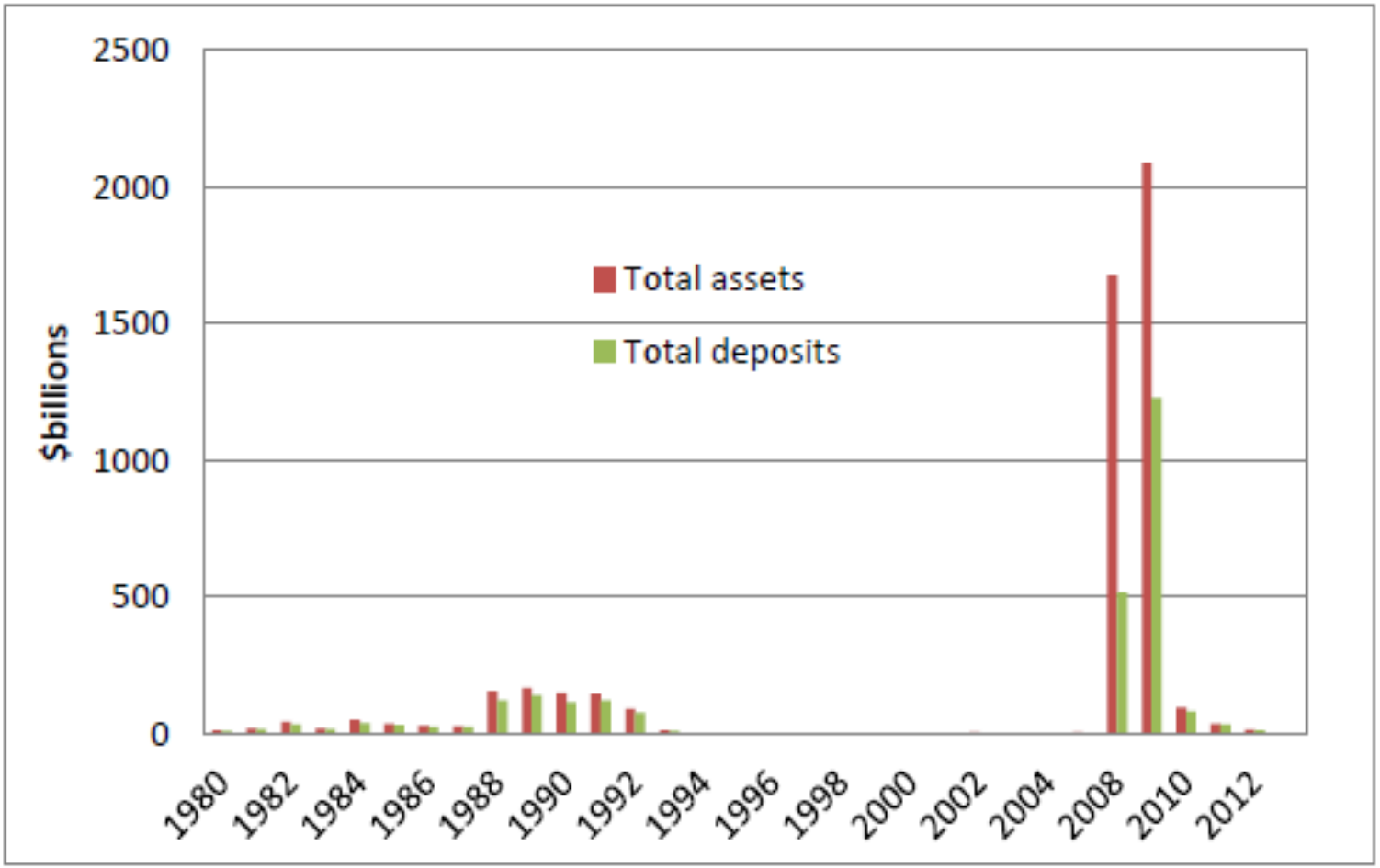
Number of bank failures in US

White and Yorulmazer (2014)



Assets of banks that failed in US

White and Yorulmazer (2014)



Weakness of SRM + SRF 4/5

White and Yorulmazer (2014)

- Systemic crises entail different tradeoffs between
  - discouraging MH induced by use of public funds and
  - avoiding disruptions arising from disorderly failure or liquiditation
- SRM + SRF built on the logic of insuring small shocks + minimizing the likelihood of loss mutualization

Weakness of SRM + SRF 5/5

White and Yorulmazer (2014)

- SRM + SRF ignore that health of a bank depends also on health of other banks
- Lacks a macroprudential dimension which is present in Dodd-Frank Act 2010
- Tension with objective to break loop between banks and their sovereign

Weakness of SRF: Transition period 1/2

- SRM and SRF effective January 2016 (bailing-in)
- However, SFR reaches €55bn capacity in 8 yrs (10 in first proposal)
- 40% of national funds built in first yr; 20% in second yr; and so on; 60% of mutualization capacity in first 2 yrs

Weakness of SRF: Transition period 2/2

- EU governments and European lawmakers had tussled over how to finance new mechanism, particularly in its early years
- Delayed mutualization: Germany fought hard to prevent SRM from tapping a common pool of European funds from the start
- Linked to legacy assets

Downside of bail-in

- Even if bail-in may increase bank loss-absorbing capacity, **it may not improve governance of banks + mkt discipline**
- Unsecured creditors subject to bail-in may be too dispersed or unskilled to exercise bank monitoring to prevent distress
- Even with large sums at stake prudent behavior and mkt discipline missing ahead of current crisis

Large inside equity did not prevent bank distress in US

Fahlenbrach and Stulz (2011)

1. James Cayne (Bear Stearns, $1,062 million)
2. Richard Fuld (Lehman Brothers, $911.5 million)
3. Stan O'Neal (Merrill Lynch, $359 million)
4. Angelo Mozilo (Countrywide Financial, $285 million)
5. Robert J. Glickman (Corus Bankshares, $281.1 million)

Possible reactions to bail-in clauses: move to unregulated sector

- Even if bank is not in distress bail-in clauses may induce some liability holders subject to bail-in to move to more lightly regulated segments of financial world; e.g. MMF
- But these segments lack LOLR; unintended consequence of destabilizing regulated banking sector by making panic more likely + spillovers back to regulated banking possible

Possible reactions to bail-in clauses: capital flights in distress

- At first hint of bank financial trouble easy to avoid being hit with cost of a bail-in
  - withdraw or
  - sell claim
- Even if equity holders and bond holders cannot run in same way that depositors can, triggering bail-in process may generate
  - capital flight
  - sharp rise in funding costs

4. Conclusions

Conclusions 1/3

- Economics and Procedures to achieve orderly bank resolution
- Objectives of orderly bank resolution
  - Avoid potential financial instability
  - Avoid public bailout
  - Avoid debt mutualization (BRRD)
  - If distress prevention fails, then Orderly Bank resolution …
  - … with shareholders and certain categories of creditors absorbing losses

Conclusions 2/3

- A word of caution
- Is Orderly Bank Resolution an Oxymoron?
- **Can we have a train derail in a orderly fashion**?

Conclusions 3/3

- Banking crises tend to repeat …
- … but each time regulators and monetary authorities treat them as if each time is special and may succumb to forbearance
- Important to have in place rules and plans to unwind banks + complex fin. inst., assign losses, to minimize time inconsistency and associated moral hazard.

Thank you for your attention

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