

Bank Resolution and the Structure of Global Banks

Patrick Bolton Martin Oehmke

Stockholm International
Banking Crisis Management Conference
June 2026

Motivation

How to resolve global systemically important banks (G-SIBs)?

- ▶ Aim: Avoid (1) Lehman scenario and (2) tax-funded bailout
- ▶ **US:** Dodd-Frank introduced OLA, modeled after FDIC receivership
- ▶ **EU:** BRRD introduced bail-in tool, with SRB as resolution authority

Main challenge: Swift transfer of assets and liabilities not possible

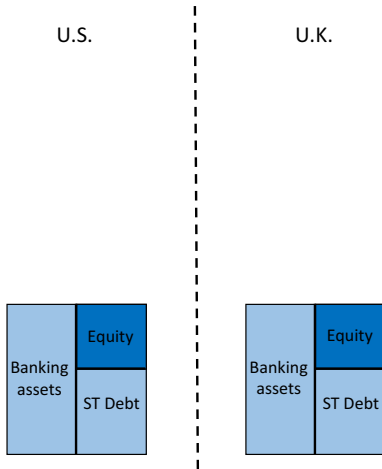
- ▶ FDIC resolution relies on **P&A**, usually over weekend
- ▶ **does not work for G-SIBs:** too complex, too large, global scale

Solution: Resolution happens exclusively on the liability side

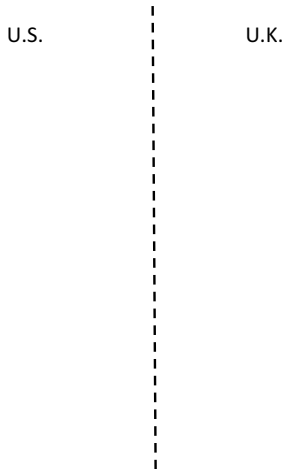
- ▶ banks issue equity and LT debt as loss-absorbing capital
- ▶ recapitalization via liability side: TLAC/MREL written down in crisis

Two Approaches: MPOE and SPOE

Multiple Point of Entry (MPOE):

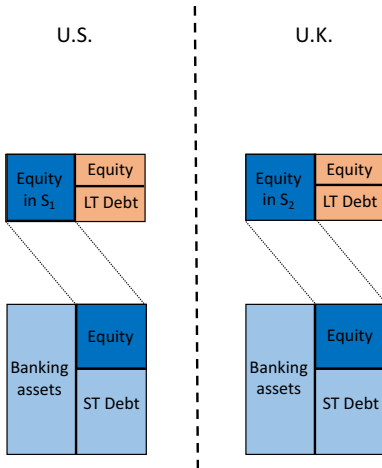


Single Point of Entry (SPOE):



Two Approaches: MPOE and SPOE

Multiple Point of Entry (MPOE):



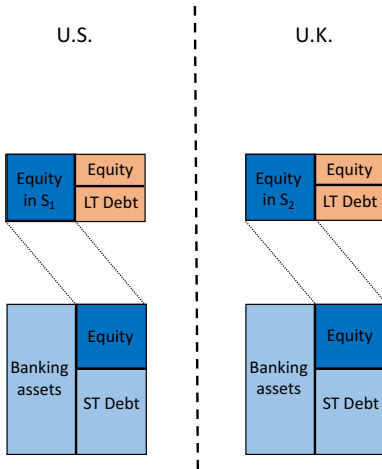
Single Point of Entry (SPOE):



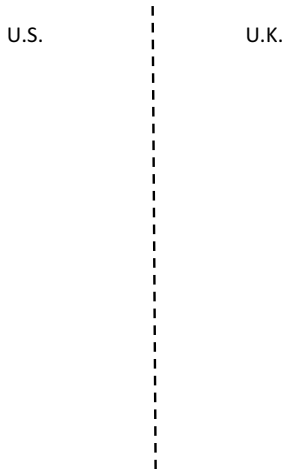
Two Approaches: MPOE and SPOE

Multiple Point of Entry (MPOE):

Loss-absorbing capital in each jurisdiction



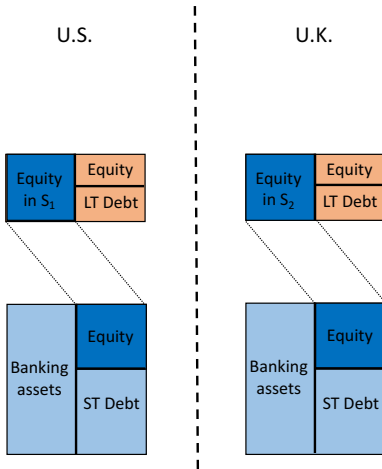
Single Point of Entry (SPOE):



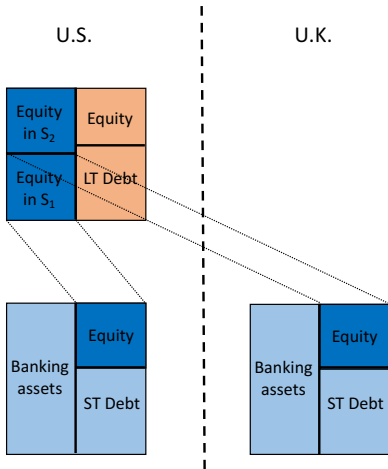
Two Approaches: MPOE and SPOE

Multiple Point of Entry (MPOE):

Loss-absorbing capital in each jurisdiction



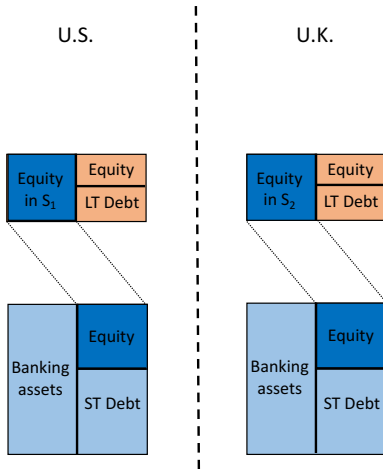
Single Point of Entry (SPOE):



Two Approaches: MPOE and SPOE

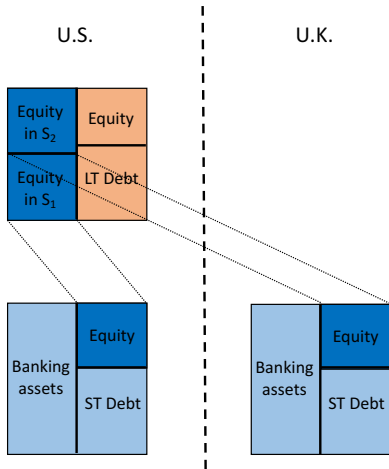
Multiple Point of Entry (MPOE):

Loss-absorbing capital in each jurisdiction



Single Point of Entry (SPOE):

Loss-absorbing capital shared



This Paper

Model of **resolution of global banks** by **national regulators**

Results:

- (1) **Minimum TLAC requirement** necessary under SPOE and MPOE
- (2) **Benchmark:** SPOE efficient under **supra-national regulator**
 - ▶ SPOE facilitates cross-jurisdictional transfers (co-insurance)
 - ▶ reduces required TLAC and allows more banking services
- (3) **Status quo:** Resolution by **national regulators** leads to inefficiency:
 - ▶ Ex-ante failure to set up SPOE
 - ▶ Ex-post breakdown of SPOE due to ring-fencing
- (4) Efficient resolution is **not “one-size-fits-all”**
 - ▶ link between resolution and bank structure

Model Setup: Primitives

Three dates: $t = 0, 1, 2$

A **global financial institution** has **two subsidiaries**

- ▶ subsidiaries operate in separate jurisdictions $i = 1, 2$
- ▶ e.g., global bank with operations in U.S. and U.K.

Each subsidiary runs a banking operation

- ▶ fixed initial **setup cost** F at date 0
- ▶ banking operation generates **cash flow over two periods**

Model Setup: Cash Flow at Date 1

Cash flow at date 1 has **aggregate** and **diversifiable risk**

Aggregate risk:

- ▶ both subsidiaries receive $C_1 \in \{C_1^H, C_1^L\}$ with probability $\{p_1, 1 - p_1\}$
- ▶ perfectly correlated across subsidiaries

Diversifiable risk:

- ▶ one subsidiary receives additional cash flow Δ
- ▶ Δ realizes in jurisdiction i with probability θ_i (and $\theta_1 + \theta_2 = 1$)

Model Setup: Continuation Value at Date 2

Cash flow at date 2 characterizes **continuation or franchise value**

- ▶ $C_2 \in \{V, 0\}$ with probability $\{p_2, 1 - p_2\}$

Continuation value subject to **economies of scale/scope**:

- ▶ separation of subsidiaries reduces V to λV , $\lambda \leq 1$
- ▶ can pay $\tilde{F} > F$ to set up redundant systems (s.t. $\lambda = 1$)

Early liquidation inefficient:

- ▶ liquidation payoff $L < \bar{p}_2 V$

Model Setup: Financing

F raised through a **combination of ST debt, LT debt, and equity**

Short-term debt (issued by operating subsidiary)

- ▶ face value R_1 due at date 1
- ▶ safe short-term debt yields liquidity benefit γ
- ▶ reduced form for net benefits of banking (liquidity transformation)

Long-term debt and equity (TLAC, issued by holding company)

- ▶ long-term subordinated debt R_{LT} due at date 2
- ▶ outside equity stake α

Issuance by holding company guarantees **structural subordination**

Model Setup: Regulators

Compare outcomes under **supra-national** and **national regulation**

- ▶ supra-national regulator maximizes total surplus
- ▶ national regulator cares only about own jurisdiction

Regulator invokes resolution when:

- ▶ an operating subsidiary cannot roll over its short-term debt
- ▶ another regulator has invoked resolution

Benchmark: Supra-National Regulation

SPOE has two advantages:

- ▶ bank can issue safe short-term debt against Δ (globally risk-free)
- ▶ can reap economies of scale/scope (subsidiaries never separated)

In contrast, under MPOE:

- ▶ cannot issue safe short-term debt against Δ (risky at national level)
- ▶ incur separation cost or pay $\tilde{F} > F$ to generate redundant systems

Net benefit of SPOE:

$$\underbrace{\gamma \Delta}_{\text{additional banking services}} + \underbrace{2 \min[\tilde{F} - F, (1 - p_1 + \gamma)(1 - \lambda)\bar{p}_2 V]}_{\text{reduction in redundancy/separation costs}}$$

Ex Ante: Will National Regulators Agree to SPOE?

Ex-ante benefit of SPOE:

- ▶ additional banking services: $\gamma\Delta/2$
- ▶ economics of scale/scope: $\min[\tilde{F} - F, (1 - p_1 + \gamma)(1 - \lambda)\bar{p}_2 V]$

Ex-ante cost of SPOE: (from perspective of jurisdiction 1)

- ▶ with probability $(1 - p_1)\theta_1$, make transfer of $\Delta/2$
- ▶ with probability $(1 - p_1)\theta_2$, receive transfer of $\Delta/2$
- ▶ $\Rightarrow$ net expected transfer of $(1 - p_1)(\theta_1 - \theta_2) \Delta/2$

Ex-ante IC for SPOE (taking into account both regulators):

$$|\theta_1 - \theta_2| \leq \frac{\gamma}{1 - p_1} + \frac{2}{\Delta} \min \left[\frac{\tilde{F} - F}{1 - p_1}, \left(1 + \frac{\gamma}{1 - p_1}\right)(1 - \lambda)\bar{p}_2 V \right]$$

$\Rightarrow$ **failure to set up SPOE** when expected transfers **too asymmetric**

Ex Post: Will National Regulators Stick to SPOE?

Ex-post IC for SPOE: required transfer smaller than cost of ring-fencing

$$\frac{\Delta}{2} \leq \bar{p}_2(1 - \lambda)V$$

⇒ **SPOE breaks down ex post** when required transfers are **too large**

Benefits from global banking ($\lambda < 1$) facilitate SPOE

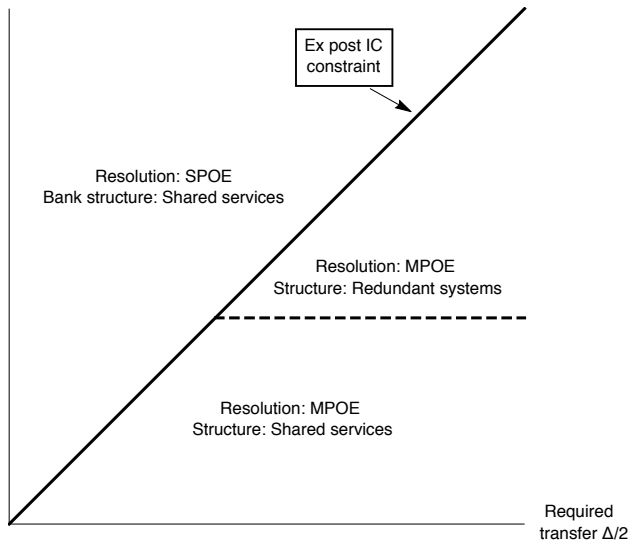
- ▶ e.g., joint cash management and IT, scale/scope economies

When IC violated, preferable to set up MPOE

- ▶ requires more TLAC, but **robust** because no transfers required
- ▶ likely even more important now given **regulatory fragmentation**

Bank Resolution and Bank Structure

Separation cost
 $(1-\lambda) \bar{p}_2 V$



Constrained-Optimal Resolution when SPOE Fails

When SPOE is not ex-post incentive compatible:

- ▶ maximize cross-jurisdiction transfer subject to ex-post IC

$$T^* = \bar{p}_2(1 - \lambda)V < \Delta/2$$

- ▶ this allows banking activity (at each operating subsidiary) of

$$C_1^L + \bar{p}_2 V + T^* < C_1^L + \bar{p}_2 V + \Delta/2$$

Essentially a hybrid model:

- ▶ limit transfers via “contributable resources” (i.e., Δ)
- ▶ corresponding increase in “prepositioned resources” (local TLAC)

Conclusion

Model of **resolution of global banks** via “liability reconstruction”

- ▶ trade-off between **MPOE** and **SPOE** resolution

SPOE efficient in principle, but **national regulators** limit applicability

- ▶ ex ante IC: **asymmetry of expected transfers**
- ▶ ex post IC: **size of realized transfers**

When SPOE not incentive compatible, more robust MPOE is preferable

- ▶ current **regulatory fragmentation** increases case for **robustness**

Model links resolution, operational structure, and business risks

- ▶ SPOE requires cross-jurisdictional complementarities or spillovers
- ▶ corporate structure and resolution mechanism have to match