



Bank Resolution and the Structure of Global Banks (Bolton and Oehmke, 2016)

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Outline

- Research question
- SPOE/MPOE practice overview
- Resolution examples
- Main contributions of the paper
- Evaluation
- Open issues

Question and aims of research

- How to resolve global systemically important banks (G-SIBs)?
- Aims (G 20 (2011)): “The new resolution framework should set out the responsibilities, instruments and powers to enable authorities to resolve failing financial firms in an *orderly manner*, by *protecting critical functions* and *without exposing the taxpayer* to the risk of loss”.
- Effective resolution is crucial to unleash market discipline
- Dodd Frank (FSB):
 - Inadequacy of Purchase and Assumption (P&A) method of FDIC for G-SIBs
 - Recapitalize subsidiaries by writing down long-term liabilities (equity and subordinated long-term debt) issued by a non-operating holding company

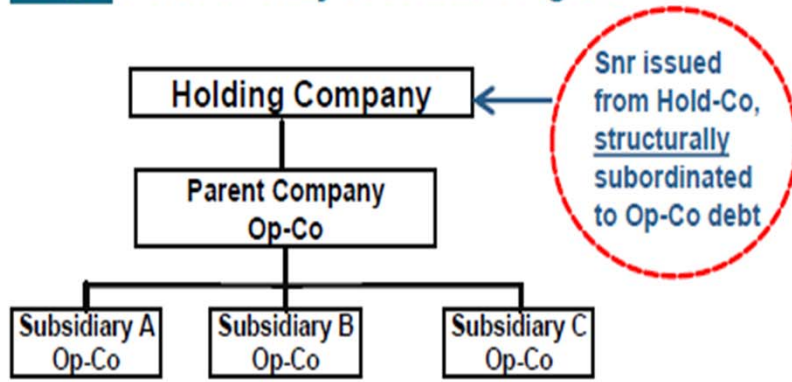
Two approaches to cross-border resolution of global systemically important entities

- Under single-point-of entry (SPOE) resolution a G-SIB is recapitalized by writing off deb/equity issues by a single global holding company that owns banking subsidiaries in multiple jurisdictions
 - Resolution losses imputed to the bondholders of the parent holding and statutory power of resolution to the authority of the parent holding.
- Under multiple-point-of entry (MPOE) resolution separate resolutions are performed in each country (if necessary) with funds from national subsidiaries or holding companies.
 - Resolution losses borne by the subsidiaries and statutory power of resolution to the host country authority .

The major difference is that under SPOE resolution loss absorbing capacity (LAC) is shared across jurisdictions.

Figure 10: Overview: Single and multiple point of entry resolution strategies

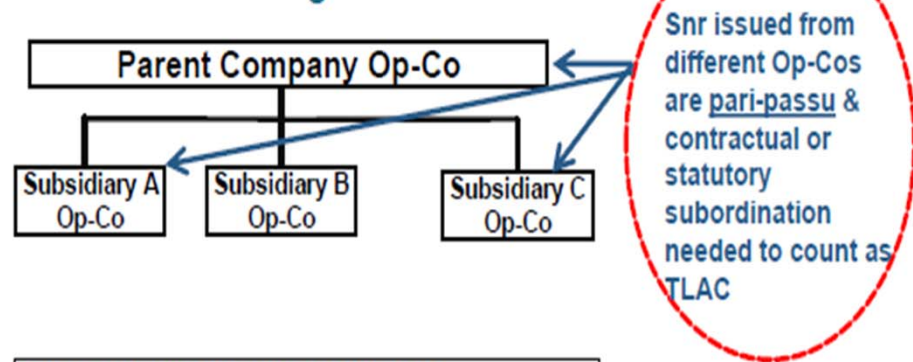
Single Point of entry resolution regime



Hold-Co structured banks (examples)

- Barclays
- RBS
- HSBC
- UBS
- ING Group
- JP Morgan
- Goldman Sachs
- Mitsubishi UFJ
- Mizuho FG

Multiple Point of entry resolution regime



Op-co structured banks (examples)

- Nordea
- BNP
- Societe Generale
- Santander
- Deutsche Bank
- Unicredit
- BBVA

Source: Credit Suisse research

Preferred Resolution Strategy of European Global Banks

| Bank | Currency(bn) | Total Assets | Equity | Preferred Resolution | Source |
|---------------|--------------|--------------|--------|----------------------|----------------------|
| Barclays | BP | 1,358 | 56.9 | SPE | RRP, July 1, 2015 |
| BBVA | Euro | 651 | 51.6 | MPE | Annual Report 2014 |
| BNP Paribas | Euro | 1,800 | 91.1 | SPE | RRP, October 1, 2014 |
| Credit Suisse | CHF | 921 | 45.0 | SPE | RRP, July 1, 2015 |
| Deutsche Bank | Euro | 1,709 | 73.2 | SPE | RRP, July 1, 2015 |
| HSBC | USD | 2,671 | 190.4 | MPE | RRP, July 1, 2014 |
| RBS | BP | 1,028 | 59.0 | SPE | RRP, October 1, 2014 |
| UBS | CHF | 1,062 | 54.4 | SPE | RRP, July 1, 2015 |

Notes: *Resolution and Recovery Plans (RRP) summaries published by FED NY.*

Source: Table 3 in Faia and Weder di Mauro, *Economic Policy*, 2016.

Both FDIC/Fed and the Bank of England promoted a SPOE approach to resolution for banks in their jurisdictions.

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Examples of resolution in the EU

When the crisis started in 2007 the resolution framework of systemic financial entities in the EU and its cross-border issues was poorly designed and lead to several major problems:

- Uncoordinated resolution when burden sharing had not been agreed ex-ante and with the participation of different competent supervisors
 - Fortis: example of uncoordinated MPOE resolution
 - Dexia

Fortis Resolution Plan

(September 28, 2008 agreement violated ex post implementation constraint of the NL which reversed course and nationalized Fortis's Dutch assets)

| | | | |
|---------------------------|--|---------------------------------|--------------------------------------|
| Country | Belgium | the Netherlands | Luxembourg |
| Investment | €4.7 billion | €4 billion | €2.5 billion |
| Interests Acquired | 49% of Belgian holding company including Belgian bank and insurance businesses | 49% of Dutch banking subsidiary | 49% of Luxembourg banking subsidiary |
| Supervisor | Belgian Banking, Finance and Insurance Commission | De Nederlandsche Bank | Central Bank of Luxembourg |

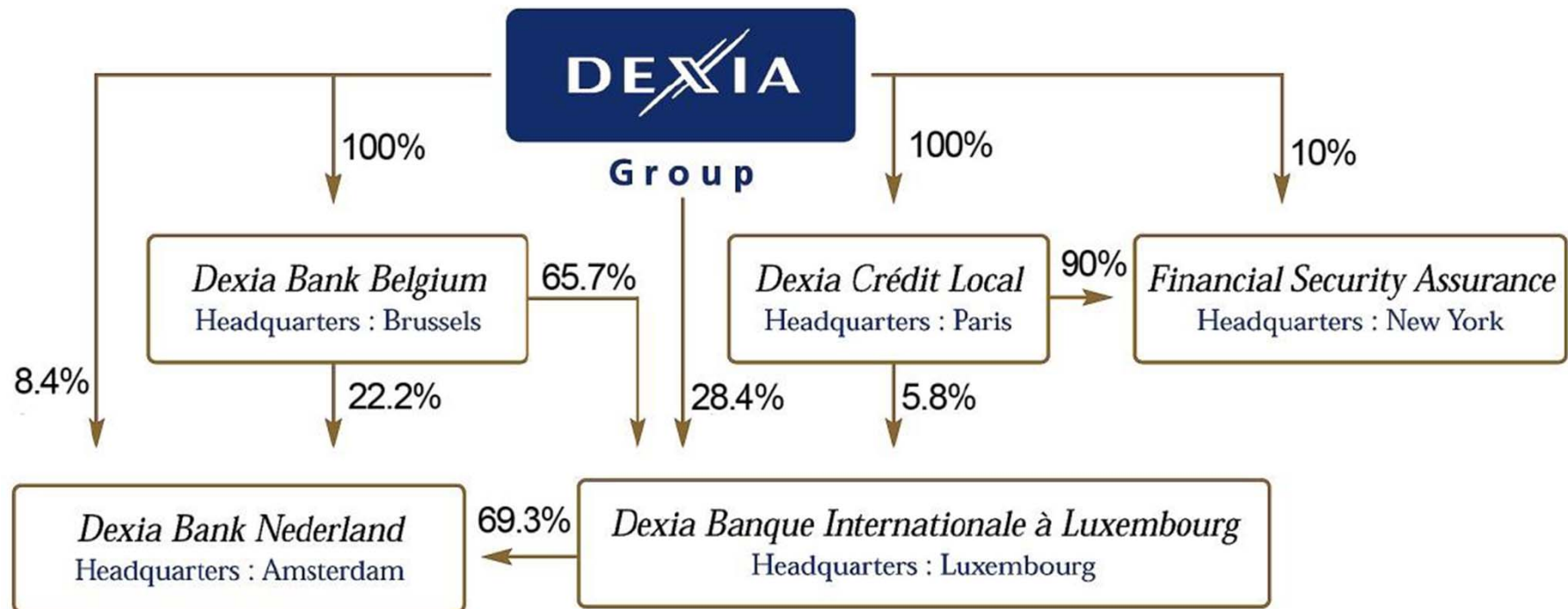
Source: Wiggins, Tente & Metrick, 2015, Yale Program on Financial Stability Case Study 2014-5C-V1

Basel Committee's review of cross-border bank resolution (2010): Fortis

- The Fortis case illustrates the tension between the cross-border nature of a group and the domestic focus of national frameworks and responsibilities for crisis management. **This leads to a solution along national lines**, which did not involve intervention through statutory resolution mechanisms;
- **Despite a long-standing relationship in ongoing supervision and information sharing**, the Dutch and Belgian supervisory authorities assessed the situation differently. Differences in the assessment of available information and the sense of urgency complicated the resolution.

Dexia Corporate Structure

(Crisis in 2008, solved by joint guarantee scheme by Belgium, France and Lux)



Source: Dexia Annual Report 2001

Basel Committee's review of cross-border bank resolution (2010): Dexia

- The tension between the cross-border nature of a group and the domestic focus of national frameworks and responsibilities for crisis management does not necessarily lead to a break-up of the firm along national lines... In general terms, **the division of the burden for guarantees among the three national authorities was premised on the proportions of share ownership held by the institutional investors and public authorities of the three countries.**
- Therefore, while the centralization of liquidity management within a cross-border group could lead to some tensions in case of liquidity problems, these tensions can be overcome by **adequate cooperation between the relevant central banks.**
- The cross-border nature of the group makes the resolution process more time-consuming, but this problem is not insurmountable in a case in which **home and host authorities clearly state their joint support to the group.**

Main Contributions (1)

Characterization of the relevant trade-offs between SPOE and MPOE resolution

1. Without LAC requirement, financial institutions may rely exclusively on short-term debt (because of asymmetry information about long-term cash flows, not because of bailout expectation)
 - short-term debt is runnable and cannot be written down during a crisis
→ disorderly liquidation or bailout
2. SPOE is the efficient resolution mechanism if regulators can commit to cooperate in the middle of a crisis emulating a *supranational regulator*:
 - Allows lower LAC because of transfers between subsidiaries, yielding more banking services and enhanced ecs. of scale/scope because global bank operations preserved after resolution.
 - It is efficient to structure global banks as multinational Ho Cos with shared services and TLAC issued by the global Ho Co.

Main Contributions (2)

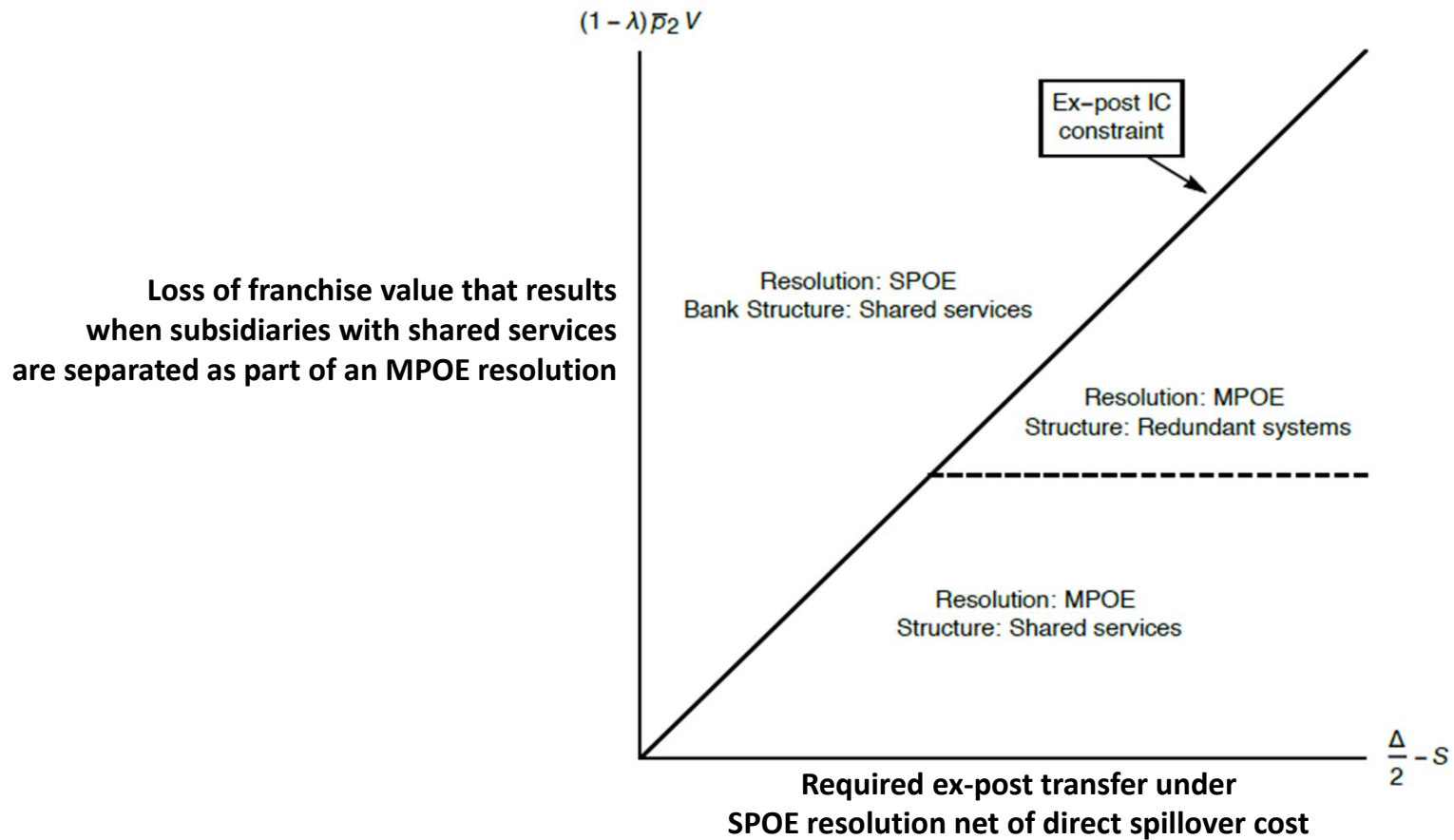
National regulators:

3. *Ex ante implementation.* SPOE regime agreement requires expected cross-jurisdictional transfers to be symmetric enough (gains from increased banking activity/global banking larger than expected net transfer).
4. *Ex post implementation.* Incentive constraints are violated (no transfer from sound home jurisdiction or ring-fencing from sound host jurisdiction) when required transfers are larger than the loss of shared services and spillover costs that result from unilateral ring fencing.
 - Incentive compatibility requires operational complementarities across national operations.

Main Contributions (3)

- Choice between SPOE and MPOE resolution: MPOE more likely to be efficient in a more decentralized/less complementary subsidiaries G-SIB:
 - Retail global bank with decentralized subsidiary business model (funded by local deposits, BBVA, Santander) vs. wholesale bank with branches and significant intra-group positions.
- *Hybrid model* when ex post ICC violated: combines shared TLAC that is held at the international holding company level with TLAC that is pre-assigned to jurisdiction.
- *Moral hazard* --- Incentive for subsidiaries to exert effort in SPOE vs MPOE: transfer effect vs increased inside equity effect (due to lower TLAC). SPOE preferred when subsidiaries more asymmetric.

Bank resolution (MPOE or SPOE) and bank structure



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Parallels of SPOE implementation with obstacles to federal regulation

- Coordination has to overcome asymmetric information problems as well as the different interests of participating countries with weak or strong regulation
 - National regulators will not agree on centralized supranational regulation when heterogeneity is high (Dell’Ariccia and Marquez (2006)).
 - The country with strong regulation will lose its reputational advantage by integrating (Morrison and White (2009)).

Evaluation (1)

- Simple carefully constructed reduced-form two-period incentive model of a global bank with two subsidiaries with many ad hoc but reasonable assumptions.
- Comments on assumptions (need for robustness):
 - It is always feasible to set aside sufficient loss absorbing capacity to recapitalize a troubled subsidiary.
 - Even with enough TLAC panic run may occur (ruled out in the paper): need coordination of resolution and LOLR.
 - Moral hazard: modeled as effort to improve returns but main problem is risk taking.

Evaluation (2)

- Very useful and timely paper in under-researched area
 - Exception: Faia and Weder di Mauro (2016)
- Regulators will benefit: sensible prescriptions out of a simple but rich model (for once research does not lag market developments by much):
 - It identifies main challenge: cooperation among supervisors/ resolution authorities ex post.
 - Evaluation of FSB/Fed proposals:
 - IC ensured via internal TLAC (not enough, need external TLAC at the intermediate holding company level)
 - Limit too much sharing of LAC across jurisdictions (Fed: 18% in intermediate Ho Co out of 21% TLAC requirement)
 - Instability of SPOE (Fed and BoE preference)?
- Recommendation: analyze resolution cases at the light of the theory and calibrate the implementation constraints

Open issues (1)

- Ex post implementation of resolution agreements: not only transfers matter but also asset redistribution (Fortis, Dexia)
- Strategic incentives of national regulators/supervisors:
 - Use capital requirements to induce desired resolution strategy (e.g. SPOE in US)
 - Implications for level playing field (advantage for domestic global banks?)
- Influence of SPOE-MPOE resolution on organizational form and incentives for foreign expansion
 - Would preference for SPOE lead to increased cross-border financial retrenchment/disintegration (over the one induced by the financial crisis)?
 - Will a hybrid model be constrained optimal with endogenous choice of foreign expansion (by limiting liability of parent holding company)?

Open issues (2)

- How resolution strategies affect/distort competition after restructuring (state aid rules in the EU)
- Coordination of resolution and LOLR:
 - Market discipline does not help in a systemic crisis
- Interaction of banking structure and resolution:
 - If investment banking and retail activities are separated (e.g., Vickers' ring-fencing), use SPOE for investment banking and MPOE for retail banking ?
- Implications for the implementation of the SRM in the EU?
 - From MPOE with bailouts to SPOE with bail-in
 - Compatibility of SPOE in the eurozone and MPOE for third countries (e.g. LATAM)



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