Bank resolution: towards a more 'holistic' approach

Mathias Dewatripont
Université Libre de Bruxelles
(ECARES and Solvay Brussels School)

8th Annual Macroprudential conference
June 26-27, 2024

Outline

1. See bank resolution as part of 'broader game'.
2. Start by summarizing earlier work with Jean Tirole on optimal governance of firms, specificity of banks and of regulation, and assess Basel frameworks in this light.
3. Argue in favor of: (i) more automatic stabilizers; (ii) beefing non-equity components of loss absorbency; (iii) limit shareholder influence within banks; (iv) focus bail-in on money 'stuck' in the bank (and 'applaud' CMDI); (v) promote 'responsible' cross-border mergers.

Bank governance and regulation as an optimal incentive scheme

(*Dewatripont-Tirole* 1994a, 1994b, 2012)

Capital structure and incentives

(i) Financing. The manager/entrepreneur raises amount *I* for investment from outside investors. *Capital structure* specifies the incentive scheme of the investor in control at stage *(iv)* below.

(ii) Moral hazard. Manager chooses *unobservable effort a* belonging to $\{a_0, a_1\}$. (Efficient) a_1 costs her Φ ; a_0 costs her nothing.

(iii) Verifiable short-term profit realization, $\pi \in \{\pi_0, \pi_1\}$, with $\pi_0 < 0 < \pi_1$, correlated with effort $(\Pr(\pi_1 \mid a_1) = p_1$ higher than $\Pr(\pi_1 \mid a_0) = p_0)$.

Capital structure and incentives

π_0 is a shortfall of income to honor some liabilities to workers or suppliers, liabilities senior to investor claims on the firm; they have to be paid at stage *(iv)*, either out of liquidation proceeds or by investors if they choose to avoid liquidation.

(iv) *Exercise of corporate control*. An unverifiable continuous signal *s* belonging to $[s_{min}, s_{max}]$ (with $s_{max} < 1/2$), independent of π, is observed. After observing this signal, investors in control (as specified at stage *(i)*) select *unverifiable action A*

Capital structure and incentives

belonging to $\{L,C,G\}$. L ("liquidation") generates l for sure. The other two actions generate a random "long-term profit" later on, at stage *(v).*

(v) Verifiable long-term profit realization, independent of effort a. Its prob. distribution depends on the choice of corporate strategy A and on s: Action C ("continuation") generates 1 with prob. s, α with prob. s, and 0 with prob. $1 - 2s$, while action G ("gambling") generates 1 with prob. $s + \tau$ and 0 with prob. $1 - s - \tau$.

Optimal incentive scheme

- If manager only cares about avoiding action L, optimal to choose it only after π_0 and a signal s lower than s^* s.t. $(p_1 - p_0)\ \Pr(s \leq s^*)\ B = \Phi$, where B is the private benefit of avoiding L.
- Not possible to implement this with a single investor, since L NOT ex-post efficient.
- Instead, having 'initial debt cap' D^* and equity can do it with equity control after π_1 but debt control after π_0 unless shareholders pay $-\pi_0$ to recapitalize the firm (and their incentive to pay rises with s if fear debtholders will choose C).

Regulation as an incentive scheme for banks

- 'Representation hypothesis': in banks, debt-holders unable to exert control, so see bank regulation as a way to replicate role of capital structure in nonfinancial corporations.
- In a sense, Basel regulation has attempted to achieve this from the start (i.e. 1988), with 2 well-known challenges: (i) calibration, and (ii) credibility of control switch (resolution question).

Regulation as an incentive scheme

- Third key issue however: relevant performance is the idiosyncratic one, not the performance linked to aggregate shocks (Holmström, 1979).
- If incentive scheme ignores this, manager unfairly punished (rewarded) for negative (positive) macro shock.
- But not good either to ‘suspend’ incentive scheme then: ‘forbearance’ after negative shock means higher leverage and this risk that shareholders go for action *G* !

Regulation as an incentive scheme

- This issue was ignored by Basel I and Basel II.
- It is addressed to some extent by Basel III: countercyclical capital buffer.
- Two problems though: (i) calibration, and (ii) it is only ‘self-insurance’, which ‘works’ only provided bad shock ‘follows’ good one, so that there is a buffer to be released.

Regulation as an incentive scheme

- Better to introduce capital insurance (à la Kashyap-Rajan-Stein, 2008), probably State-provided, or automatic stabilizers (e.g. through deposit insurance premia indexed on the business cycle (Dewatripont-Tirole, 1994b).
- Based on the idea of the State as insurer of last resort (classical in economics).
- Key point since bank creditors are short-term depositors, so intrinsic conflict between dis-ciplining banks and endangering financial sta-bility.

Regulation as an incentive scheme

- Private insurance also potentially adequate, provided it is credible: beware resource shortage (AIG …).
- Also, CoCos whose triggers would distinguish between idiosyncratic and macroeconomic events, so as to appropriately discipline bank management. Not that easy to design though.

Beyond macroprudential policy, how has post-crisis regulation performed so far and what more should be done ?

Preventing crises

Research shows Basel III solvency rules not to be ‘excessive’. Prominent academics argue it is (vastly) ‘insufficient’.

- See e.g. Cecchetti (2014) and BCBS (2016), Admati-Hellwig (2023).
- Note: further research needed on interaction between solvency and liquidity ratios, and on a better understanding of the way in which banks ‘internalize’ multiple ratios), and on banks’ ‘use’ of liquidity buffers in times of stress.

Recent experience

- Last years not without serious shocks (low inflation, covid, high inflation) but no new Great Financial Crisis for now.
- US learnt Basel III would have been useful for SVB et al …
- Crédit Suisse showed the risk of procrastina-tion, of slow-moving accounting ratios (and of ‘too-big-to-manage’ banks ?). But also the loss-absorbing value of AT1.
- Question: has the Banking Union been ‘lucky’ so far ?

‘Market leverage ratio’ of US G-SIBs

Add-on	Bank	Market cap*	Assets**	Ratio
2.5%	JP Morgan	555	4090	13.5%
2.0%	B. of America	306	3273	9.3%
2.0%	Citigroup	114	2432	4.7%
1.5%	Goldman	144	1698	8.5%
1.0%	Morgan St.	155	1228	12.6%
1.0%	Wells Fargo	200	1959	10.2%

*: on June 14, 2024; **: end 2023.

‘Market leverage ratio’ of Banking Union G-SIBs

Add-on	Bank	Market cap*	Assets**	Ratio
1.5%	BNP Paribas	74	2914	2.5%
1.5%	Deutsche Bank	30	1436	2.1%
1.0%	Crédit Agricole	42	2386	1.8%
1.0%	ING	55	1111	5.0%
1.0%	Santander	72	1942	3.7%
1.0%	SocGen	20	1716	1.2%

*: on June 14, 2024; **: end 2023.

‘Pragmatic’ avenues

- Whatever we think about the ‘optimal core equity ratio debate’ in academia (which would benefit from quantitative research), political momentum low at this moment for much higher solvency requirements.
- Useful therefore to look for ‘pragmatic avenues’: start here with limiting shareholder influence within banks (then, look at bail-in).

Corporate control

- General debate in business world about ‘share-holder value’ versus ‘stakeholder value’?
- Specificity of banking: VERY high leverage, and thus a potentially big difference between firm value and shareholder value.
- Remark: everybody complains about excessive banking leverage … but the tax system subsi-dizes debt relative to equity: should it for banks?

Towards less equity-oriented corporate governance

- Both in terms of managerial incentives and in terms of shareholder control. See Becht et al. (2010).
- Note that TLAC requires some loss absorbency NOT to be equity …
- Policy debates on bank corporate governance (e.g. BCBS 2015) should stress bank specificities more. Changes here could be a (much) ‘cheaper’ way to reduce risk. Do evaluate Eur. Parl. variable/fixed-compensation cap.

Other idea: preserve consistency between bank’s ‘societal role’ and its ‘internal power structure’

- Contrast between key ‘missions’ of ‘boring’ deposit-taking institutions (‘organizing payment system and lending to entities households and SME’s’) and compensation structure within such institutions (which favors investment banking).
- Does this plead for bank ‘ring-fencing’ (Vickers) or separation (Glass-Steagall)?

European Banking Authority High Earners (HE) 2017 (pre-Brexit thus)

	BE	DE	FR	UK
Total number HE	22	390	233	3.567
Average Comp. (M€)	1.4	1.6	1.7	2.0
% Investment B.	23	27	61	58
% Retail B.	14	5	3	3
% Asset Man.	5	5	11	12
% Other bus. Areas	58	63	25	27

Cleaning up the mess through bail-in ?

General principle: bail-in VERY costly if leads to financial instability

- Lehman in September 2008 was bail-in.
- Best metaphor is Diamond-Dybvig (1983).
- 'Informational contamination' involves a mix between 'pure coordination' and rational inference (failure of one bank makes depositors nervous about other banks), especially given lack of transparency of bank balance sheets (Aghion et al., 1999).
- Well-designed bailout MUCH cheaper.

Banking crisis outcomes

(% of GDP; Source: *Laeven-Valencia*, 2012)

Area	**(Gross) fiscal cost***	**Increase in debt****	**Output loss*****
Japan (1997)	14.0	42	45
Sweden (1991)	3.6	36	31
USA (1988)	3.7	11	0
USA (2007)	4.5	24	31
Euro area (2008)	3.9	20	23

*: committed funds, to date (but (almost) fully repaid in the case of Sweden, & USA 2007).

**: three years after the crisis; ***over 3 years, relative to trend.

Therefore, concentrate the pain on claimholders whose money is ‘stuck’ in the bank

- Indeed, ‘orderly resolution’ no panacea: key is reaction of depositors of other banks, not the bank under resolution.
- Key there is often not ‘mechanical inter-connection’ (implicit focus of the law when it addresses bank systemicity), but ‘informa-tional interconnection’.
- In this sense, CS AT1 handling by Swiss authorities was good (Perotti-Martino, 2024)

Implication: Make bail-inable instruments subordinated to deposits and with sufficient residual maturity

- FSB instrument (TLAC) good, because of its sequencing: first build up long-term subordinated bail-inable claims held by banks before introducing no-bailout rule.
- Not done initially in EU (even if getting better recently), which explains why bail-in (BRRD) not really implemented. Downside: ‘when bailout is out and bail-in is not in, denial is the only option left‘.

EU Commission Crisis Management and Deposit Insurance really helpful

- Brings EU back to FSB 'TLAC dynamics', by allowing for national DGS use for smaller banks without 8% long-term junior claims.
- Complement, not substitute, for more LT junior loss absorbency, more intrusive supervision, and holding management accountable.
- Not necessarily optimal to insist on immediate exit from the market by problem bank: temporary nationalization can be cost-effective.

Who should be protected, who should be bailed-in, who should be resolved ?

- Don't pretend bailing in deposits is a solution.
- Resolution is not an objective in itself: key is to avoid externalities.
- 100% LCR outflow rates is one option.
- To avoid narrow banking, do have lower outflow rates (but not too low …) with actu-arially fair deposit insurance premia, which can be lowered when bank holds more long-term junior claims.

Cleaning up the mess through (cross-border) mergers ?

Excess capacity in banking lingers on too long

- Too often, supervisory reaction to unhealthy banking system is to ask for (possibly pro-gressive) recapitalization, possibly even with 'constraints on deleveraging'.
- This leads to excessively slow removal of excess capacity, with a vicious circle, since it is tough to be tough with weak banks.
- Pleads for (possibly publicly-funded) economy-wide bad bank systems.

Can cross-border banks help ?

- Increased push for cross-border mergers in the Eurozone (SSM, ECB, not to mention big banks themselves).
- Could reduce overcapacity (and accelerate restructuring), and should help monetary transmission.
- But will it also allow for more risk diversification?
- Or instead exacerbate the Too-Big-To-Fail syndrome?

Cross-border M&As in BU pre-covid

- Limited: 9% of deals in 2016 (slightly more in 2017), 15% in 2011-2015.
- US: cross-state deals between 31 & 52% during 2000-2015 (versus between 5 & 19% in Euro-zone).
- Result: domestic credit institutions in 5 biggest countries (by banking assets) in Eurozone (DE, FR, IT, ES, NL) each amount to more than 90% of domestic assets.
- Note: Belgium is interesting exception: 6th country by size, and one where this number is only around 50%.

Cross-border banks and home bias

- Advantages go further than just home sovereign bias and ‘doom loop’.
- Home sovereign bias indeed a problem (sovereign concentration, without capital requirements (‘0 risk weight’) tolerated from the start by Basel: ‘original sin’).
- Hope that Basel will address it unrealistic (see e.g. BCBS 2017a).
- Makes it harder politically for Eurozone to tackle it, except possibly through ‘concentration risk weights’.

Cross-border banks and home bias (2)

- But note that home sovereign bias not the only problem: home economy bias problematic too (and if sovereign risks defaulting, home eco-nomy will tank too, which makes it rational for sovereign home bias to rise in times of so-vereign stress).
- Cross-border banking can address both home biases.
- One idea: introduce concentration risk charges only at consolidated level, not subsidiary level.

Cross-border banks and TBTF

- Don't underestimate potential Too-Big-To-Fail: problem, given that Eurozone already has 7 (weakly capitalized) G-SIBs.
- Risk especially relevant for takeover battles, where the evidence is that around 100% of the efficiency gains are obtained by share-holders of the target, and where the 'winner's curse' is not rare (e.g. hostile takeover of ABN-AMRO by RBS-Santander-Fortis). And not obvious Basel III and Banking Union would have prevented it, despite banks enjoying now more capital and liquidity.

How about 'home-host issues' ?

- What about regulatory impediments to cross-border banking ? They do exist as far as subsidiaries are concerned.
- Lack of comfort about waivers by 'hosts' understandable in a world where, beyond low solvency, market not 'truly European' (cf ING-Commerzbank HQ case).
- Natural solution: structural subordination.