

## Discussion of

# *The simplistic model to estimate the required amount of the banks loss absorbing capacity*

Andrzej Stopczynski

Francesc Rodriguez Tous  
Cass Business School

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# Summary

- The paper seeks to understand how much loss absorbing capacity does a bank need, in particular in relation to the shock, the capital requirements, and the resolution path.
- Model has two periods:
  - Period 0: Bank has assets  $A_0$ , funded by deposits ( $D$ ), bailinable debt ( $U$ ), and equity ( $E_0$ ).
  - Period 1: Bank receives a shock to the value of its assets equal to  $Y_0 = y_0 \cdot A_0$ .
- Analyse two resolution paths:
  - Sale of the assets: this causes some misallocation costs  $\alpha$ .
  - Bail-in.
- “Adds” capital requirements:  $E = A \cdot t \cdot \rho$ .

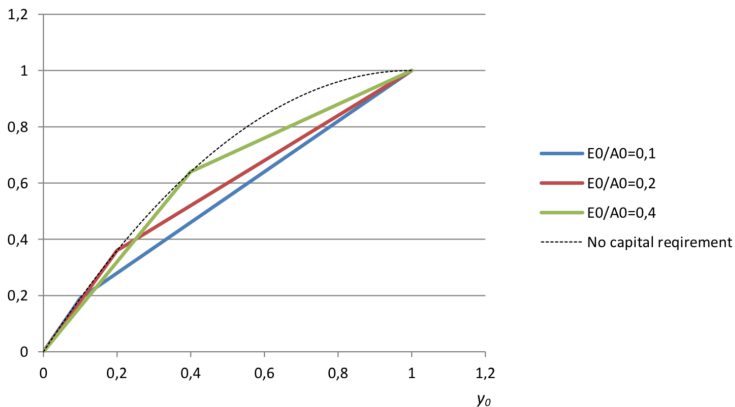
# Capital requirements

- In the second part of the paper, capital requirements are introduced:  $E = A \cdot t \cdot \rho$
- This is then compared to the case of "no capital requirements".
- However, assumption number 4 in the first part is a capital requirement; in particular, a leverage ratio requirement:
  - $\bar{E}_1 = y_0 \cdot A_1$ .
- The comparisons are hence less relevant.

Figure 5

## The required LAC

(the same capital constrain in the current and resolved bank)



# Preferred resolution

- Two options: bail-in or sale.
  - Bail-in: required capital ex post.
  - Sale: misallocation costs  $\alpha$ .
- ... *if misallocation costs exceed the loss ( $\alpha > y_0$ ) then recapitalization is preferred*
- Implicit assumption: buyer does not need capital ex post.
- Contradicts welfare analysis.

## Case of $E_0 > Y_0$

- When introducing capital requirements, two cases:
  - $E_0 > Y_0$
  - $E_0 < Y_0$
- In the first case, it is mentioned that  $E_0 + U = Y_0 + E_1 - (E_0 - Y_0)$ .
- But given the assumption that the loss triggers resolution, then both cases are identical:  $E_1 = E_0 + U - Y_0$
- We need that  $E_0 + U - Y_0 \geq \bar{E}_1$  (It might be worth differentiating between actual amounts and requirements.)

## Case of $E_0 > Y_0$ - numerical example

- Initial equity:  $E_0 = 8$
- Size of the shock:  $Y_0 = 3$
- Ex post required equity:  $\bar{E}_1 = 7$
- Formula:  $E_0 + U = Y_0 + E_1 - (E_0 - Y_0)$
- $E_0 + U = 3 + 7 - (8 - 3) = 5$
- $U = -3?$
- Correct way:  $E_0 + U = 3 + 7, U = 2.$



- Interesting paper attempting to understand how the amount of bailinable debt depends on the size of the shock, the resolution path, and capital requirements.
- I would encourage the author to pursue these relationships further.
  - Systematic comparison between three paths: sale, bail-in, liquidation.
  - What happens if we decrease capital requirements ex post (CCyB)?