

**Discussant comments on
Macroprudential regulation and systemic capital requirements**

Celine Gauthier, Alfred Lehar and Moez Souissi

Prepared for the BIS CCA Conference on
“Systemic risk, bank behaviour and regulation over the business cycle”

Buenos Aires, 18–19 March 2010

Discussant*: Dairo Estrada

Affiliation: Bank of the Republic, Colombia

Email: destrada@banrep.gov.co

* These comments reflect the views of the author and not necessarily those of the BIS or of central banks participating in the meeting.

Comments on Macroprudential regulation and systemic capital requirements

Dairo Estrada
Financial Stability Department
Central Bank of Colombia

March 2010



Macroprudential regulation and systemic capital requirements

- The recent financial crisis demonstrated the need for macroprudential regulation in bank regulation.
- There is a need to reform the financial system to make it more robust and avoid a new general crisis.
- Bank requirements should better reflect individual risk as well as their contribution to the system's overall risk.
- Among the regulators' proposals to do so, one could find the need to strengthening capital requirements including countercyclical capital or provisioning.
- The paper addresses this problem by including adjusted capital requirements as systemic capital requirements.



The paper

- In order to implement this kind of requirements, the authors suggest five different methodologies.
- It is interesting that the model shows that the increase in the PD by itself does not have a significative impact on the capital requirement.
- The model does well in modeling asset fire sales and the spillover effects.
- It is gripping to see the effects that has the systemic capital requirements on the PD when calculated using the Shapley value.
- Overall, insightful results of the buffer provided by systemic capital requirements.



Comments on Macroprudential regulation and systemic capital requirements

Liquid assets and market risk:

- It would be useful to consider a price for liquid assets different from 1, since these assets are subject to market risk and the balance sheet is valued mark-to-market.
- Given that the capital requirement is stated following Basel II, it should include a market risk component in the denominator.
- In this way banks could sell liquid assets, as well as illiquid assets, in order to reach back capital requirements.
- In the case of an asset fire sale (AFS), liquid asset's prices are also affected \implies government debt.
- A liquid asset market should be considered.



Comments on Macroprudential regulation and systemic capital requirements

Illiquid assets and liquidity market:

- The shock to the illiquid asset's price is set *ad hoc*.
- The results show that this shock is considerably big and that its effect is very sensible to the threshold in the price shock.
- It would be useful to model the rationale of agents of the illiquid asset market (market microstructure), in order to see what would be a more realistic shock to the asset price.



Comments on Macroprudential regulation and systemic capital requirements

Intervention and number of banks

- The model does not allow for any endogenous reactions by the government or central bank. Even though, the reaction of these institutions do reduce the impact of the externalities produced by the interbank market.
- It would be interesting to see what would be the effect on the sharing rule when these institutions intervene the market.
- The exercises only considers the six biggest banks in Canada.
- When considering contagion effects it is useful to assess all the intermediaries in the interbank market, since they are all affected by the changes in price of their assets.
- There is a significative difference between the problems: *too big to fail* and *too connected to fail*.



Comments on Macroprudential regulation and systemic capital requirements

PD simulation

- The maximums of the simulated default rates (SDR) for 2009Q2 are on average three times higher than the historic peaks.
- Also, the average (SDR) is 1.5 times the historic peaks.
- This is a really extreme scenario. It is 2+ times worse than anything observed so far. Could it happen?



Comments on Macroprudential regulation and systemic capital requirements

Countercyclical capital

- The paper argues that a countercyclical reduction in the minimum Tier 1 capital requirements would reduce the risk of default triggered by AFS (no doubt about that).
- It would be nice to have an empirical exercise that shows how this countercyclical requirement could help to reduce the PD.



Thanks!

