

Discussion of Paper: Disciplining Effect of  
Supervisory Scrutiny in The EU-Wide Stress Test  
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*Discussion by Prof. Rym Ayadi, CASS Business School & Chair of BSG*

- As a response to the Great Financial Crisis, regulators/supervisors attempted to restore market confidence in the fragile financial system;
- **Enhancing transparency** and **decreasing the uncertainty** resulting from the information asymmetry between market players, regulator/supervisors and depositors is essential;
  - The disclosure of the results stress tests has been key to breach the information gap in the market
- The stress tests have evolved over time to become a tool to strengthen transparency and to evaluate the resilience of the financial system in general and individual banks in particular;
- Reference: Ayadi and De Groen (2014), Stress Testing, Transparency, and Uncertainty in European Banking: What Impacts?  
[The Oxford Handbook of Economic and Institutional Transparency](#)

- **The first CEBS stress test exercise of 2009** had as official objective to increase the aggregate information on the resilience of the financial system and sharing of best practices among policy makers in the European Union;
- Initially, the exercise was not intended to determine the need for recapitalization of individual banks – and therefore not explicitly seeking to discipline banks;
- The following stress tests evolved to produce estimations of capital shortages, which brought new indication on the resilience of the EU banking sector;
- ✧ **The disclosure of this supervisory information has served to bridge the missing link between the supervisory review activity and market discipline – that link became de-facto the explicit disciplining link;**
- **The second CEBS stress test exercise of 2010**, reported the names of the banks that did not meet the capital targets under the adverse scenario;
- The room for national discretion declined at the moment that the pan-EEA supervisor of supervisors EBA came into force;
- The banks that failed EBAs stress test and capital exercises in 2011, 2012, and 2013 were required to strengthen their capital position up to levels above the existing regulatory capital requirements.

- **The importance of disclosure must be re-emphasised**
- ✓ The value that supervisors attach to the disclosure was, inter alia, highlighted in the following quote of the European Commission, European Central Bank (ECB) and CEBS at the time of the disclosure of the CEBS stress test results in 2010:
  - *“We support, in particular, **the transparency of this exercise**, given the specific market circumstances under which banks currently operate. We therefore welcome the publication of banks’ individual results, particularly their respective capital positions and loss estimates under an adverse scenario, as well as detailed information on banks’ exposures to EU/EEA central and local government debt. **Such disclosures ensure transparency regarding conditions in the EU banking sector.**” (EC, ECB and CEBS, 2010)*

- **What impacts of enhancing transparency?**
- ✓ Using a standard event-study methodology assess the ability of the stress tests to signal the quality of both individual banks as well as the banking sector as a whole to the market, (Using 572 observations of listed banks subject to cross-border viability and transparency exercises in Europe between 2009 and 2013)
- ✓ Banks subject to the stress tests, capital- and transparency exercises support that an increase of the available information on the resilience of tested banks enhances the average value of these banks;
- ✓ Market participants anticipate that the methodologies of the stress tests will be enhanced and therefore banks that are failing the stress tests will have to enhance their resilience;
- ✓ The combination of both stress test or capital exercise and extensive disclosure have been most effective

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- **Objective:** to examine **the effect** of the **EU-wide Stress Test conducted in 2016** by EBA and ECB on **bank risk**; to identify whether the increased supervisory scrutiny associated with the test can influence bank behaviour;
- Focus on the interactions between supervisors and banks using the internal risk models and its potential to foster banks' risk management capabilities => These interactions arise via the use of the Constrained Bottom-Up approach which is a mixture of a Bottom-Up and Top-Down stress test;
  - *“Banks use their own internal risk models to generate projections based on a common methodology and pre-defined macro-financial scenario. Meanwhile, banks' projections are challenged by the competent supervisory authorities during the quality assurance process to ensure their credibility typically by applying their own Top-Down models and other challenger tools. If a bank's internal model-based projections materially deviate from the supervisor's, a process to discuss and possibly revise them is launched”*, however
  - *“With respect to stress testing, banks misuse the Bottom- Up setting of the EU-wide exercise to strategically adjust their models to improve their loan loss projections. ....that banks optimize one model for regulatory purposes while using another model for their risk management processes and decision making . While we do not rule out this kind of strategic behaviour, we conjecture that in reality the model for regulatory purposes and the one for decision making share some common ground upon which we test the hypothesis that banks' participation in the EU-wide stress test and the described interaction about the internal models used in the stress test affects banks' risk-taking decisions”*
- This is a **novel paper** that assesses the relationship between the supervisors and banks via the stress test tool and using the IRB as the mean to emphasise this relation;

- **Data:**

- Use of bank-level supervisory data (from the ECB) (detailed information on credit risk exposures, accounting figures, and bank-specific capital requirements for the period between 2015 and 2018)
- Unique dataset that can be used to monitor the relationship between banks and supervisors

- **Methodology:**

1. The paper examines whether tighter and more intrusive supervision by means of a regulatory stress test can discipline bank behaviour using a diff. in diff. estimation.
2. It compares the change in risk-taking around the 2016 EU-wide stress test exercise of banks that were tested and banks that were not tested.
3. It measures risk-taking as the aggregate risk-weight of banks' entire credit risk exposures (risk weight density (RWD)).
4. By controlling for changes in capital requirements that are related to the stress test results, the method is able to disentangle their effects from those caused by the tighter scrutiny due to the stress test.

- **Results:**

- The results show that banks that participated in the exercise reduced their average Risk Weight Density (RWD) by about 4.2 percentage points relative to banks that were not tested

- **Results:**

- The results show that banks that participated in the exercise reduced their average Risk Weight Density (RWD) by about 4.2 percentage points relative to banks that were not tested
  - The deeper the relationship between banks and supervisors (number of issues to discuss and years of interaction), the lower the RWD
  - The potential positive and significant role of internal models and repeated game of supervisory scrutiny
  - Lesser role of the publication of ST results (market discipline) – a necessary but not a sufficient condition for changing bank behaviour



## Improvements:

- On the data:
  - Period of analysis relatively short to assess supervisory scrutiny
  - Assess the period prior to 2015
  
- On the methodology:
  - Test the role of deleveraging
  - Are there other determinants of the reduced RWD?
  
- On the results:
  - Role of IRB: role of initial quality of IRB model? Is there an optimal IRB model that can be used as reference?
  - Quality assurance channel plausible explanation – however, is there evidence of variability of supervisory quality assurance processes between banks?
  - The conclusion on the role of market discipline not well founded
  - Other channels: supervisory forbearance that can act on the opposite direction?

## Discussion :

- IRB models as a mean for supervisory scrutiny, that **if effective** can lead to better risk management and more prudent risk taking;
- Supervisory scrutiny quality? Role for harmonised regulatory guidance?
- Role of market discipline to reinforce supervisory scrutiny and to enhance its quality?
- What are the costs and benefits of banks and supervisors interactions via IRB?
  - Supervisory discretion
  - Forbearance
  - Cost of supervision per bank
  - Are the benefits out-weight the costs?
- Should there be a **standard supervisory formula** that sets the capital needs for a specific sector based on a given business model (a set of bank characteristics) and which ever deviation to above or below can be seen as either a premium or a penalty and let market discipline banks?

- *Thank you*
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