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Discussion notes on the paper

The Manipulation of Basel Risk Weights

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Why I liked the paper

- Addresses a hugely-relevant issue in supervisory design
  - "Have internal-ratings based capital ratios backfired?"
- Provides sound empirical evidence
  - 115 banks, 21 OECD countries, up to 4 years
  - Robust, fine-grained analysis of several hypotheses
- Turns empirical findings into clear policy implications

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Key findings / 1

- Banks moving to IRB save capital
  - This is an expected result, as the choice to move to IRB is taken on a voluntary basis
    - Why should a bank move to IRB if it expects its RWAs to increase?
    - IRB movers are those better equipped to reap a capital discount (as confirmed by Table 11 in the paper)
- Capital savings are stronger for low-capital banks
  - the put option value of limited liability is higher, so bankers have a stronger incentive to take more risk
  - default risk makes them harder to sanction on an ex post basis
- ...hence banks may have been cheating on RWs to save capital

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Low capital banks want lower RWAs. Does that mean cheating?

- There is more than the (Blum, 2008) story (put option).
- Low-capital banks are closer to capital constraints. Hitting the 8% Basel floor would force them to
  - Dispose assets, including profitable ones
  - Raise new equity capital from investors
    - Incumbent shareholders would get diluted in their property and control rights
  - Seek support from the government or from a stronger institution
    - Top managers would face high reputational costs or simply lose their jobs.
- Hence, they have a stronger incentive to extract value from the shift to internal ratings, but…
  - …this could be achieved in legitimate (although expensive) ways, e.g. by extending IRB to more portfolios or legal entities

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Key findings / 2
supervisory scrutiny

- «More supervisory scrutiny reduces risk weight manipulation» (Tables 8 and 9):
  - Little or no drop in the average RW upon IRB implementation when the external auditors are stronger
    - But can auditors really discipline banks when it comes to internal ratings? Do they have the required skills and legal mandate?
  - The drop in the RW increases with the number of supervised IRB banks in a given country
    - Why are large and small banks equally weighted?
    - Why not standardise this by a measure of banking system size (or regulatory headcount)?

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Are *supervisors* cheating?

- In the paper banks may choose to cheat on RWAs and supervisors simply do not (cannot?) stop them
- What if instead *some* supervisors were *choosing* to keep a soft stance when validating IRB systems?
  - Are there country-specific patterns in the post-IRB drop in RW?
  - Are some authorities more strongly lobbied by banks (TA/GDP ratio)?
  - Have IRB been used as a way to prop up capital in the aftermath of the crisis ("crisis FE"), improving capital ratios while avoiding further costs to the taxpayer (Debt/GDP) and keeping credit flowing to the real economy?
  - Are multinational lenders better supervised because of the checks and balances among national authorities?
  - What happens after first-time IRB implementation: are supervisors captured, so that they cannot distance themselves from the validated systems when flaws become apparent over time…?
- …before we get back to simpler rules ("less is more"), make sure that this is not just a matter of implementation

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Minor suggestions (don't worry, I'll just skip them…)

- According to the EBA's methodology, "Global charge" should be "RWA + 12.5xEL", not "RWA+EL": check that this is only a typo
  - Low-capital banks may have higher provisions on impaired loans, so this might change the results
- Short term rates are used as a covariate to account for the opportunity cost of debt. Should they?
  - The target return requested by shareholders usually equates the cost of debt plus a premium, so the cost of debt may not make a difference in terms of opportunity costs
  - How about the tax rate (debt is a tax shield)?
- Clarify how roll-out plans are dealt with (when banks roll out IRB in different years for different portfolios)
- Use Pillar 3 data to get a better insight of loan sub-portfolios than allowed by Bankscope data in Table 4
- Plain leverage is seen as the strike price affecting a put option's vega, hence the incentive to use IRB to increase (hidden) risk
  - Why not test also the other determinants of the vega (e.g. the pre-IRB level of RWA/TA as a proxy for sigma)?
- Condition the estimate of the "IRB gain" on the credit cycle: while it could be legitimate in a benign phase, it looks hardly suspicious in a downturn

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