#### Session on "Risk Management"

#### **Tobias Berg**

"Playing the Devil's Advocate: The Causal Effect of Risk Management on Loan Quality"

Olivier De Jonghe, Maaike Diepstraten and Glenn Schepens "Banks' Size, Scope and Systemic Risk: What Role for Conflicts of Interest"

> **Bob DeYoung** University of Kansas Discussant

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- Both papers report interesting empirical findings about bank risk.
- In both papers, the results are economically large and very robust.
- High quality work, but both papers leave me unsatisfied:
  - To make full sense of the reported results, we need to learn more about the underlying phenomenon being studied.

## Berg (1)

- Mortgage loan applications at a large German bank
  - Risk managers on salary.
  - Loan officers on bonus pay (by loan volume).
  - <u>Policy change in May 2009</u>: Risk manager approval is now required for a broader set of accepted loan applications.
- Headline result: Defaults declined by over 50% in the newly treated loan category.
  - Robust to various econometric methodologies.
- Direction of the result is no surprise.
- Magnitude of the result may or may not be a surprise.

## Berg (2)

- <u>More direct</u>: Why not change loan officer incentive contracts?
- Banks have long rewarded loan officers based on loan volume.
  - So these incentives must be solving a problem.
  - Retail lending is a sales culture. In a sales culture, volumebased incentives are efficient!
    - In a loan securitization model, sales culture is strong.
    - In a loan portfolio model, sales culture likely weaker.
- The point is that synergies/gains to specialization exist:
  - Give loan officers incentives to maximize sales.
  - Pay risk managers to weed out the mistakes.

# Berg (3)

- Policy change was implemented in 2009.
  - Mortgage defaults were very high at the time.
  - Economy had entered a downturn.
- Why didn't the bank implement this policy during the previous expansion?
  - Perhaps this policy is <u>not efficient</u> during expansions?
  - Does the optimal balance between (a) loan officer sales incentives and (b) risk manager involvement shift across the business cycle?
- Future research. Cannot be addressed using data in-hand. But crucial for understanding the efficacy of this policy.

## Berg (4)

- Similarly, how did the policy change affect other aspects of the bank's performance?
  - Earnings?
  - Growth?
  - Loan portfolio mix?
  - Loan officer turnover?

#### De Jonghe, Diepstraten and Schepens (1)

- Traded banks from 76 countries, 1997-2011.
- In this panel, how is systemic risk related to bank size and bank noninterest income?
- Authors find a very robust empirical result.

#### "<u>The Result</u>"

- For small banks, systemic risk <u>increases</u> with noninterest income share.
- For large banks, systemic risk <u>decreases</u> with noninterest income share.
- "The Result" kicks in for banks with assets > \$2 billion.

### De Jonghe, Diepstraten and Schepens (2)

- "The Result" is an empirical regularity in the data. But:
  - No ex ante theory is offered that predicts it.
  - No ex post explanation is offered to explain it.
- I would really like to know <u>why</u> and <u>how</u> "The Result" obtains.
  - 1. How (and why!) is systemic risk related to bank size?
  - 2. How (and why!) is noninterest income related to noninterest income activities?
  - 3. Why (and how!) does bank size neutralize the systemic risk effects associated with noninterest income?
- Any investigation of these primary questions should start by identifying the channels through which these effects occur.

## De Jonghe, Diepstraten and Schepens (3)

- A second empirical finding: "The Result" occurs only in countries where it is difficult to exploit conflicts of interest!
- Potentially intriguing. By neutralizing conflicts of interest, a country can get the following pleasing outcome:
  - Increased bank size → offsets the systemic risk-increasing effects of noninterest income.
  - ...Or is it the following?
  - Increased noninterest income → offsets the systemic riskincreasing effects of bank size?
- Until we have a fuller understanding of "The Result," we cannot begin to understand this governance result.

### De Jonghe, Diepstraten and Schepens (4)

- Median bank in the data has assets = \$2 billion.
  - A substantial number of banks in the data are not systemically important.
  - Over half the banks are U.S. banks.
- Authors use MES as their proxy for systemic risk.
  - A default event—or at least a high probability of one—is a necessary trigger for systemic risk episodes.
  - **MES** measures asset volatility (bank i's stock returns on the worst 12 market trading days of the year).
  - **MES** includes no information about a bank's equity cushion.
  - Why not use **SES**, which captures both asset volatility <u>and</u> financial leverage.

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