Discussion of "Business Complexity and Risk Management: Evidence from Operational Risk Events in U.S. Bank Holding Companies" by Chernobai, Ozdagli, and Wang

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- Why it's important:

 - complexity and managerial failures versus strategic risk-taking

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 - ▷ diseconomies of scope

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 - ▶ Accidents happen? are these unforeseen mistakes or the results of choices

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- The "Natural Experiment" compared to ideal
 - gradual increase in complexity of some firms
 - ▶ I imagine bank lobbying helped lead to GLBA
 - other correlates of pre-diversification and/or operational risk management
 - implicit assumption that supervision (fines/selection from unobservable to observable events) orthogonal

- How to interpret increase in Op. Risk. events
- The "Natural Experiment" compared to ideal
- Ex-ante versus ex-post nature of analysis

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- ▶ imagine we observe increase in events so long as increase in resources for risk management < increase in complexity</p>
- "management failure" is a bit muddied or overly broad for me: from inaction through to reduced effort from agency problems.

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- Are managers committing to X through $\Delta Resources < \Delta Risk(complexity)$? Where X is risk-taking, obfuscation of skill,...
- ▶ Q: are diversifying managers worse off, do we think this is suboptimal for them in some way?

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- ▶ growth into non-bank activities appears related to culture, risk aversion, local opportunities "failures in operational risk management indicate deficiencies in other risk management areas", "[...] show that banks with higher non-interest income ratios have higher contributions to systemic risk, "these restrictions were abolished for reasons unrelated to the operational risk of banks"

2. Identification

- ▶ parallel trends should, most importantly, be in outcomes (LHS), rather than only complexity (RHS) - what I think of as the first stage here
- growth into non-bank activities appears related to culture, risk aversion, local opportunities
- ▶ put controls on equal footing with treatment: interact with after in order for strongest answer to, e.g. "is this just big banks, or risky banks, or ..." - allow for time varying relationship

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- ► Some concern about degrees of freedom in analysis.
- 1 choice of years why before/after 1996-1999, not 1989 or 1999?
- 2 what ex-ante measures would we expect to predict treatment, e.g. banks that hadn't grown would grow into nonbanking (for diversification) seemed just as reasonable to me

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 - > jargon, regulatory definitions

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 - ▷ Banks as one (highly regulated, hence "ideal") laboratory to study complexity of firms in general

Recap

▶ Big question, high-level conceptual issue for the organizational structure of firms

- ▶ More could be done in clarifying how best to interpret results
- Paper shines an important light on Op. Risk, documenting heterogeneity in experience by US banks as they expanded into non-banking activities