Deregulation, Market Structure, and the Demise of Old-School Banking, by Emilio Bisetti, Stephen A. Karolyi, and Stefan Lewellen

Discussion by Andrew Detzel

1University of Denver

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Main questions and background?

- Does competition increase bank risk?
- Change banking IO?
- Explain the demise of “old-school banking”?
- Contribute to financial crises?

Old and still important *policy* question

- E.g., Depression era policy makers felt need to protect banks from “excess competition” to foster financial stability
- Fed Governor Daniel Tarullo (2012):
  
  “...primary aim of Dodd-Frank is to contain systemic risk, even if this reduces the competitiveness and efficiency of banks.”

- Fed won’t allow “narrow banks” (compete with normal banks)
Theory

- Backdrop: Banks have incentive to gamble with leverage

- **Competition increases** bank risk:
  
  - **Key motivation for this paper:** Banks won’t jeopardize rents by taking risk (e.g., Keeley, *AER* 1990).
  
  - Competition reduces information rents from relationship banking leading to more moral hazard and adverse selection (e.g., Petersen and Rajan, *QJE* 1995).

- **Competition decreases** bank risk:
  
  - If banks charge rates that are too high, they encourage risk shifting (e.g., Boyd and De Nicoló, *JF* 2005)
  
  - Too-big-to-fail

- **More recent/less well known:** Competition decreases *correlation* of bank risk strategies (Anginer, Demirgüç-Kunt, and Zhu, *JFI* 2014)

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Main contributions

Like many others: use staggered rollout of state-level interstate banking laws to identify shocks to competition.

**Key novelty:** Differentiate between:

- *StatesIn:* \# of states whose banks can compete with in a given bank's home state.
  
  E.g. For Colorado bank XYZ in 1986q3 on LHS of regression, how many states can branch into Colorado?
  
  Measures competition directly

- *StatesOut:* \# of states a given bank can enter
  
  E.g. For Colorado bank XYZ in 1986q3 on LHS, how many states can Colorado banks enter?
  
  Authors say measures “Investment Opportunities”
Main contributions

- Controlling for $StatesOut$, $StatesIn$ (Competition):
  
  **Decreases:**
  
  - Profitability (Net interest margin, ROA, ROE, interest expense)
  
  - “Old-school banking” as % of whole (Loans/Assets, loans kept, interest income/income)
  
  **Increases:**
  
  - Bank risk (Loss provisions, charge offs, Risk-weighted assets, $\sigma(ROE)$, $\sigma(ROA)$)
  
  - M&A activity

- Controlling for $StatesIn$, $StatesOut$ generally has opposite effect

**Paper’s Interpretation:** Competition reduces “rents” and banks respond with more risk taking and non-traditional banking.

- Suggestive that banking competition helped set stage for great financial crisis...
Monopoly power occurs when firms face downward-sloping demand.

Banks can be price takers before and after deregulation.

Outward shift in supply happens when new banks can enter (and bring better production technology/lower cost curves).

**ALL** of the results in this paper are consistent with zero economic rents before and after “competition” increases.
What does “competition” mean?

- Same logic applies to quantity of *risk* as opposed to quantity of $ in supply/demand curves
- Outward shift in supply of loanable funds increases marginal risk taken at the margin.

ALL of the results in this paper are consistent with zero economic rents before and after “competition” increases.
Reasons to believe cost economies shift *alone* can be sufficient to explain reduced profitability/increased risk

- Economies of scale now realizable
- **Operating leverage**, presumably lower for branches than HQ’s, allows for more aggressive supply of banking services at the margin
- In investment asset pricing theories, lower OL results in lower cost-of-capital and lower equilibrium profitability

Otherwise identical entrants will *mechanically* have lower ROA and ROE than incumbents (rather than lower *economic* profits)

- They have not fully depreciated new buildings & equipment yet
- Operating profitability vs earnings? or incumbent dummy?

Outward shift in supply seems (in total $ sense) inconsistent with “demise of old-school banking”

Why not use/include neo-classical competitive benchmark?
Missing LHS variables related to interpretation

- Missing key LHS variables for the rent/risk-taking story (although hard because equity not always public)
  - M/B or Q: (Charter value/rents).
- Even with greater risk of assets, it is not clear that banks are riskier.
  - Where is leverage...???
  - ..systemic risk?
  - ...inter-bank correlation?
  - ...(funding) liquidity risk?
  - FDIC insurance payouts?
  - All critical if going to make big leap of intra-banking sector competition setting stage for great financial crisis.
- Note that 8-quarter earnings volatility to measure bank risk is problematic
  - Will *mechanically* be high if a downward trend in earnings follows increase in *StatesIn*.
  - Any publicly owned banks? (Return volatility)
What does StatesOut measure?

- Authors say new “investment opportunities”
- Used like “anti-competition”
- This interpretation is important because StatesIn/StatesOut decomposition is key novelty
- Interact StatesOut with StatesIn from StatesOut states to measure investment opportunities?
  - NPV depends on competitive advantage
- Can also positively measure competition:
  - e.g., new states are outside source of deposits and therefore supply of loanable funds that can be used in home state
  - Outside states source of human capital
Empirical setting exposition

Why were states rolling out these measures?

Why then?

International competition? (Was competition already there?)

Trouble with local banks? (Were local banks going to have problems anyway?)

Who were early adopters?

One was NY (Jiang, Levine, and Lin, RFS 2016, WP 2018))

Important for the 20-years later interpretation

How intertwined were changes to intrastate branching?
Clustering matters!

LHS = bank-time; RHS = state-year ⇒ need state-year clustering!

Even with fixed effects!!!


Why not value-weight (GDP/population) directed graphs?

NY banks don’t care if WY banks can enter
Conclusion

- Clever empirical design
- New evidence on very important classic questions
- Still not 100% convinced on interpretation, measurement, and statistical inference.

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