Ultimate Ownership and Bank Competition by Jose Azar, Sahil Raina, and Martin Schmalz

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Overview

- <u>Research question</u>: Does common (minority) ownership have anticompetitive effects in banking?
- Important & timely question
 - US mutual fund assets have more than doubled since 2003.
 - Black Rock and Vanguard are top 5 shareholders in 70% of the largest U.S. firms.

Overview

• <u>Research question</u>: Does common (minority) ownership have anticompetitive effects in banking?



Outline of Comments

- Measuring common ownership
- Deposits as a product market
- Diff-in-diff
- Mechanism

Measurement

• GHHI reflects both common ownership and **concentration**.

$$\text{GHHI} = \sum_{j} \sum_{k} \frac{\sum_{i} \gamma_{ij} \beta_{ik}}{\sum_{i} \gamma_{ij} \beta_{ij}} s_{j} s_{k},$$

- Concern (IV/DiD): Index fund ownership could affect prices through concentration rather than common ownership (e.g. facilitating mergers).
- Suggestion: Use GHHI and control for HHI
 - Better isolates the incremental effect of common ownership in the OLS regressions too.

Deposits as a product market

- 1. Deposits are also an <u>input</u> for banks.
 - Concerns about unobserved heterogeneity go beyond factors related to deposit demand.
 - Loan demand
 - Bank-level, if ICMs active (not addressed by county controls or branch FE).
 - Use of alternative funding sources
 - Wholesale funding, loan securitization
 - Suggestions:
 - Bank × time FE in IV

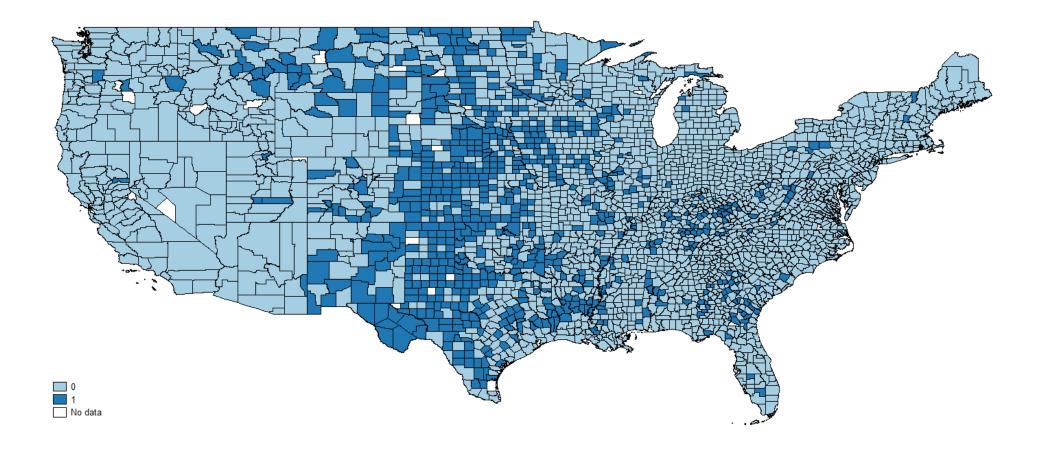
Deposits as a product market

- 2. Deposit pricing may reflect bank risk (and implicit guarantees).
 - Threat to identification if index fund ownership ↔
 safer banks, banks with more implicit guarantees
 - Suggestions:
 - Bank×time FE or direct controls
 - For robustness, you might also try dropping: (1) TBTF banks
 (2) financial crisis

DiD

- Gets around some concerns but raises others.
- Compares \triangle deposit prices₂₀₀₄₋₂₀₁₃ between:
 - Counties with high index fund own. in 2003
 - Counties with low or **no** index fund own. in 2003

Counties with no public banks in 2003



DiD

- Suggestions:
 - Matched sample (e.g. geographic proximity, bank characteristics, etc.)
 - Better yet: Treatment = Shock to Common Ownership
 - Mergers of pure play asset management firms? (He and Huang, 2017)

Mechanism: Coordination

- Between all firms or only some?
 - Bank of America and JP Morgan Chase
 - Existing work finds increased coordination among commonly-owned **peer firms of similar size** (He and Huang, 2017)
 - Bank of America and ... (other Russell 2000 constituents)?

OCONEE FEDERAL FINANCIAL CORP	MACATAWA BANK CORP
CLIFTON BANCORP INC	MUTUALFIRST FINANCIAL INC
FARMERS CAPITAL BANK CORP	BEAR STATE FINANCIAL INC
HINGHAM INSTITUTION FOR SAVINGS	UNION BANKSHARES INC
SUMMIT FINANCIAL GROUP INC	CENTRAL VALLEY COMMUNITY BANCORP
MALVERN BANCORP INC	PENNS WOODS BANCORP INC

• Deposit pricing requires coordination at a "micro" level.

Mechanism: Independent action

- The bulk of index funds' profits come from nonfinancial firms that presumably benefit from bank competition.
- Seems to require complex, centralized decision-making
 - Calculating common ownership at the market (vs. firm) level is complicated.
 - What if banks delegate pricing decisions to local offices? (Dlugosz, Gam, Gopalan, Skrastins (2018), Liberti & Mian (2009), Liberti (2017), etc.)

Conclusion

- I learned a lot from this paper!
- Very important topic.
- Few easy fixes.
- Deeper issues:
 - Deposits are special.
 - Opportunity to further clarify the mechanism.