# Bank Ownership and Product Market Competition

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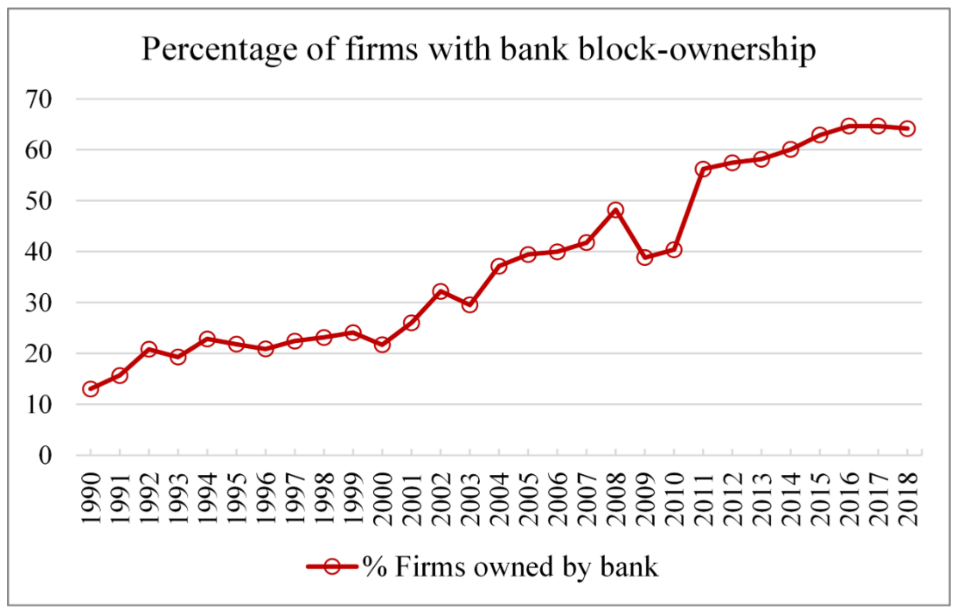
## Abstract

This paper studies how bank ownership of industrial firms affects their markups. We find that bank ownership increases firms' markups, while bank ownership of industry rivals reduces firms' markups. Using bank mergers that generate exogenous shocks to bank ownership of industry rivals, we employ a difference-in-differences analysis to establish causality inference. For the affected firms, their costs of loans increase, and the adverse effect on markups is stronger for competitive industries, R&D intensive firms, and when banks have more proprietary information of firms. Our mechanism analysis shows that banks utilize their financing and information advantage to realize their impact.

## A fact of bank ownership



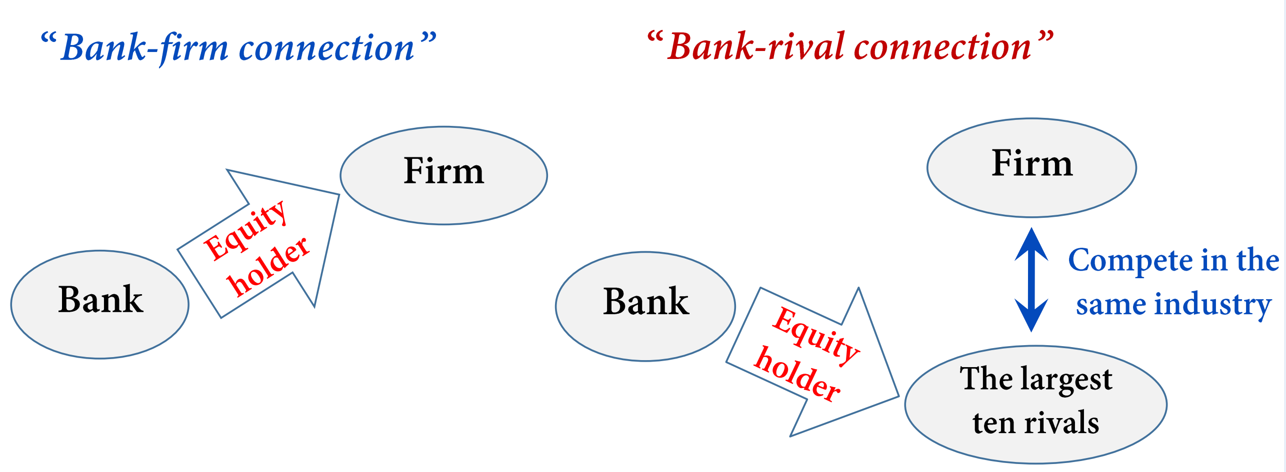

## Debates: how banks shape competition

- ❖ Cestone and White (03', JF); Cetorelli (04', JMCB); Cetorelli and Strahan (06', JF)

**Recently, two papers reawaken this questions:**

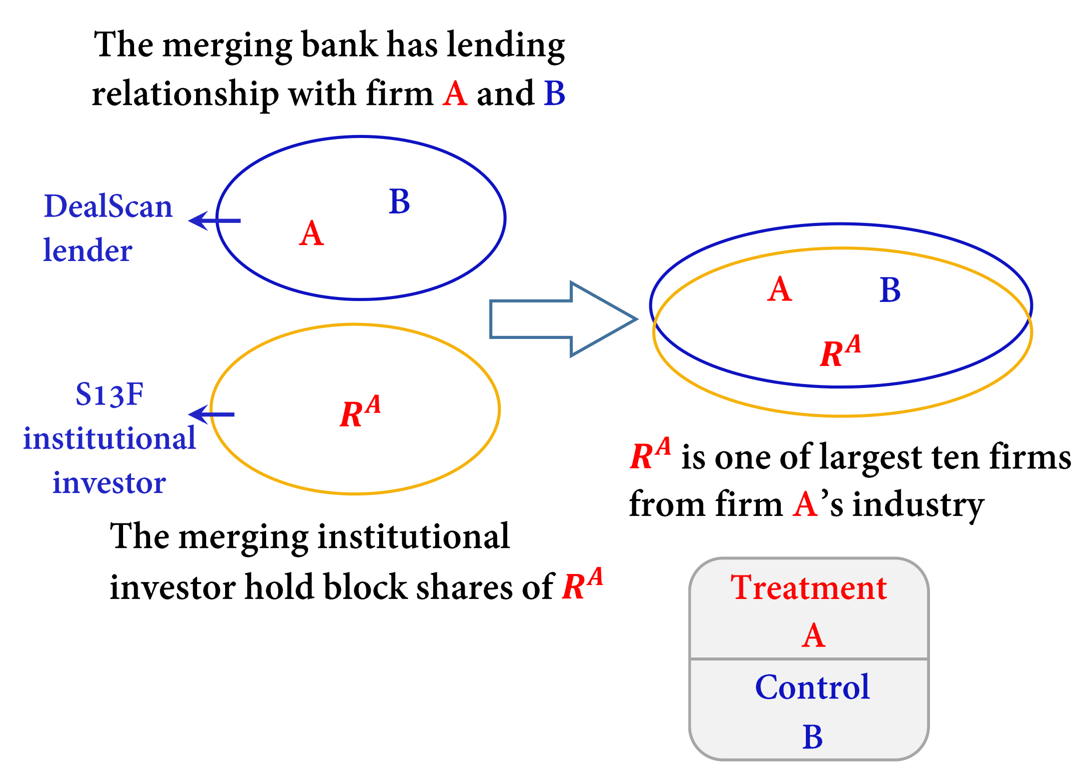
- ❖ **Common lender could raise anti-competitive concerns**
  Saidi and Streitz (21', RFS); De Franco et al. (20', MS)
- ❖ **Common ownership induces less aggressive competition**
  Azar et al. (18', JF; 21' FM); Xie and Gerakos (20', AEAPP); Gutiérrez and Philippon (18', AEAPP); Anton et al. (21'), etc.

## OLS analysis

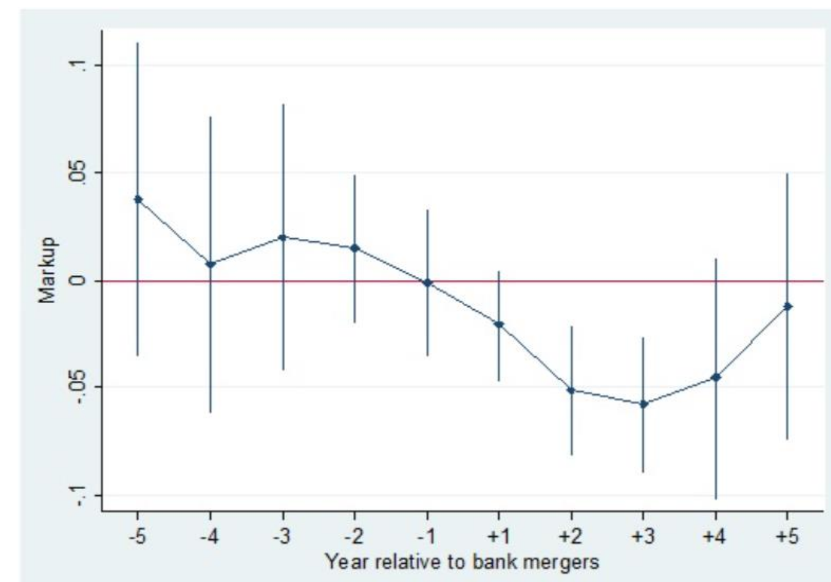



- ➢ Firms with bank blockholders experience higher markups (profit margins) than firms without bank blockholders.
- ➢ Firms whose industry rivals block-held by banks experience lower markups (profit margins) than firms whose industry rivals are not block-held by banks.

## Identification + DID analysis




- ➢ Mergers between lenders of affected firms and institutional shareholders of industry rivals




(a) Markup

## Does banks' incentives matter?

Conjecture 1. As the value of a bank's stock investment in the industry rivals increases, it has a higher incentive to support the industry rivals.

Conjecture 2. If a bank pursues long-term profits in the stock market, it has a higher incentive to support the industry rivals.

**Findings:**

- ❖ The adverse effect on market power is stronger if a bank's investment share in the rivals (measured by the value of the bank's holding of rivals divided by the value of its total stock investment) is above the median.
- ❖ The adverse effect on market power is stronger if the bank is a dedicated investor (Bushee (98', 01')).

## Two underlying mechanisms

Bank ownership of industry rivals↑

"Financing channel"
Banks may charge higher loan spreads, reduce loan amount, and requires more collateral; thus, reducing firms' competitive advantage in financing.

"Information channel"
Banks may intentionally or unintentionally leak firms' proprietary information to those rivals that held by banks, thus reducing firms' competitive advantage in information.

- ❖ The formation of bank ownership of industry rivals leads to higher likelihoods of bank switching.
- ❖ The formation of bank ownership of industry rivals slightly increases loan spreads.

➔ Consistent with the "financing channel".

- ❖ **The effect on market power is stronger for**
  1) Highly competitive industries; 2) R&D intensive firms
- ❖ **The bank switching effect on is stronger if**
  1) Bank-firm pairs have intensive past lending;
  2) Bank-firm has durable relationship;
  3) Bank-firm has proximal geographic distance

➔ Consistent with the "information channel".

## Takeaways

Literature of institutions and competition

- **Bank and competitions:** Cestone and White (03'); Cetorelli (04'); Cetorelli and Strahan (06')
- **Common lenders:** Saidi and Streitz (21'); De Franco et al (20')
- **Common ownership:** Azar et al. (18', 21'); Gutiérrez and Philippon (18'); Anton et al. (21'), etc.

Literature of bank ownership

Firms' performance and valuation (e.g., Gorton and Schmid (00', JFE); Morck et al. (00' JB))
Debt capacity (Santos and Rumble (06'); Santos and Wilson (17'))

Literature of information leakage in financial conglomerates

Acharya and Johnson (07'); Massa and Rehman (08'); Ivashina and Sun (11'); Chen and Martin (11')
Bhattacharya and Chiesa (95'); Asker and Ljungqvist (10'); De Franco et al. (20')

## Conclusion

**This study explores how bank ownership shapes the competitive strength of firms.**
Bank ownership of firms could enhance firms' market power.
In contrast, bank ownership of the industry rivals could harm firms' market power.

Our mechanism analysis suggests that the *financing channel* and *information channel* are two non-mutually exclusive channels.

**Overall, banks ownership of industrial firms induces the reallocation of market power within an industry, thus intensifies concern of unfair competition.**