The Effects of Bank Regulator Switching on Supervisory Ratings

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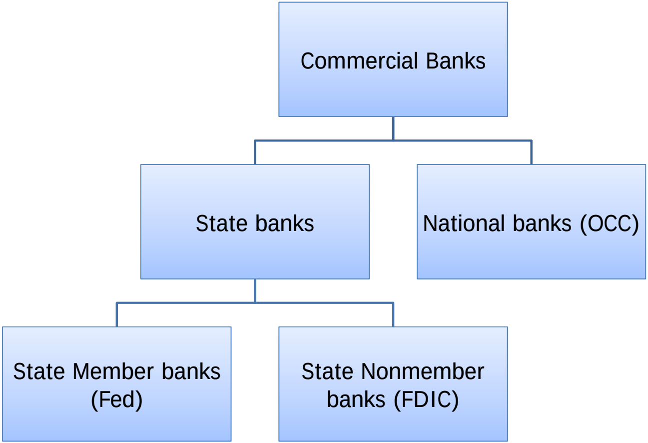
Federal Reserve Board

[1] The views expressed herein are my own and do not necessarily reflect those of the Board of Governors or the staff of the Federal Reserve System.

Motivation

- Commercial Banks in the United States choose their regulators and can switch among them over time.

Commercial Banks by Entity Types



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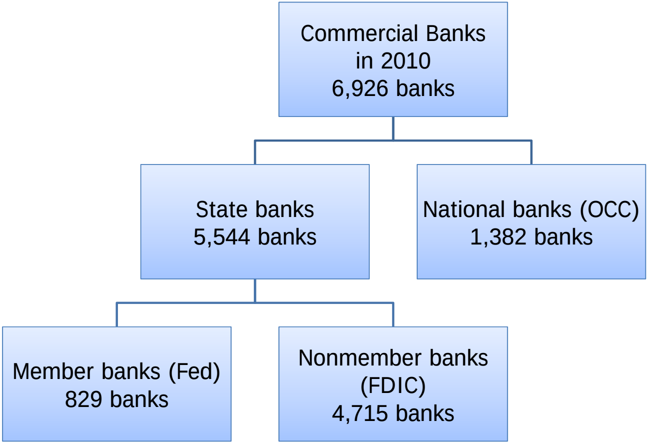

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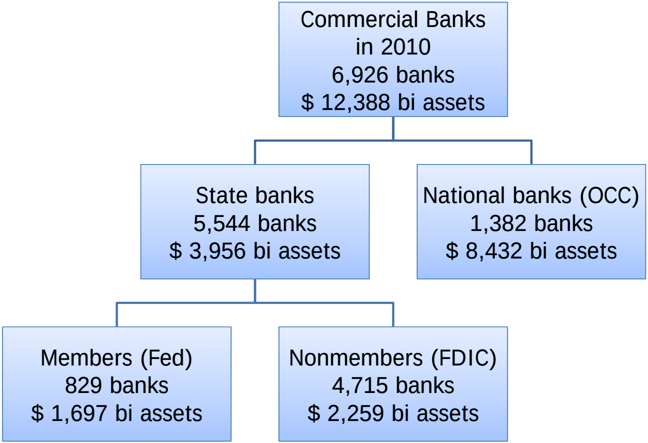

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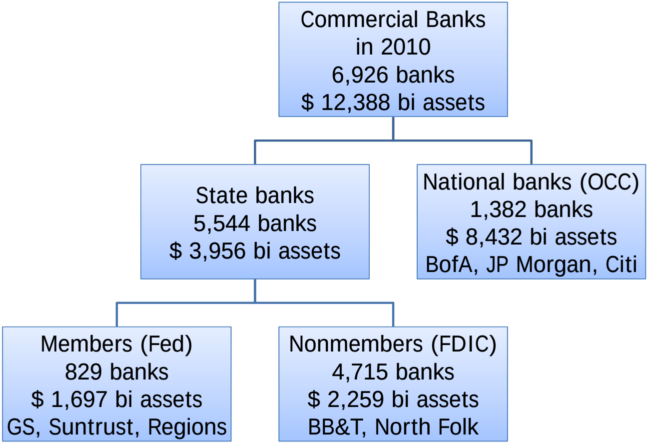

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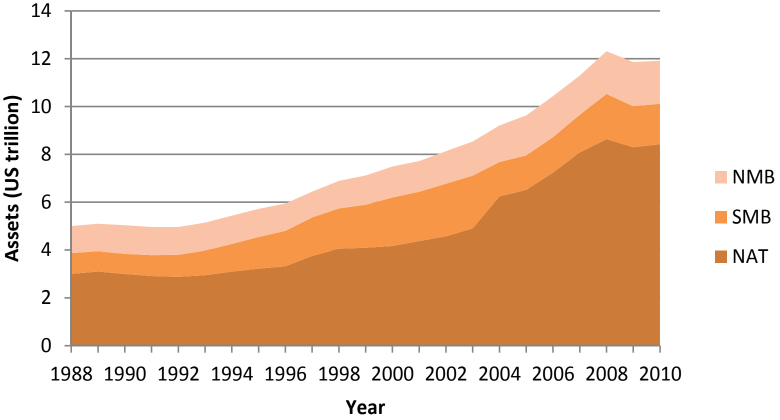
  - alters the regulators' powers, because their powers depend on which banks they supervise,
  - and often also affects their resources, because most regulators' budgets are funded by fees charged to the banks overseen.

Commercial Banks' Assets by Entity Type



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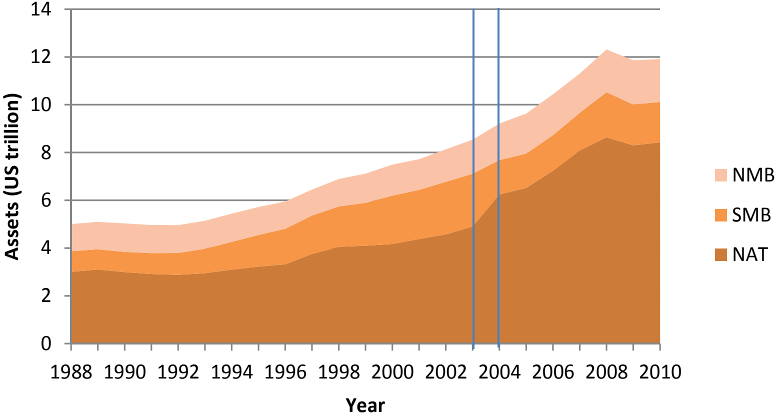

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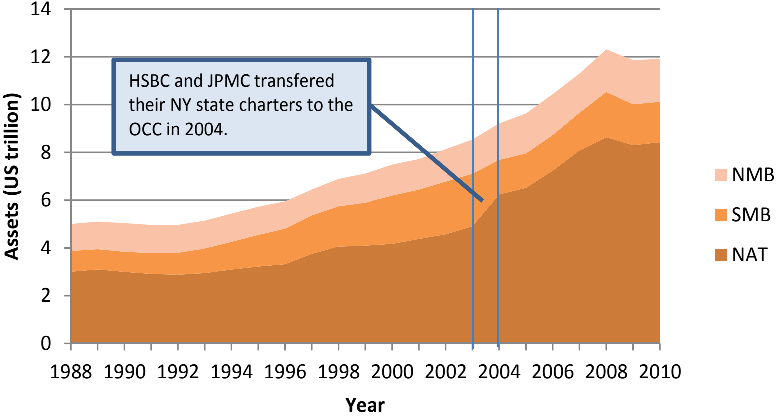

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- **Does bank regulator switching undermine supervision?**
- This idea has been emphasized since the recent financial crisis:
  - U.S. President Barack Obama (2009) argued that the ability of financial institutions to **"shop for the regulator of their choice"** weakened the oversight prior to the crisis.

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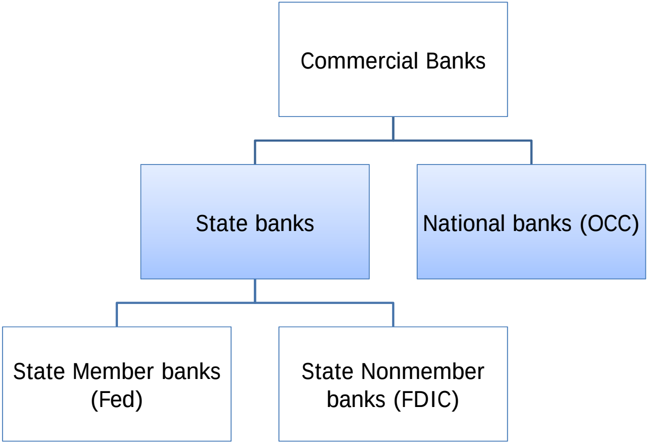
- No empirical evidence that establishes a **causal effect** of regulator switching on supervisory standards.
- I attempt to fill this gap:
  - **I estimate the effect of switching between national and state regulators on banks' supervisory ratings.**

Commercial Bank Charters



CAMELS Ratings

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- Areas evaluated:
  - **C**apital adequacy.
  - **A**sset quality.
  - **M**anagement.
  - **E**arnings.
  - **L**iquidity.
  - **S**ensitivity to market risk.

CAMELS Ratings

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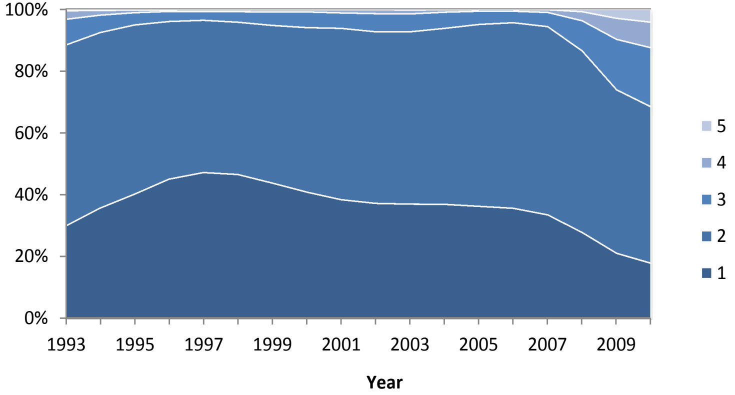
- CAMELS ratings have a substantial impact on banks' profits. Banks with worse ratings
  - are subject to more frequent examinations,
  - pay higher assessment fees and
  - are subject to more frequent and more severe supervisory actions.

Distribution of CAMELS Ratings



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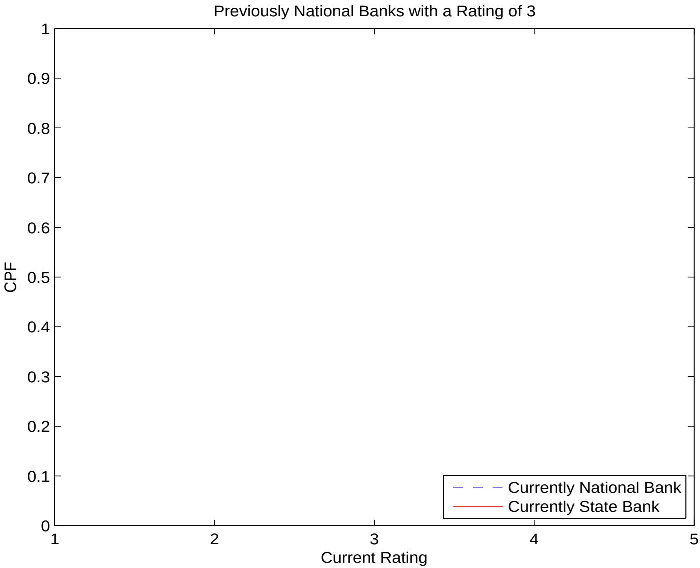

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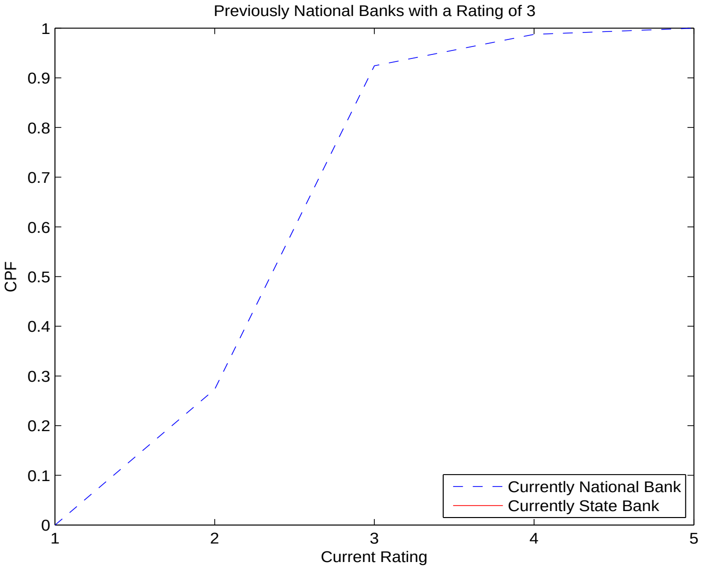

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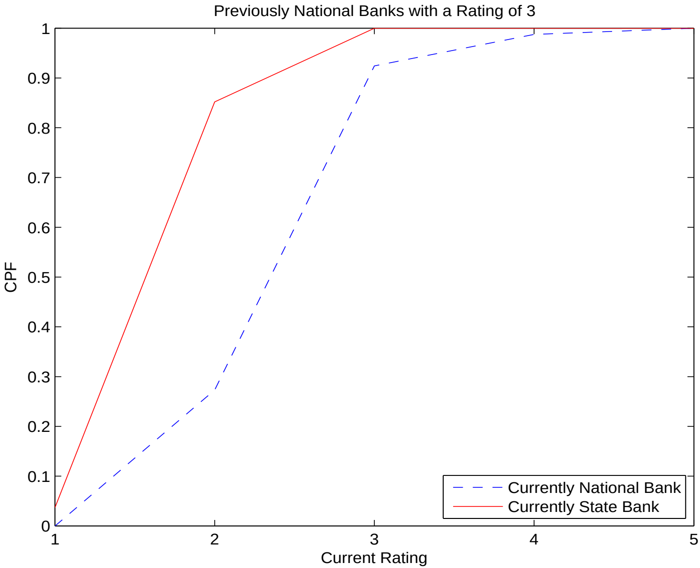

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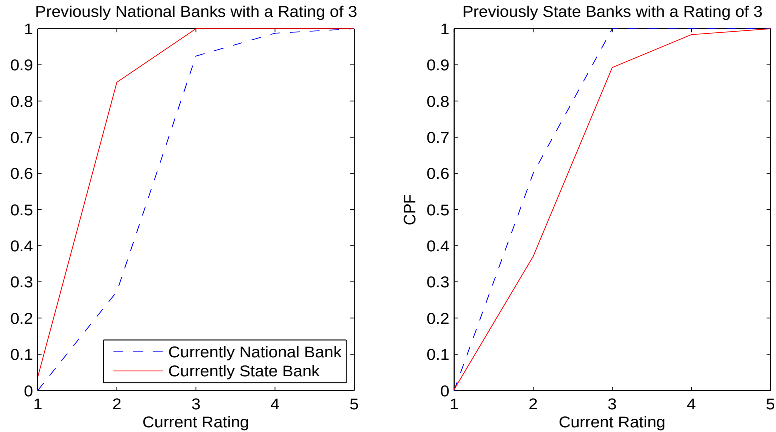

Econometric Evidence

- Probit model:

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$$r_i = X_i\beta + I_{si}\gamma + \eta_i \tag{1}$$

- where

- $r_i = 1$ if CAMELS is equal to 1 or 2 and $r_i = 0$ otherwise for each exam i.
- X_i is a vector of characteristics for the respective exam and bank.
- $I_{si} = 1$ if the bank switched charters since the last exam and $I_{si} = 0$ otherwise.
- η_i is the error term.

Probit Analysis of CAMELS 1 or 2

Variable	Previously national	Previously state
Changed charter	0.955	0.880
	(0.275)*	(0.275)*
Pseudo R-squared	0.614	0.510
Number of observations	43,843	82,493
Number of banks	3,635	9,318

Note: Both equations include bank characteristics, and state and year fixed effects.

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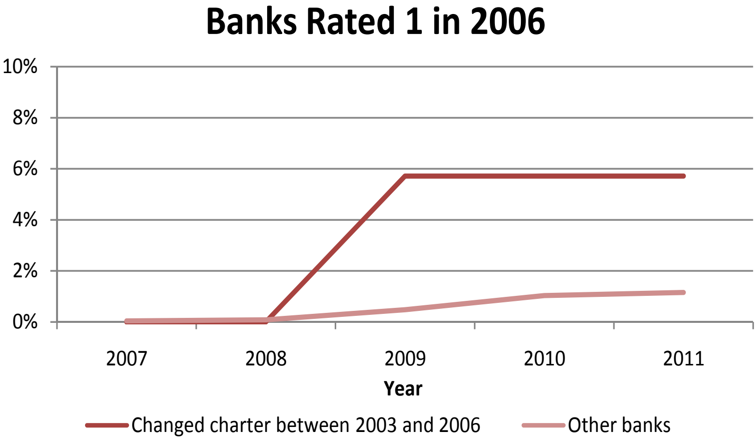
- I address this problem using assessment fees as instruments for regulator switching.
  - See the paper for details.

Evidence from Bank Failures

- I test the following hypothesis:
  - If banks that change charters are better rated than equally safe banks that do not, **then banks that change charters should fail more often than banks that do not change charters and that are equally rated.**

Cumulative Failure Rates



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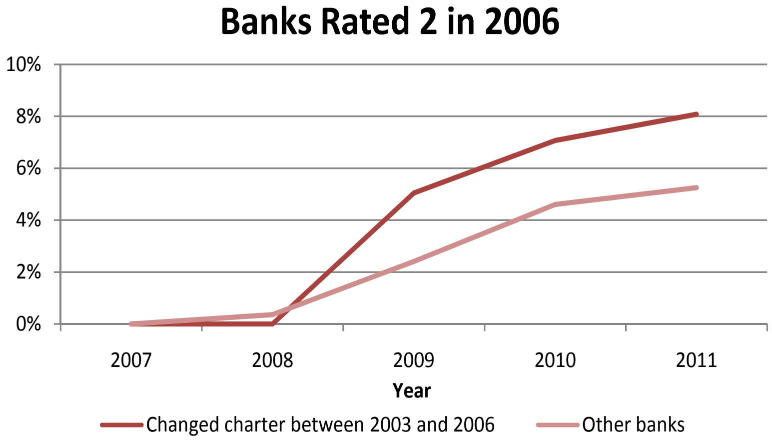

Evidence from Bank Failures

- Duration model:
  - Failure event is bank failure.
  - Annual observations on commercial banks.
- Covariate of interest:
  - Dummy equal to one if the bank changed its charter in the last four years, and equal to zero otherwise.

Duration Analysis

Variable	Bank Fails	Bank Ceases to Exist
Changed charter	3.131	1.244
	(1.360)**	(0.119)*
Component CAMELS included	Yes	Yes
Log likelihood	1,519	15,286
Number of observations	99,593	99,593
Number of banks	10,359	10,359
Number of failures	315	3,869

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Summary

- Banks that switch charters are more likely to be considered fundamentally safe and sound by their supervisors.
- Evidence suggests that banks can arbitrage ratings by switching charters.
- What banks should a supranational regulator supervise?
  - Big?
  - Systemically important?
  - Arbitrageurs?