

The Economic Impact of Merger Control: What is Special About Banking?

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Are banks special?

- Three reasons:
 - Prone to instability
 - Strong information asymmetries
 - Potentially used to pursue other objectives
- Consequences:
 - Highly regulated sector and government interventions
 - Cautious (or negative) attitudes towards competition (e.g., Keely, 1990)
 - Even if changing recently (e.g., Boyd and De Nicolo, 2006)

This paper

- New perspective on the special nature of banks
- Are banks special with regard to the control of mergers and acquisitions (M&As)?
- How do banks react to strengthening of competition policy (i.e., merger control) relative to non-financial firms?
- If differently, why?

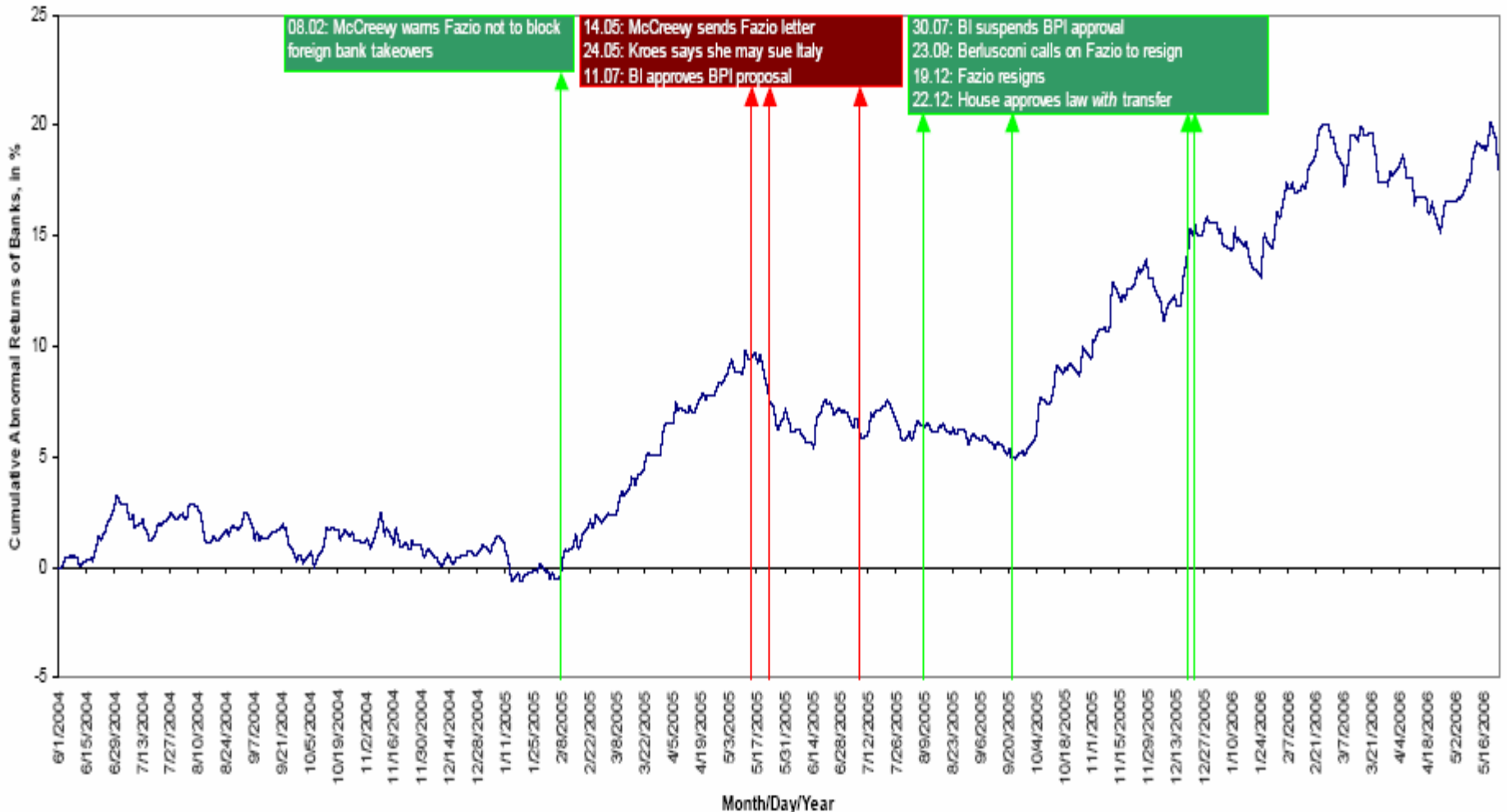
Main findings

- Legislative strengthening of merger control
 - **Increase** bank stock returns
 - **Decrease** firm stock returns
- After legislative changes, **only** target banks' size and profits increase (no changes in acquirer banks)
- No changes in firms' M&As characteristics
- More positive reaction of banks' stock returns if supervisor control of M&As was opaque

Our interpretation

- Specific supervisory/institutional environment in banking can explain (partly) the special nature of banks
- Competition control of M&As may exert a positive “externality” in banking
- It seems to compensate for some inefficiencies (or potential **discretion**) of the supervisory focus on “soundness and prudence”

An illustration...recent Italian experience



| Event | Date | CAR(0, 2) | | | CAR(0, 20) | | | CAR(0, 60) | | |
|---|----------------------|-----------|-----------|-------|------------|------------|---------|------------|------------|-----------|
| | | All Banks | BPI | BAPV | All Banks | BPI | BAPV | All Banks | BPI | BAPV |
| 1 McCreedy warns Fazio not to block foreign takeovers | 8-Feb-05 | 1.21 | 0.54 | 0.79 | 3.23 | -1.53 | 10.47 * | 10.62 ** | -5.38 | 25.54 *** |
| 2 Banca d' Italia approves proposal of BPI to acquire control of BAPV | July 11, 2005 | 0.92 | 4.23 | -0.77 | -0.04 | 2.58 | -8.18 | -5.40 | 47.93 ** | -27.57 * |
| 3 Banca d' Italia suspends proposal given to BPI | July 30, 2005 | 0.03 | -3.11 | -0.45 | 0.59 | -7.51 | 3.87 | 5.87 | -58.15 *** | 28.29 * |
| 4 Berlusconi calls on Fazio to resign | September 23, 2005 | 0.05 | -1.27 | -0.94 | 4.89 * | -25.73 *** | 4.04 | 6.59 | -3.23 | -8.12 |
| 5 Fazio resigns / House approves law with transfer | December 19-22, 2005 | 1.67 * | 11.02 *** | -0.92 | 0.31 | 17.17 ** | -1.65 | 5.03 | 28.64 ** | -7.37 |

The Italian experience

- Expected limits on supervisory discretion in takeover battles increased bank valuation (CARs > 20% !)
- How to design control of M&As and limit supervisory discretion?
 - Italian central bank had both competition and supervisory power over bank M&As
 - Competition policy transferred to the Antitrust
 - May this limit supervisory discretion?
 - Is this a “general” result?

What we do ...more in detail

- **Unique** data set of institutional design of M&A control
- 19 (industrial) countries
- Time period: January 1987 – July 2004
- Determine the timing of the significant changes in the control regime (*events*)
- Investigate the impact of these changes on:
 - Valuation of banks and firms (event study)
 - Type of mergers taking place (before/after)
 - Relate valuation effects of individual banks to institutional characteristics

Competition control of M&As

- General control applying to all (most) sectors
 - Prevent excessive market power and lessening of competition
 - Market-oriented control, efficiency driven
- We describe it through 4 variables (all between 0 and 1)
 - Competition criteria, Competition enforcer, Competition overturning, Mandatory notification
- Changes in any of them constitute our **events**
- We date changes at the earliest possible date in the legislative process

Event study

- All events towards strengthening of competition control of M&As (mostly introduction)
- Standard methodology
- Our prior: Introduction/strengthening of competition control should
 - prevent market power, reduce future monopoly profits
 - and deflate stock prices

Methodology: Cumulative Abnormal Returns

$$r_{jt} = \alpha_j + \beta_j r_{mt} + \gamma_j^b \delta_{jt}^b + \gamma_j^a \delta_{jt}^a + \varepsilon_{jt}$$

t : day when domestic market is open

0 : event (or implementation) day

$-250 - \tau \rightarrow +250 + \tau$: estimation window

τ : event windows: 2, 10, 20, 40, 60, 120 days

r_{jt} : bank stock or non-financial (firm) index return, country j

r_{mt} : domestic (world) market index return

δ_{jt}^b = 1 during period *before* event $[-\tau, 0]$

= 0 otherwise

δ_{jt}^a = 1 during period *after* event $[+1, \tau]$

= 0 otherwise

$\gamma_j^{a,b}$: cumulative abnormal returns (CARs)

Test if the average of the bank and firm CARs across events equals zero

Test if the difference between the bank and firm CARs across events equals zero

Event study results

| Change in Control (Number of Cases) | | [-120,0] | [-60,0] | [-20,0] | [-2,0] | [1, 2] | [1,20] | [1,60] | [1,120] |
|-------------------------------------|---------------|----------|---------|---------|-----------|--------|--------|--------|---------|
| Country Market Index | | | | | | | | | |
| <i>Event (20)</i> | Firms | -2.8 * | -2.5 ** | -1.0 ** | -0.3 | -0.1 | -0.2 | -0.9 | -1.7 |
| | | 6:14 * | 6:14 * | 6:14 * | 5:15 ** | 10:10 | 9:11 | 10:10 | 8:12 |
| | Banks | 8.3 | 5.0 * | 2.3 * | 0.8 | 0.1 | -0.7 | 1.7 | 8.5 |
| | | 13:7 | 13:7 | 14:6 * | 16:4 *** | 11:9 | 11:9 | 10:10 | 11:9 |
| | Banks \ Firms | 11.1 * | 7.6 *** | 3.3 ** | 1.1 * | 0.2 | -0.5 | 2.6 | 10.2 * |
| | | 13:7 | 13:7 | 14:6 * | 15:5 ** | 12:8 | 11:9 | 10:10 | 11:9 |
| | | 7:7 ** | 7:7 ** | 8:8 ** | 11:11 *** | 1:1 | 2:2 | 0:0 | 3:3 |
| <i>Implementation (20)</i> | Firms | -0.9 | -1.2 * | -0.6 * | -0.2 * | -0.1 | 0.1 | -0.1 | 0.2 |
| | | 10:10 | 7:13 * | 6:14 * | 10:10 | 8:12 | 10:10 | 6:14 * | 12:8 |
| | Banks | 5.4 | 3.4 | 1.6 | 0.7 | 0.6 | 3.2 | 1.7 | 2.3 |
| | | 10:10 | 12:8 | 13:7 | 9:11 | 11:9 | 12:8 | 10:10 | 8:12 |
| | Banks \ Firms | 6.3 | 4.6 | 2.2 | 1.0 | 0.6 | 1.1 | 3.3 | 2.1 |
| | | 10:10 | 11:9 | 14:6 * | 10:10 | 12:8 | 11:9 | 13:7 | 8:12 |
| | | 0:0 | 5:4 | 8:8 ** | -1:-1 | 3:3 | 2:2 | 4:4 | -4:-4 |

Banks positively and firms negatively affected

Robustness

- Approval, Decision, Publication Dates
- Market Indices
 - Country and European
 - World
 - Other Combinations: World Bank, World Firm, ...
- Estimation Windows
- Individual Banks' stock returns
- *France May 16th, 2003:*
 - *Weakening Competition Control by Court Decision*

| Change in Control (Number of Cases) | [-120,0] | [-60,0] | [-20,0] | [-2,0] | [1, 2] | [1,20] | [1,60] | [1,120] |
|---|----------|---------|---------|-----------|---------|--------|--------|---------|
| <i>Case Weakening Competition Control</i> | | | | | | | | |
| <i>France, May 16th, 2003</i> | | | | | | | | |
| Firms | -1.20 | -0.23 | -0.17 | 0.11 ** | 0.02 | 0.24 | -0.08 | 1.11 |
| Banks | 6.25 | 0.40 | -0.01 | -0.77 *** | -0.14 * | -2.42 | -1.91 | -12.07 |

Did M&As change after the events?

- Data:
 - Complement SDC with records from antitrust and supervisory authorities
 - Increase bank M&A sample by $> 10\%$ for event countries
 - 15,148 bank- and 101,441 M&A records for sample countries
- Study M&A activity 1,2, and 4 years before and after implementation
 - Number and type of bank and firm M&As
 - “Bootstrap” distribution to account for country specific trends in M&As

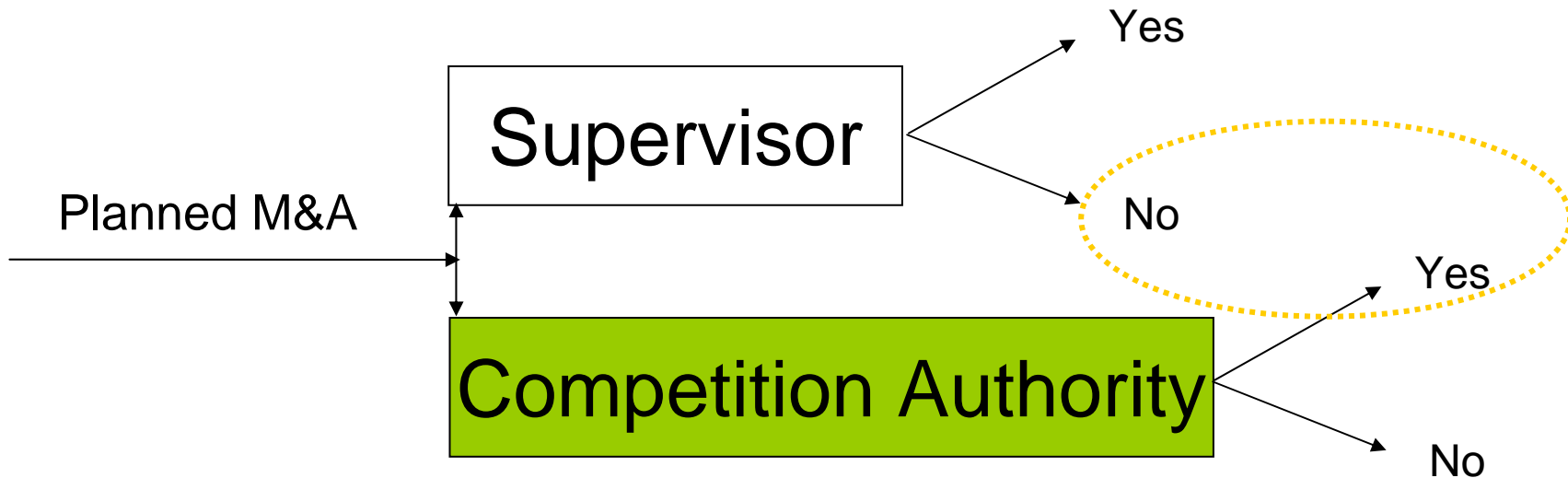
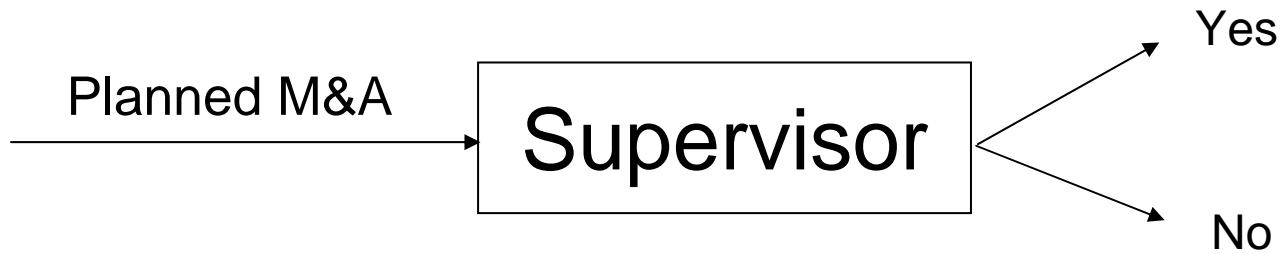
M&A findings

- Target banks' size and profits **increase**
- Firm characteristics **unaffected**
- **Surprising** again for **banks**, as competition control should rather **reduce** merger size
- Why is this for bank mergers?

What is special about banking?

- Banks are also subject to **special** supervisory reviews of M&As (e.g, Basel Core Principles)
- Stability concerns may lead supervisors to
 - Promote inefficient M&As (to save bankrupt institutions)
 - Block proposed M&As (avoid disruption)
- Typically **opaque** process, open to potential **discretion**

Interaction between authorities



Cross-sectional exercise: Link individual bank CARs to

- 3 variables describing supervisory control:
 - Supervisory enforcer
 - Supervisory focus
 - **Supervisory opaqueness**: It combines informal notification and decision public
- And other variables capturing
 - Competition policy aspects: Antitrust enforcer and overturning, efficiency defense, national markets*C3
 - Potential more lending or more advice: various income measures
 - Others: non-performing loans

Cross-sectional CAR exercise: Results

| | Model | IV | V | VI | VII |
|-------------------------------|---------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Supervisory Opaqueness | | 58.29 ** (23.36) | 73.31 *** (24.16) | 86.77 *** (29.62) | 82.88 *** (25.69) |
| Efficiency Defense | | | -3.34 * (1.76) | -3.44 (3.84) | -2.18 (2.10) |
| National Markets | * C3 | 0.39 (0.72) | 0.30 (0.72) | 2.27 ** (1.08) | 0.54 (0.76) |
| log(Bank Assets) | | 8.19 *** (3.09) | 9.26 *** (3.18) | 9.96 ** (4.05) | 10.81 *** (3.43) |
| log(Bank Assets) ² | | -0.25 *** (0.09) | -0.28 *** (0.10) | -0.26 ** (0.12) | -0.32 *** (0.10) |
| Supervisory Opaqueness | * log(Bank Assets) | -7.17 ** (2.89) | -8.76 *** (2.97) | -9.29 ** (3.64) | -9.78 *** (3.14) |
| Supervisory Opaqueness | * log(Bank Assets) ² | 0.22 ** (0.09) | 0.26 *** (0.09) | 0.24 ** (0.11) | 0.29 *** (0.10) |
| Efficiency Defense | * log(Bank Assets) | | 0.20 * (0.11) | 0.24 (0.24) | 0.13 (0.13) |
| Constant | | -66.01 *** (25.03) | -77.03 *** (25.99) | -93.37 *** (33.19) | -89.44 *** (27.97) |
| Number of Observations | | 226, | 219, | 79, | 219, |
| Adjusted R-squared | | 0.08 | 0.10 | 0.25 | 0.11 |

Conclusions I

- We have shown that banks are **special** from a **new** perspective
 - Strengthening of competition control of M&As **increases** banks' stock returns
- The specific **supervisory reviews** of bank mergers seem to play an important role in explaining this effect
- Stronger focus on competition seems to have a positive externality in banking

Conclusions II

- Results seem to contradict “conventional wisdom” that competition is bad in banking
- ...and support recent strengthening of competition control, competition authorities and transparency of review process also in banking (e.g., Italy, France, Portugal)
- ...suggestive of the optimal allocation of policy responsibilities between competition and supervisory authorities
- One important caveat: this is **not** a welfare analysis!