

# Political Power and Market Power

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# The Political Power of Corporations

- ▶ Mergers may be detrimental because they increase monopoly power
- ▶ ...or because they increase monopsony power
- ▶ [Another channel](#) first discussed in Brandeis (1914) (“curse of bigness”)
- ▶ Larger firms may have more incentives or resources to get favorable regulation

# Market Power Begets Political Power?

- ▶ Rajan-Zingales, Saving Capitalism from the Capitalists, 2003
- ▶ Callander-Foarta-Sugaya (2021)
- ▶ Incumbents have an incentive to enlist policy-makers to erect barriers to entry so they can maintain oligopoly/monopoly rents.
- ▶ **Mergers** may cause that incentive to go up (Zingales 2017)
- ▶ Antitrust policy should look at the effect of concentration on political influence (Wu 2018)

# Lobbying Spending in the US by Source in 2019 (OpenSecrets)

Business, Labor & Ideological Split, 2019

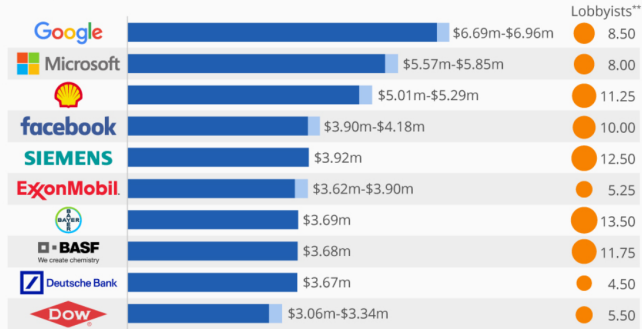


|                    |                 |        |
|--------------------|-----------------|--------|
| Business           | \$2,968,251,096 | 86.54% |
| Other              | \$260,281,617   | 7.59%  |
| Ideological Groups | \$152,310,046   | 4.44%  |
| Labor              | \$48,964,316    | 1.42%  |

# Largest Spenders in EU Lobbying

## The Companies Spending the Most on EU Lobbying

Self-reported annual lobbying expenditure in the European Union\*



\* most recent available estimate as of April 29, 2019; converted to U.S. dollars

\*\* Full-time equivalent



@StatistaCharts

Sources: EU Transparency Register, LobbyFacts.eu

statista

# This Paper

- ▶ **Question:** Do firms whose size increase because of a merger increase their political influence activity?
- ▶ **Theory:** combine Grossman-Helpman (1994) with IO merger model
- ▶ **Data:**
  - ▶ Mergers + company info: Compustat firms (25k) from 1999 to 2017
  - ▶ Two influence activities: lobbying spend and campaign donations
- ▶ **Empirical Approach:**
  - ▶ Panel event study: Freyaldenhoven et al 2019
  - ▶ Bartik instruments

# Theory

# Model: Idea

- ▶ Combine two ingredients:
  1. Standard **oligopoly model** with the addition of regulatory variables ("augmented Cournot model").
  2. Standard **lobbying model** where firms try to influence regulatory variables.
- ▶ Characterize lobbying and oligopoly equilibria
- ▶ Study effect of merger on lobbying activity, quantities/prices, and firm profits



# Model: Lobbying

- ▶ Lobbying model of Grossman-Helpman (1994), building on Bernheim-Whinston's (1986) [menu auctions](#).
- ▶ Two stage game:
  1. All lobbies offer transfers;
  2. The policy maker chooses policy

# Two Cases

- Recall the demand function

$$p_i = A - Q + bF_i + aR.$$

- Two scenarios:

1. Pure **public-good** lobbying:  $b = 0$
2. Pure **private-good** lobbying:  $a = 0$

# Merger Analysis: Public-Good Case

- ▶ If the two firms merge, both the total transfer  $t_1^* + t_2^*$  and the amount of regulation  $R$  go up.
- ▶ Intuition: in duopoly, firms dissipate part of the potential benefit of  $R$  through lower prices. With a merger, they benefit from it fully and hence they invest more in lobbying.

# Theory: Conclusions

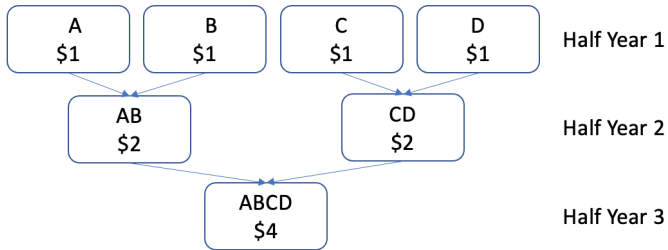
- ▶ Depending on the nature of regulatory policy, increased industry concentration can increase or decrease total lobbying activity
- ▶ As both kinds of policies are present in the US, need for empirical analysis
- ▶ Extension with (heterogeneous) fixed costs: extensive & intensive margin
- ▶ Extension to industry associations

# Empirical Analysis

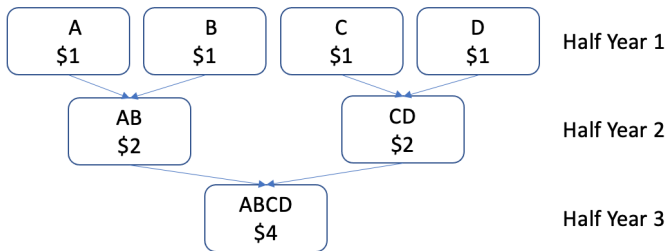
# Overview

- ▶ Research question: *Do lobbying and campaign contribution activities increase or decrease after mergers?*
- ▶ Do firms spend more together, vs the sum of when they were separate?
- ▶ Composite firms + two identification strategies

## Example: Graphical Representation of Composite Firm “ABCD”



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## Tabular Panel Representation of “ABCD”

| HalfYearID | CompositeFirmID | Total Revenue (Size) | # of Component Firms | Composite HHI Index |                                 |
|------------|-----------------|----------------------|----------------------|---------------------|---------------------------------|
| 1          | “ABCD”          | \$4                  | 4                    | 2,500               | $= (1/4)^2 \times 4 \times 10K$ |
| 2          | “ABCD”          | \$4                  | 2                    | 5,000               | $= (1/2)^2 \times 2 \times 10K$ |
| 3          | “ABCD”          | \$4                  | 1                    | 10,000              | $= (1/1)^2 \times 1 \times 10K$ |



# Our composite firm panel

- ▶ All Compustat firms (1999-2017)
- ▶ Transformed into composite firms using SDC Platinum data.
- ▶  $\implies \approx 12\text{K}$  composite firms (bundles) composed of 15K component firms (members).
- ▶ Joined with political data.
  - ▶ LobbyView: Total spent on lobbying by all component firms.
  - ▶ OpenSecrets: Total PAC spending of all component firms.

# Regression Equation

$$\sum_{f \in \mathcal{F}_{it}} y_{f,t} = \beta_0 + \beta_1 \text{MergerIndex}_{it} + \beta_2 X_{it} + \delta_i + \gamma_t + \epsilon_i. \quad (1)$$

- ▶  $y_{f,t}$  = political influence expenditures for firm  $f$  at time  $t$ .
- ▶  $\sum_{f \in \mathcal{F}_{i,t}} y_{f,t}$  = sum of expenditures all firms inside composite firm  $i$ .
- ▶  $\text{MergerIndex}_{it}$  = Main variable of interest.
- ▶  $X_{it}$ :  $\text{Revenue}_{it}$  and additional controls (varied in coordination with identification strategies).
- ▶  $\delta_i$  = composite firm FEs,  $\gamma_t$  = time period FEs.
- ▶ SEs clustered at panel unit  $i$  (composite firms).

# Panel Event Study

# Main Results: Panel Event Study

|                     | (1)<br>Lobby<br>Amount | (2)<br>Lobby<br>Amount | (3)<br>PAC<br>Contribs | (4)<br>PAC<br>Contribs |
|---------------------|------------------------|------------------------|------------------------|------------------------|
| # Component Firms   | -65,384**<br>(27,069)  | -62,393***<br>(24,160) | -4,470*<br>(2,382)     | -4,290<br>(2,839)      |
| Additional Controls |                        | Y                      |                        | Y                      |
| Observations        | 222,540                | 222,519                | 222,540                | 222,519                |
| $R^2$               | .54                    | .55                    | .32                    | .32                    |

- ▶ # Component firms = Number of independent, as-yet-unmerged firms inside composite firm. ↓ with each merger.
- ▶ All regressions include composite firm fixed effects, time period fixed effects, and total size (revenue) controls. “Additional controls” are described in Slide 43.

# Large vs Small Firms

- ▶ Theory suggests different results for “private good” vs “public good for industry” lobbying.
- ▶ One implementation of this: Large vs small firms.

# Heterogeneity by Firm Size

|                     | (1)<br>Lobby<br>Amount     | (2)<br>Lobby<br>Amount     | (3)<br>PAC<br>Contribs     | (4)<br>PAC<br>Contribs     |
|---------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| # Component Firms   | -14,996<br>(16,417)        | -60,468**<br>(24,512)      | -689<br>(966)              | -4,201<br>(2,856)          |
| Additional Controls | Y                          | Y                          | Y                          | Y                          |
| Sample              | Below<br>Median<br>Revenue | Above<br>Median<br>Revenue | Below<br>Median<br>Revenue | Above<br>Median<br>Revenue |
| Observations        | 76,352                     | 146,167                    | 76,352                     | 146,167                    |
| $R^2$               | .4                         | .55                        | .67                        | .32                        |

- All regressions include composite firm fixed effects, time period fixed effects, and total size (revenue) controls. “Additional controls” are described in [Slide 43](#).

# “Close” vs “Distant” Mergers

- ▶ Possibly different results when merging firms are in the same industry or in different industries.
- ▶ Similarity measure: # of unique NAICS code inside composite firm.
  - ▶ Lots of different NAICS codes  $\implies$  mergers of different firms.
  - ▶ Few  $\implies$  competitors merging.

# Close vs Distant Mergers

|  | (1)<br>Lobby<br>Amount | (2)<br>Lobby<br>Amount | (3)<br>PAC<br>Contribs | (4)<br>PAC<br>Contribs |
|--|------------------------|------------------------|------------------------|------------------------|
| # Component Firms                        | -69,195**<br>(34,589)  | -69,913**<br>(31,367)  | -3,115<br>(2,748)      | -2,700<br>(2,507)      |
| # Component Firms $\times$ Unique NAICS3 | 13,712**<br>(5,481)    | 13,761**<br>(5,792)    | 230<br>(357)           | 67<br>(186)            |
| Additional Controls                      |                        | Y                      |                        | Y                      |
| Observations                             | 222,540                | 222,519                | 222,540                | 222,519                |
| $R^2$                                    | .54                    | .55                    | .32                    | .33                    |

- Interpretation: When very different firms merge, the lobbying increase isn't as high.
- We need similar firms to merge (horizontal) to get as big of an increase in lobbying.
- Qualitatively same story with PAC, but less precise.



# Alternative Mechanism

- ▶ “*After* a merger happens, regulators increase scrutiny.”

## Hassan et al. (2019), “Firm-level political risk.”

- ▶ “[T]he share of their quarterly earnings conference calls that they devote to political risks.”
- ▶ We study this variable as an outcome of the merger.
- ▶ Measure of higher regulatory scrutiny.
  
- ▶ This is available only for a subset of firms that have regular investor calls.

# Hassan et al. (2019), “Firm-level political risk.”

|                     | (1)<br>Lobby<br>Amount | (2)<br>PAC<br>Contribs | (3)<br>Political<br>Risk | (4)<br>Political Risk<br>Econ. Policy | (5)<br>Political<br>Sentiment |
|---------------------|------------------------|------------------------|--------------------------|---------------------------------------|-------------------------------|
| # Component Firms   | -93,960***<br>(30,584) | -5,698<br>(4,448)      | -.031<br>(.034)          | -.034<br>(.036)                       | -.002<br>(.035)               |
| Additional Controls | Y                      | Y                      | Y                        | Y                                     | Y                             |
| Observations        | 54,549                 | 54,549                 | 54,549                   | 54,549                                | 54,549                        |
| $R^2$               | .63                    | .38                    | .36                      | .31                                   | .44                           |

- ▶ Replicated results on main specifications (Col 1 & 2).
- ▶ Political risk outcomes normalized.
- ▶ Can reject large effects: 95% CI: (-0.1 to +0.03  $\sigma$ s).

# Conclusions

- ▶ Do firms increase or decrease their lobbying activity when they merge?
  - ▶ Theory: depends on what they lobby for
  - ▶ Evidence for increased lobbying spending
  - ▶ Weaker evidence for increased campaign donations
  - ▶ All action is in larger firms
- ▶ Implications for policy
  - ▶ Next round table!

Thank you!