Political Polarization in Financial News

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2nd London Political Finance (POLFIN) Workshop
June 25, 2021

Example

Tesla had a massive stock rally in February 2020. Here's how it was reported in *The Wall Street Journal* and *The New York Times*.

THE WALL STREET JOURNAL.
U.S. EDITION

Tesla Rally Stirs Memories of Past Market Bubbles

The New York Times

Backed by Bulls (and Helped by Bears), Tesla's Stock Soars

887.06 USD Feb 4, 2020

THE WALL STREET JOURNAL.

Tesla Rally Stirs Memories of Past Market Bubbles

By Paul Vigna

5 February 2020

Tesla Inc.'s shares rose 14% Tuesday to $887.06. They have surged 56% in the past week and have nearly quadrupled since early October.

Those outsize gains don't match Tesla's more modest fundamentals, which include annual losses.

They do, however, resemble any number of other assets that have experienced prolonged bubbles, including shares of Qualcomm Inc. and other tech stocks of the dot-com era; oil in 2008 and bitcoin in 2017.

"I'm not saying this is the top," said Peter Cecchini, the chief market strategist at Cantor Fitzgerald. "I don't have a target [price], or a view on where it goes from here. It just feels like other bubbles."

Mr. Cecchini compared Tuesday's rally -- during which the Dow Jones Industrial Average surged more than 400 points -- to a "bizarro world" in which everything is the opposite of what it should be. Tesla, though, is leading the pack. "The rise in Tesla shares are emblematic of the speculative mind-set," he said.

The New York Times

Backed by Bulls (and Helped by Bears), Tesla's Stock Soars

By Niraj Chokshi and Peter Eavis
5 February 2020

Traders who bet against Tesla's success could be the ones now pushing the share price higher.

There's a new rocket ship from Elon Musk: Tesla's stock.

The electric-car manufacturer's shares closed at $887 on Tuesday, up from $650 two trading days earlier -- a gain of 36 percent. Since the start of the year, the price has more than doubled.

You can credit much of the increase to the seemingly boundless enthusiasm of Tesla's supporters, for whom Mr. Musk, the chief executive, is a hero. But the haters appear to be playing a role, too: After betting that the company would fail, many seem to be cutting their losses -- and that is actually pushing shares higher.

Here's what's happening.

Why are investors so enthusiastic about Tesla?

To the bulls, Tesla is positioned for greatness now that it has recovered from a rocky start to 2019.

After burning through $1.1 billion in the first half of last year as it struggled with the production and delivery of its more affordable Model 3 car, Tesla turned a corner in the second half of 2019. In the fourth quarter, it generated $1 billion in cash even after capital expenditures and posted its second straight quarterly profit.

Even though Tesla posted an annual loss for 2019, as it has every year, its backers argue that the company has corrected course. Operating costs were down about 7 percent last year, while automotive sales were up 13 percent and deliveries rose 50 percent. With a new Shanghai factory producing vehicles in China and another under construction in Europe, Tesla is also poised for global expansion, they say.

But the company's sky-high valuation -- which has more than tripled since late October -- is about more than improved efficiency and new factories. It's a bet on Tesla's future.

Example continued

- *Wall Street Journal* and *New York Times* occupy opposite ends of the political spectrum.

- 90% of political donations by Tesla employees went to the Democratic Party.

- Did Tesla's political affiliation play a role in differential news coverage?
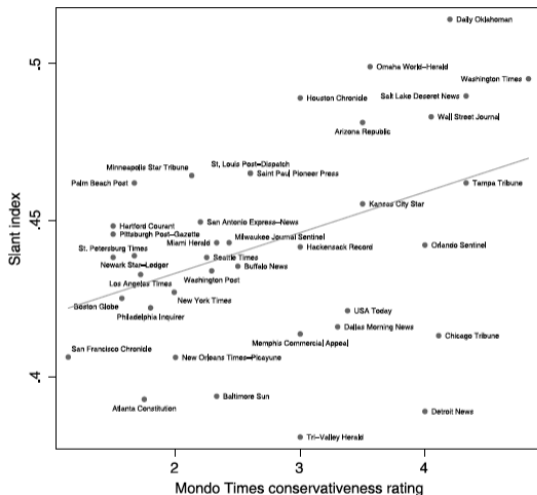

FIGURE 1.—Language-based and reader-submitted ratings of slant. The slant index (*y* axis) is shown against the average Mondo Times user rating of newspaper conservativeness (*x* axis), which ranges from 1 (liberal) to 5 (conservative). Included are all papers rated by at least two users on Mondo Times, with at least 25,000 mentions of our 1000 phrases in 2005. The line is predicted slant from an OLS regression of slant on Mondo Times rating. The correlation coefficient is 0.40 ($p = 0.0114$).

Standard explanations of polarization don't apply to financial news

- News that is easily verifiable, weather, sports, or corporate financial news is less likely to be biased (Gentzkow and Shapiro, 2006).

- Financial news read to inform financial decisions not confirm political beliefs (for eg, Huberman and Regev, 2001, Barber and Odean, 2008, Tetlock 2007, and many others.)

- Business and opinion pages have separate editors.

This paper

- Over 25 years of financial news published in *Wall Street Journal* and *New York Times* on 100 largest listed U.S. firms.

- Compare reporting between the two newspapers about same firm-specific events to ask:

- Q1: Do newspapers report differently on financial news about politically aligned firms?

- Q2: Do investors respond to politics induced disagreement in financial news?

Findings on likelihood and tone of coverage of politically aligned firms

- Newspapers more likely to cover and write positively about politically aligned firms.
  - Driven by more politically active firms; Journalists adopt tone of employer; Coverage in *WSJ* changes after acquisition by more conservative News Corporation.

- Abnormal trading volume higher when greater politics induced disagreement in coverage.
  - Concentrated in most politically active firms, and when more disagreement in tone.

- Evidence that individual investors respond to news.
  - Investors trade more when news appears in paper they read, and in the same direction as other investors who read same paper.

Data

Data and variables

- 100 largest publicly traded firms in the U.S.
- Financial News: Daily articles from print editions of WSJ and NYT, which mention 1 or at most 2 firms, between January 1990 and December 2016, from Factiva.
    - 80% of articles in financial section.
- Political Alignment: Campaign contributions by PACs and employees to Republican and Democratic Party candidates in each two-year election cycle between 1990 to 2016 from Opensecrets.org.
- Tone: Loughran and McDonald's (2011) dictionary of financial words that carry negative or positive tone.
- Newspaper circulation in metropolitan area: Alliance for Audited Media.
- Retail investor Trading: Terrance Odean.
- Firm specific variables: CRSP and Compustat.

Likelihood of Coverage

Empirical Specification

$$Y_{i,j,t} = \beta_1 \textit{Political Alignment}_{i,t} + \beta_2 X_{i,t} + \textit{Firm FE} + \textit{Quarter FE} + \textit{Topic FE} + \varepsilon_{i,j,t}$$

with $Y_{i,j,t} = \begin{cases} 1 & \text{if article about firm } i \text{ on day } t \text{ in } \textit{WSJ} \\ 0 & \text{if article about firm } i \text{ on day } t \text{ in } \textit{NYT} \end{cases}$

- *Political Alignment* = % of Campaign contributions to Republicans/Democrats; Top 20th percentile political donor.

- Compare coverage between the two papers about same firm at same point in time.

- Control for Firm, Quarter, Firm $\times$ Quarter FE; 2 digit Topic FE; advertising; profits.

- Focus on most politically active firms to capture effect of politics.

- Compare coverage after acquisition of WSJ by News Corp (exogenous to firm characteristics).

- Study article length, type of news.

Coverage and political alignment between firm and newspaper
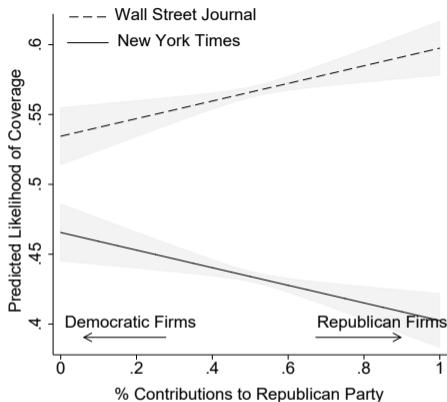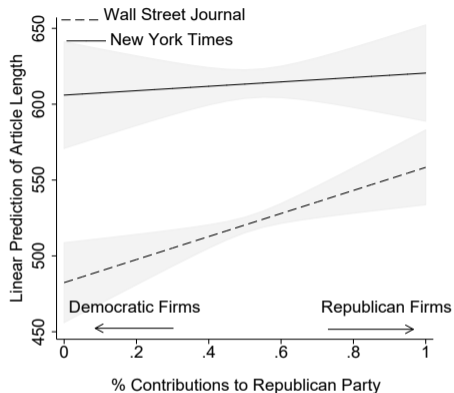

Figure 1A: Likelihood of Coverage

Figure 1B: Article Length

- 1 sd increase in contributions to Republicans increases likelihood of coverage by 3% and article length by 4% in WSJ relative to NYT.
- Results stronger for more politically active firms.

Likelihood of same day coverage of good versus bad news

$$\Pr(\text{Article in } j \geq 1)_{i,j,t} = \beta_1 \text{ Political Alignment}_{i,t} \times \text{ Good/Bad News}_{i,k,t}$$
$$+ \beta_2 X_{i,t} + \text{Firm} \times \text{ Quarter FE} + \varepsilon_{i,j,t}$$
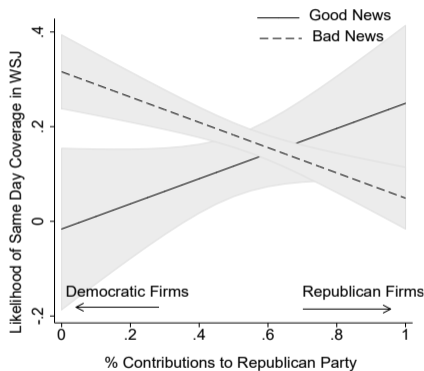
Fig 2A: Likelihood article published in WSJ
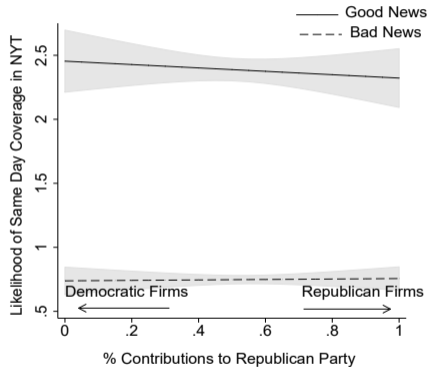
Fig 2B: Likelihood article published in NYT

- 1 sd increase in Republican donations for average number of negative words decreases likelihood by 12% relative to mean.

Tone of Coverage

Empirical Specification

Using **daily coverage of largest 100 listed firms** in the *Wall Street Journal* and *New York Times* between 1990-2016, we estimate the following:

$$Tone_{i,j,t} = \beta_1 WSJ_{j,t} \times \text{ Political Alignment}_{i,t} + \beta_2 X_{i,t} +$$

$$\text{Firm} \times \text{ Quarter FE} + \text{ Paper} \times \text{ Quarter FE} + \text{ Topic FE} + \varepsilon_{i,j,t}$$

- Tone = Positive Words/Total Words; Negative Words/Total Words; (Positive-Negative)/(Positive+Negative)

- *WSJ* = 1 if Wall Street Journal; 0 if New York Times.

- Firm $\times$ Quarter FE and Paper $\times$ Quarter FE absorb variation in coverage due to firm/paper idiosyncratic factors.

- Focus on firms at the political extremes.

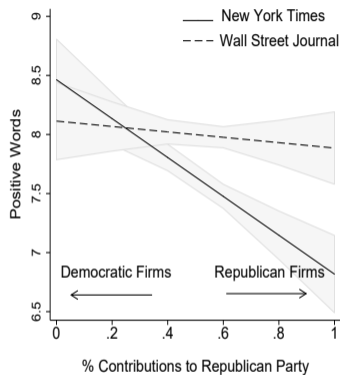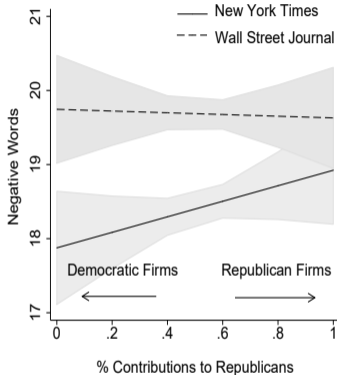# Tone by political alignment

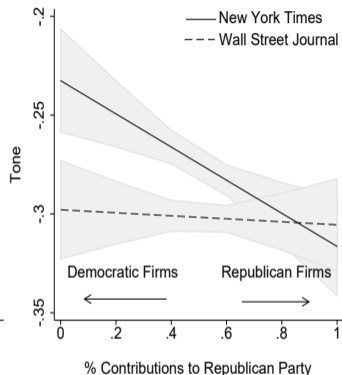
Fig 3A: Positive Words

Fig 3B: Negative Words

Fig 3C: Tone

- For a firm at the mean level of contributions to Republicans an article published in the NYT includes 10% fewer positive words than the WSJ.

News Corporation acquisition of *The Wall Street Journal*

- Compare likelihood and tone of coverage between 1990 to 2008 (Pre-News Corporation) and 2008 to 2016 (Post-News Corporation).
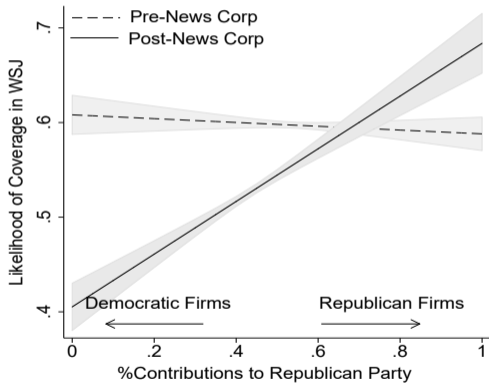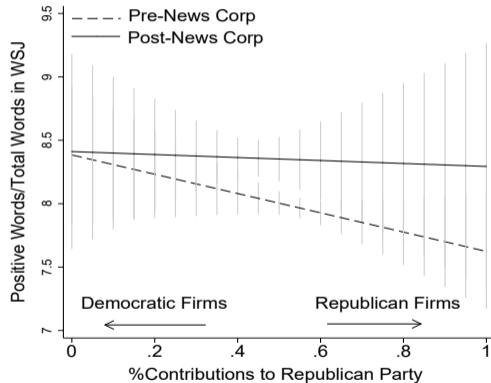

Fig 4A: Likelihood of Coverage

Fig 4B: Positive Tone in WSJ

Additional Robustness

- Subsample of articles written by same journalists who switch jobs between both papers to control for Journalist FE.

- Subsample of articles on same firm on same day in both newspapers - tone differences not driven by newspapers covering different firms/topics.

- Similar results if articles restricted to earnings topic, financial sections - not driven by political news about firms.

Disagreement in news and abnormal trading volume

Disagreement in news and trading

$$Abnormal\ Volume_{i,t} = \beta_1\ Disagreement_{i,t} \times Top\ Political\ Donor_{i,t} + \beta_3 X_{i,t} + Firm \times Year\ FE + \epsilon_{i,j,t}$$

- Restrict sample to firms with exactly two articles on a given day in either paper, to control for newsworthy events.

- Compare firms with two articles in one paper (No Disagreement) to firms with one article in each paper (High Disagreement).Also use difference in tone of coverage between papers.

- Compare abnormal volume for Top Political Donors - unlikely that events that cause abnormal volume occur more for top donors.

- Control for total articles in all news outlets on a given day, length of articles, absolute returns, lagged absolute returns, lagged abnormal volume, Firm × Year fixed effects.

Polarization and trading volume

$$Abnormal\ Volume_{i,t} = \beta_1\ Disagreement_{i,t} \times\ Top\ Political\ Donor_{i,t} + \beta_3 X_{i,t} +\ Firm \times\ Year\ FE + \epsilon_{i,j,t}$$

- *High Disagreement*=1 if 1 article in each paper; 0 if both articles in 1 paper.
- *Absolute value of difference in tone* is the difference in tone between the papers.
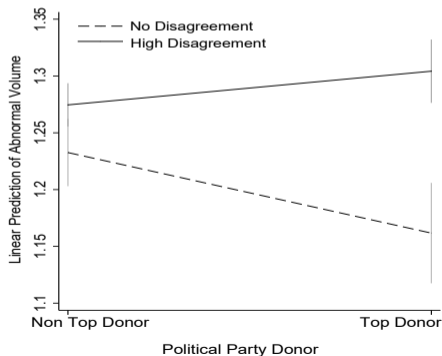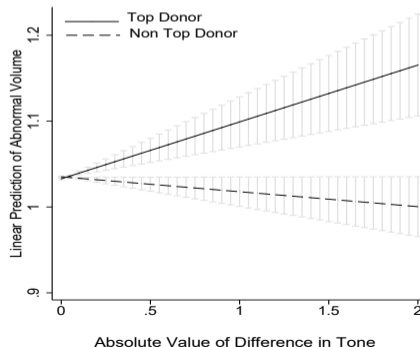

Fig 5A: Disagreement in coverage

Fig 5B: Difference in Tone

Readership and Investor Herding

Do individual investors respond to the news?

- Match zipcode of individual investors to newspaper circulation data in that zipcode to identify which newspaper is more likely to be read.

- Do investors trade more when news is printed in the newspaper they are likely to read?

- Results
  1. Investors trade more in a stock when news about that stock is reported in the paper they are more likely to read, but not if reported in the other paper.
  2. Investors trade in the same direction as other investors who read the same newspaper.

In summary

- Newspapers cater to their readership even when covering financial news events, which do not lend themselves to partisan interpretation.

- Politics induced disagreement between news sources increases trading volume.

- Political polarization affects trading behavior by segregating information sets of investors.