Discussion on

Do Chinese Social Media Delineate the Optimistic Bias of Traditional Media?

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Summary

- Research Question
  - whether social media (SM) <u>delineate</u> the bias of traditional media (TM) by supplying less biased information to the market in China

- Baseline result
  - the association between TM tone and SM tone is weaker when <u>TM tone is positive</u>

- Market reaction result
  - the stock return response to the TM tone is significantly reduced when it deviates positively from the SM tone.

- Conclusion: social media can serve as a benchmark against newspapers' <u>reporting bias </u>in China.

Overall comments

- The topic is interesting
  - TM in China are optimistically biased (e.g., Piotroski, Wong, Zhang 2015; 2017; Qin, Strömberg,Wu 2018)
  - SM provide value-relevant information in democratic regimes (e.g. Blankespoor et al., 2013; Bartov et al., 2018)
  - It is important to understand whether social media in China, i.e., a different regime, can provide useful information to the market

- Setting is unique
  - Use comprehensive data of TM and SM covering 3,000 Chinese listed firms
  - 146 million posts of a social media from *EastMoney* Stock Message Board (Guba)
  - Nearly 4 million newspaper articles, 162 unique newspapers

Overall comments

- Issues
  - Concept
  - Design
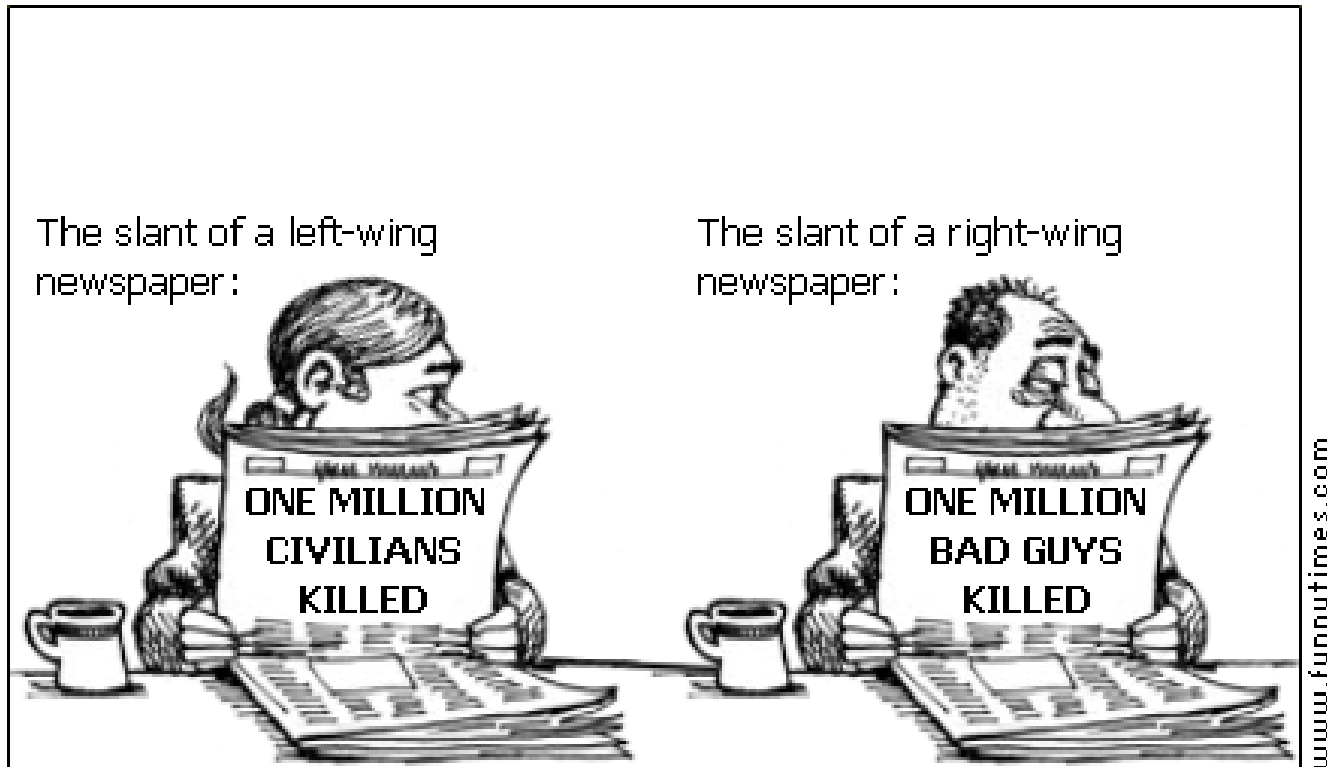 - H1
- Suggestions

What is media bias?

- Media bias could refer to
  - Selected coverage (coverage bias)
  - Biased reporting (reporting bias)

Coverage bias

Reporting bias

What is TM bias in China

- "…, we assume that a positive tone reflects the government's preference to either suppress negative information (that is, only good news events are covered) or inject a positive bias in the news industry's coverage of listed firms."
  - Piotroski, Wong, Zhang 2017 (JLE, p.184)

- So the TM bias in China is also about
  - coverage bias (cover only good news events)
  - reporting bias (add bias to bad news events)

What does this paper do?

- The topic of the paper is about whether SM <u>delineate</u> the positive bias in TM.

- It is not very clear what "delineate" means
  - (1) SM correct the coverage bias in TM?
  - (2) SM correct the reporting bias in TM for a given event?

- The paper seems talking about (2)
  - The paper talks a few times about reporting bias in TM for underlying events
 - but their results could be driven by (1)

Design

- The paper measures TM tone and SM tone for <u>the same firm on the same day</u>
  - This helps ensure that TM and SM cover the same events
  - This is important if the story is about SM delineates the reporting bias in TM

- The paper defines TM Bias = TM tone – SM tone
  - One implicit assumption is that TM & SM cover the <u>same events</u>
  - by definition Tone = News Event + Bias

Design

- The problem is that measuring SM tone and TM tone for the same firm on the same day is not adequate to control for news events
  - The difference in SM & TM tone can still reflect difference in (1) coverage bias and (2) reporting bias for a given event

- Let's look at the distribution of the tone
  - Almost 80% of TM tone is positive
  - Almost 90% of SM tone is negative

Design
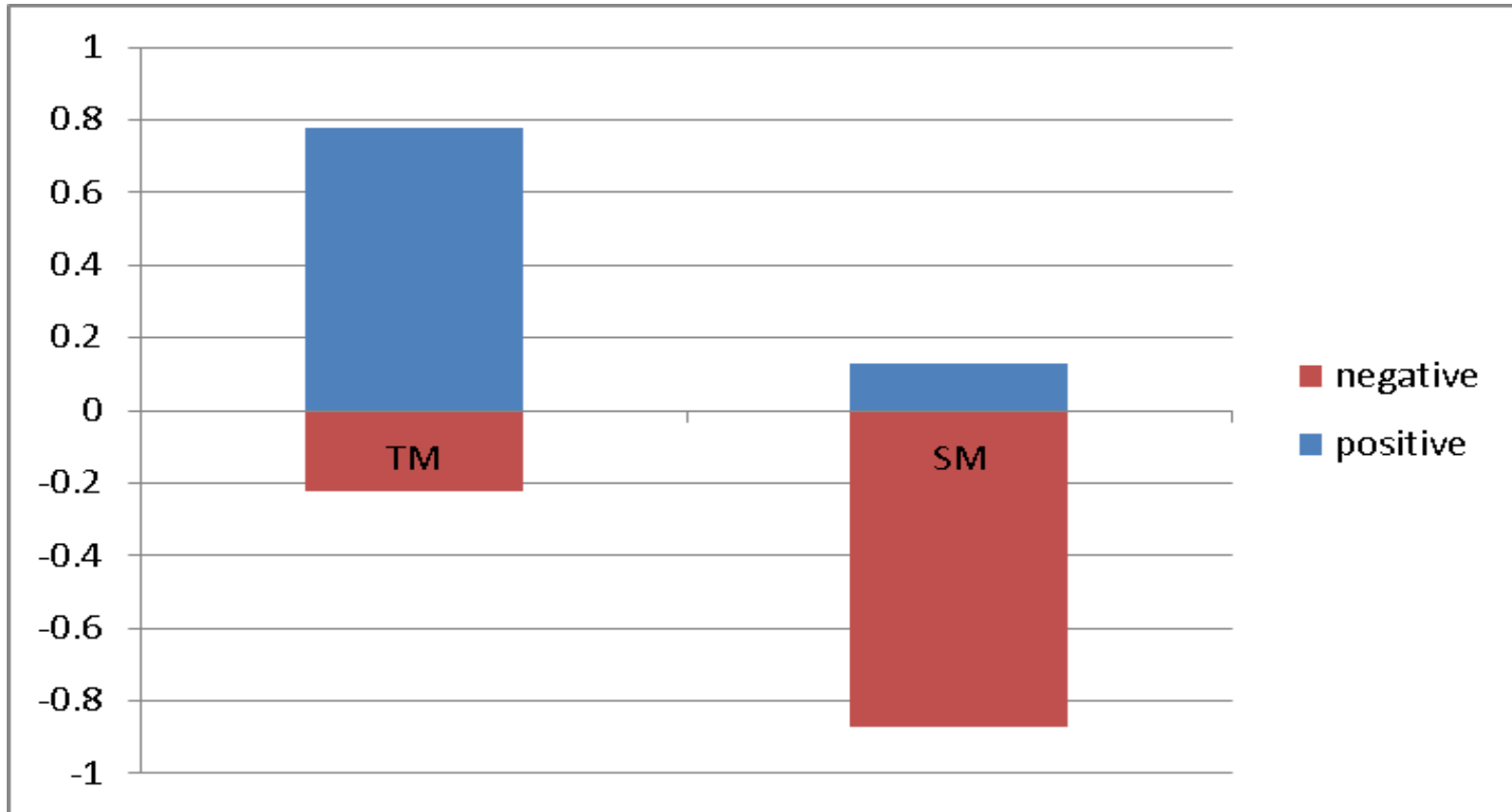
- Is the difference due to reporting bias?
- Is the difference due to coverage bias?

Design

- Coverage bias: TM and SM can cover different events, even for a same company on a same day.

- Example: BYD, a electric car maker in China
  - TM coverage vs SM coverage on 3/3/2015

BYD

- ## Newspaper coverage on 2015-03-03

News Titles	Date	Newspaper
从比亚迪K9"远嫁"日本看酸葡萄心理 (BYD exported buses to Japan)	2015-03-03	北京商报
比亚迪纯电动公交 登陆武汉 (BYD electric buses debut in Wuhan)	2015-03-03	深圳商报
比亚迪全新3系集智升级 (BYD 3 series technology upgrade)	2015-03-03	北京晨报

  - This may be an incomplete list

- ## SM coverage (from GUBA)

Date	Total Posts	Positive Posts	Negative Posts	Neutral Posts
2015-03-03	145	53	70	22

  - Only 5 posts are about BYD exporting buses to Japan, 80% of the posts discussed or tried to predict stock price performance

H1

- H1 argues that when <u>TM tone is positive</u>, TM is more optimistically biased
  - To support this argument, the paper further argues the <u>cost</u> of bias is <u>lower</u> when <u>underlying event is positive</u>

- Appendix I shows that TM bias monotonically increases in TM tone
  - This appears to support the above argument for H1
  - The problem is that <u>TM Bias = TM tone – SM tone</u>, where TM tone could be based on a positive event but SM tone could be based a negative event

Appendix I

Traditional Media Tone and Traditional Media – Social Media Tone Difference

Traditional Media Tone Decile	Mean of TM Bias (Traditional Media Tone- Social Media Tone)	Standard Deviation	Frequency	
1	-0.3794	0.3760	98,421	▲
2	0.0287	0.3535	97,206	TM Negative
3	0.2889	0.3410	97,943	TM Positive
4	0.4654	0.3279	94,736	▼
5	0.6061	0.3314	96,345	
6	0.7229	0.3316	97,796	
7	0.8421	0.3340	97,993	
8	0.9648	0.3337	98,644	
9	1.0683	0.3323	97,264	
10	1.1415 → SM Negative 0.3294		94,634	
Total	0.5732	0.5722	970,982	

- A large bias could capture a large coverage bias, not reporting bias
- This supporting H1, but is confusing because H1 is talking about reporting bias

Suggestions

- Clarify the objective of the paper
  - is it about SM correcting coverage bias or reporting bias?

- If this is about correcting reporting bias, need to control for the underlying events

- Focus on a specific news event announced by firms, e.g., earnings news, where you can clearly define good or bad news
  - Add a filter to the newspaper title and SM posts to make sure they are both about the same news events

- It would be interesting to know whether SM correct the reporting TM bias in this refined setting

Suggestions

- If the paper is about whether SM delineate <u>coverage bias</u>
  - this is interesting too
  - but the paper is currently talking about reporting bias
  - may still need to distinguish coverage bias from reporting bias.

Thank You and Good Luck!