

Discussion of the paper
*Market manipulation and suspicious stock
recommendations on social media*
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▷ Abnormally high number of messages on Twitter \Rightarrow Abnormal returns (AR): large price increase on the event day, and sharp reversal on the next trading week.

▷ Findings consistent with pump-and-dump schemes where fraudsters/promoters use social media to temporarily inflate the price.

Evidence:

- Stronger AR: (i) when the tweeting activity is generated by stock promoters ; (ii) users tracking pump-and-dump schemes has a significant and opposite effect.
- Strong price reversal: (i) when the tweeting activity is generated by stock promoters users tracking pump-and-dump schemes ; (ii) low significance for firms with corporate social media accounts.

▷ Calls for:

- 1) Higher control over the information published on social media.
- 2) Better education for investors seeking trading opportunities.

- ▶ New topic: First pump-and-dump scheme analysis applied to social media.
- ▶ Thorough investigation on Twitter activity (knowledge of SM, analysis of pump-and-dump accounts, links to websites, etc.) and pump-and-dump schemes (SEC litigation study, literature review on this topic, etc.).
- ▶ Well-written paper, pleasant to read, detailed examples (examples of tweets).
- ▶ Recent, appropriate and broad literature review.
- ▶ Applicable results: militate in favor of more demanding regulations.

- ▷ Other papers evidencing the significant link between financial news on Twitter (content and frequency) and market returns: Mao, Counts, Bollen (2011) and Bollen and Mao (2011).
- ▷ Link your results with theory: Price Pressure Hypothesis (PPH: news \Rightarrow temporary buying pressure and reversal to the fundamental value in a short period) vs. Information Diffusion Hypothesis (IDH: price change is due to information diffusion + no price reversal in a short period), see e.g., Zhang, Song, Shen, Zhang (2016, Economic Modelling).
- ▷ Good idea to control for liquidity, especially for Small/Micro-caps. You could refer to the literature on reduction in information asymmetry:
 - Blankespoor, Miller, White (2014, Accounting Review): firm-initiated news via Twitter is associated with lower abnormal bid-ask spread.
 - Foucault, Hombert, Rosu (2016, JF): stocks with more informative news are more liquid even though they attract more activity from informed high-frequency traders.

However, you may try using the Bid-Ask spread: see Fong, Holden, Trzcinka (2017, Review of Finance).

- ▷ Good idea to control for the sentiment. You could refer to Ranco, Aleskovski, Caldarelli, Grcar and Mozetic (2015, PloS ONE): they find a significant dependence between the Twitter sentiment and abnormal returns during the peaks of Twitter volume.
- ▷ Additional robustness check #1: You may control for lagged volume to rule out the possibility of informed trading from institutional investors. See Hendershott, Livdan and Schurnhoff (2015, JFE) who show evidence that institutional order flow increases more than five days prior to the announcement of good news and decrease more than five days before bad news.
- ▷ Additional robustness check #2: Be careful with Bloomberg prices. Bloomberg use BVAL source which is a Mark-to-model pricing. You may try performing the same analysis focusing only on BGN prices (formula: `BDH(Ticker@BGN;Mnemonic;Date1;Date2)`) or using CRSP.

- ▷ Additional analysis #1: Consider separately positive and negative news from pump-and-dump accounts and their impact on returns. See Heston and Sinha (2015, WP) who find that positive news stories increase returns quickly, but negative stories have a long-delayed reaction.
- ▷ Additional analysis #2: Do pump-and-dump news significantly increase the volatility (likely). See Glasserman and Mamaysky (2017, WP) who find that an increase in the unusualness of news with negative sentiment predicts an increase in stock market volatility.
- ▷ Additional analysis #3: Although the volumes are not significantly impacted by abnormal events, have you tried to perform the same regression on volumes? See Peress (2014, JF): trading volume falls by 12% on newspaper strike days.

- ▷ Could be interesting to see the distribution of the number of tweets of the companies involved.
- ▷ Perform a Normality test (e.g., Shapiro-Wilk) to justify the use of the Corrado test.
- ▷ Justify the use of your independent variables (p.16). Precise in the text that there is heteroscedasticity and you use White standard errors.
- ▷ Twitter is no longer 140 characters, but 280 (p.9). You forget to cite Table 5 p.13.