TEXTUAL DISCLOSURES AND RETAIL INVESTORS

Ankit Jain[1], Abdul Khizer[2], and Ramabhadran S. Thirumalai[3]

INTRODUCTION

Prior evidence suggests that textual disclosures provide incremental information to investors as all value-relevant information cannot be presented in financial statements (Davis, Piger, and Sedor 2012; Li 2010). However, there is no formal external auditing requirement for these disclosures, and it is difficult to regulate them (Cazier, Merkley, and Treu 2019). Thus, managers often mislead investors by increasing the complexity of the annual reports when the performance is poor (Li 2008) or strategically employing overly optimistic or pessimistic tone around important corporate events (Huang, Teoh, and Zhang 2014). The experimental evidence from Tan, Wang, and Zhou (2014) suggests that less sophisticated investors are more susceptible to the framing effects of language. The current study empirically examines how less-sophisticated investors interpret textual information.

Most of the early evidence on the behavior of retail investors show that retail investors are unsophisticated, behaviorally biased, and otherwise uninformed. They show that retail investors have lower ability to process information as compared to institutional investors (Tan, Wang, and Zhou 2014) and that they are more likely to be influenced by the poor readability of textual disclosures (Lawrence 2013). Thus, retail investors could make poor investment decisions by misinterpreting textual disclosures. However, the view that retail investors are unsophisticated and noise traders has been challenged by recent findings. Retail investors vastly outnumber institutions. They are not homogenous and some of them could be informed. Kelley and Tetlock (2013 & 2016) argue that retail investors may have unique information about the firm either from geographical proximity, relationships with employers, or additional insights into customer tastes. Moreover, unlike

[1] Email: a.jain@business.uq.edu.au, School of Business, University of Queensland, Room 403, Colin Clark Building, St. Lucia 4067, Brisbane, Australia
[2] Email: abdul_khizer@isb.edu, Indian School of Business, Gachibowli, Hyderabad 500111, India
[3] Email: ram_thirumalai@isb.edu, Indian School of Business, Knowledge City, Sector 81, Mohali 140306, India

institutional investors, retail investors do not suffer from principal-agent problems. Thus, it is possible that some retail investors are not prone to the framing effects of language. Therefore, it is not clear ex-ante if retail investors are influenced by the language of textual disclosures.

Prior studies examining the trading of retail investors have employed data either from a single broker or used an indirect proxy. Lawrence (2013) employs data on the trades and portfolio positions of individual investors from a single broker for the period 1994 to 1996. Baginski, Demers, Kausar, and Yu (2018) use the trade size as a proxy for small investors. These proxies could lead to biased inferences about the population of retail investors (Kelley and Tetlock 2013). This concern is motivated by the fact that large investors split their orders into smaller trades (Loughran 2018), and therefore employing trade size to proxy investor category could lead to misclassification of traders. We use unique transaction-level data from the stock market in India that enables us to employ a much cleaner investors' classification scheme.

DATA AND SAMPLE CONSTRUCTION

We analyze earnings conference call transcripts to capture textual disclosures as they are one of the most important avenues through which the management communicates significant information to investors (Brown, Call, Clement, and Sharp 2017; Li, Minnis, Nagar, and Rajan 2014; Frankel, Mayew, and Sun 2010). Although conference calls are voluntary in India, the number of Indian companies hosting these calls has risen significantly in recent years.[4] The Indian capital market regulator, Securities and Exchange Board of India (SEBI), mandates the disclosure of conference call transcripts to the public.[5] We obtain the transcripts of earnings conference calls from ProwessIQ, Capital IQ, and Researchbyte[6] website. We focus on those firms which were part of the S&P BSE 500 index during the period 2004 to 2019. We collect accounting and daily stock trading data from Prowessdx.

---

[4] "*Number of companies hosting earnings calls rises by 40% in five years to FY18*" – By Kiran Kabtta Somvanshi, Economic Times (November 27, 2018). (Link: https://economictimes.indiatimes.com/markets/stocks/news/number-of-companies-hosting-earnings-calls-rises-by-40-in-fy18/articleshow/66820555.cms?from=mdr)

[5] Provisions of Regulation 30 of Listing Obligations and Disclosure Requirements Regulations, 2015

[6] Researchbyte (Link: https://www.researchbytes.com/) is one of leading websites that provides information on annual reports, earnings conference calls, management interviews, and investor presentations for Indian companies.

Additionally, we employ a rich tick-by-tick transaction data from the Bombay Stock Exchange (BSE)[7] in India. The dataset has all orders and trades during the period from January, 2009 to March, 2016. It also contains the categories of traders and their masked identity. This allows us to identify trades of different categories of investors easily. We combine this transaction-level data with the earnings conference call data.

We count the frequency of optimistic and pessimistic words in earnings conference call transcripts by employing a financial dictionary of optimistic and pessimistic words from Loughran and McDonald (2011).[8] We define *TONE* as the difference between the count of optimistic words and pessimistic words and scale it by the total count of optimistic words and pessimistic words.

There are 8,273 quarterly earnings conference call transcripts from 559 unique firms during the period 2004 to 2019. We find that on average there are 7,032 words in the earnings conference call transcripts out of which 80 words are optimistic and 86 words are pessimistic. Thus, *TONE* on average is pessimistic (negative).

RESULTS

We start by examining if *TONE* contains some information about future operating performance. As firms' performance cannot be completely captured by the quantitative disclosures in the financial statements, managers could employ *TONE* to provide a signal of future firms' performance (Davis, Piger, and Sedor 2012; Li 2010). However, Huang, Teoh, and Zhang (2014) provide strong evidence that managers strategically employ *TONE* to mislead investors. We analyze the association of *TONE* with future earnings and sales growth and find that *TONE* is negatively associated with future earnings in the next quarters. The negative association is both statistically significant and economically meaningful. Specifically, we find that when *TONE* increases from 25th percentile to 75th percentile, next quarter's earnings decreases by 5.7 percent of its average value. Similarly, we find that more optimistic *TONE* in the current quarter predicts lower sales growth in the next quarter. This evidence suggests that managers use optimistic *TONE* to obfuscate poor future performance.

---

[7] The Bombay Stock Exchange (BSE) is the world's tenth-largest stock exchange in terms of market capitalization.
[8] This financial dictionary contains 354 optimistic words (e.g. "*achieve*", "*benefit*", "*enhance*") and 2,355 pessimistic words (e.g. "*adverse*", "*damage*").

Next, we investigate how investors react to *TONE* by looking at the stock price changes around the earnings conference call disclosure date. We calculate abnormal returns as the difference between daily stock returns from Prowess and market returns. We use the S&P BSE 200 returns as a proxy for market returns. We calculate cumulative abnormal returns (*CAR*) across the three short-term windows *[-1, +1]*, *[-1, +3]*, and *[-1, +5]* where 0 is the date when the conference call transcripts are made available to investors. We find a positive association between *TONE* and *CAR*, which is statistically significant at the 1 percent level. Specifically, we find that as *TONE* increases from 25th percentile to 75th percentile, *CAR [-1, +1]* increases by 1.4 percent. Thus, the association is also economically meaningful. Thus, investors react positively to optimistic *TONE*. While *TONE* does not predict positive future operating performance, it predicts positive stock returns in the short-window around the earnings conference calls. This finding suggests that investors are misled by *TONE*.

Finally, we analyze the trading activities of retail investors separately. We are interested to know if retail investors are the net buyers or the net sellers when *TONE* is more optimistic. We identify all the trades executed by the retail investors from the BSE tick-by-tick dataset. If retail investors are misled by *TONE* of the earnings conference call, then we should expect retail investors to be net buyers of the stock when *TONE* is more optimistic. However, we find that retail investors are net sellers of the stocks when managers employ more optimistic *TONE*. Furthermore, we find that large non-institutional investors' ownership decreases when *TONE* is more optimistic while there is no effect on small non-institutional investors' ownership. This evidence suggest that the large retail investors may not be misled by *TONE*. Further research should investigate the different trading behavior of small and large retail investors.

CONCLUSION

Most of the early evidence on the behavior of retail investors show that retail investors are unsophisticated, behaviorally biased, and otherwise uninformed. Using rich and transaction-level data from the stock market, we examine how retail investors react to textual information which is a noisy signal about firm fundamentals. Our evidence suggests that the managers use linguistic tone in the earnings conference call to mislead investors by obfuscating future poor performance. However, the average retail investor is not necessarily misled. Further research could examine the different trading behavior of small and large retail investors.