HOW QUICKLY DO MARKETS LEARN? PRIVATE INFORMATION DISSEMINATION IN A NATURAL EXPERIMENT

By Jackson, Jiang, Mitts

Discussion by

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Overview

- Nice (but unfortunate) experiment to study information use and map it to how investors might trade while information is being incorporated
  - Exploitation of information is “small” in some sense
  - Paper precisely pulls out interesting dispersion of duration of private window

- My comments are about what the authors do with these facts in the last third of the paper
- I think there is a fundamental contribution to how we understand information asymmetry across firms that the authors could jump on…
  - Comments are largely big picture: Hopefully helpful

Big Picture on Contribution

1. Studies of “unfair” information releases by government or surveys

2. Studies of extent to and impact of information asymmetry

3. Studies of information entropy/incorporation

Big Picture on Contribution

1. Studies of “unfair” information releases by government or surveys
   - Studies of this EDGAR pre-release
     - Jackson and Mitts
     - Rogers, Skinner, Zechman
   - Document the abnormal return and uptake in trading volume
   - Others Set 1: Tips and leaks to specific
     - Tipping papers (e.g., Irving et al RFS 2007) about analysts reports tips emerging irregularly
     - Cieslak, Morse, Vissing-Jorgensen (2014): Information coming out of little-known Board of Governors meetings
   - Others Set 2: Set of leak recipients
     - Michigan Survey of Consumers pre-release (Hu, Pan, Wang, 2014)
     - Federal Reserve: FOMC information via news lockup pre-release (Bernile, Hu, Tang 2014)

Timing of price impact

What is different here is:

- the slowness of price incorporation, when information is not just a “tip” to a select group.
  - Those on PDS stream know others all informational advantaged as well
  - Why not trade immediately?

- Furthermore,
  - 92% of releases have no trades!
    - (Authors should do a lot more of incorporating these into the analysis of price impact from information acquisition)
  - And even those that do trade, advantage leads to only 0-10 basis points in the time between the PDS and edgar post.

Big Picture on Contribution

1. Studies of “unfair” information releases by government or surveys
   - But this is not the objective here… already done
   - Authors instead want to use this as an experiment of “how markets process new private information”

2. Studies of extent to and impact of information asymmetry

3. Studies of information entropy/incorporation

Big Picture on Contribution

1. Studies of “unfair” information releases by government or surveys

2. Studies of extent to and impact of information asymmetry
   - Studies of (generally some combination):
     - How much private information exists (hard) and rents
     - How private information informs market pricing
   - Accomplished through:
     - Model based: Measurement of information asymmetry from models & testing
     - Event based: Studies of information advantage events

3. Studies of information entropy/incorporation

How much Information Asymmetry is there in a firm or across firms?

- An important measure of information asymmetry is the price impact of trade as a measure
- Collin-Dufresne and Fos (2014) however:
  - Take insider trades as being at least sometimes informed privately
  - Show that measures of information asymmetry measure low on the days that insiders trade.
    - A problem

- Opportunity here… back to the drawing board
  - I want to know something, anything, about what drives information asymmetries and what resolves them
  - Use the experiment not as an opportunity to study a private event but as an opportunity to understand what in the cross section predicts needing more informed signals

Trying to understand how specific information gets into prices:

- Tetlock (2014) reflects on Roll's presidential address
- At a daily frequency, market-level factors explain only 21% of the variance of firm-level returns
- There is a lot of fluctuations going on
- We still don't have a very good sense about mechanisms

- One other point from Tetlock that is relevant here…
- News is slow
  - Is the frequency of people paying attention low? Strange in this high frequency world
  - I think this reinforces the next idea: joint learning

Big Picture on Contribution

1. Studies of “unfair” information releases by government or surveys
2. Studies of extent to and impact of information asymmetry
3. Studies of information incorporation/decay

- EDGAR studies:
  - Drake Roulstone Thornock (2014)
    - The unexpected earnings information in EDGAR releases carries price-valuable information (and relates to volume)
  - Loughran nd McDonald (2015)
    - Small % of EDGAR volume happens on information days.
    - Hard to understand price impact of cross sectional information

But here, we know differing volume of interested informed parties (including the zero trades observations) in particular releases

Flow of this paper

- Document the timing of profits…
  - Increase with length of the private window, but mainly realized in the predicted length of the window
- Document the abnormal return relative to the total abnormal return.. i.e., how much of the total AR is captured in the private information period.
- Then introduce the longer period and the idea of strategic trading…
  - Ask when there is a longer delay period, are the early informed able to traded strategically such that they gain more (nice evidence that the later informed overshoot)
  - Answer: Yes

Strategic Trading vs Jointly getting Informed?

- I am not sure I buy the strategic trading to lower price impact of their trades in this setting (model of Caldentey and Stacchetti 2010)
  - Theirs is a model of a solo informed, hiding information and trading strategically to not reveal when information is fully out
  - This matches the dynamics here, but
  - Here the informed are probably those that get stream from Bloomberg / Thomson Reuters (?)
    - Not solo informed
- Back to the main question: why not trade fully immediately?
- Authors answer: because takes time to write brief
- But the rest of the market will be also filled with informed traders in 90 seconds

Strategic Trading vs Jointly getting Informed?

- I'm not convinced on the lack of trading immediately when others informed – like pre-release of FOMC or Michigan Survey of Consumers

- Rather, time needed to read processed signals from other investors

You have (or can have) measures of

- how much private trading there is in the private information period
- how much information advantage these traders capture of ex post return
- how much surprise in the filings (i.e., in the accounting data))
- Illiquidity, idiosyncratic volatility, other information asymmetry measures

Speak to fundamental questions in the cross section or panel:

- Mechanisms of information acquisition (Tetlock)
- Dispersion of different types of information NEEDED for updating
  - Value of individual private information versus multiple signals/consensus

Summing up

- Nice experiment to learn in an area (understanding information asymmetry across firms) which is proving elusive
- My preference: tilt the paper against what these particular traders gain and the picture of strategic trading
- And instead embrace the limited trading and small effects as a way to measure the dispersion of need for information updating, gains from signals, and how these things interact with the information environment of the firm and the degree to updating information in the Edgar filing