Earnings Uncertainty and Attention
A discussion

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Relationship between earnings uncertainty and attention

Objective and analysis

- How do investors allocate attention between firms with different uncertainty in earnings?
- **Hypothesis**: Investors allocate more attention to firms with high earnings uncertainty.

- **Measures of earnings uncertainty**: Ratio of uncertain words to total words in 10-K/10-Q filings of US firms between 1995 and 2018 and historical earnings volatility.
- **Measure of attention**: Google search for a key word scaled by its time series average.
- Regress abnormal search volume during the earnings week on earnings uncertainty measures.

Relationship between earnings uncertainty and attention

Result

- Firms with high ex-ante earnings uncertainty experience higher Google search activity around earnings release.
- Investors seek more information about high earnings uncertainty firms.

Relationship between attention and return volatility
Objective and analysis

- What is the effect of higher attention on return volatility?
- **Hypothesis**: There is an increase in volatility when investors pay more attention to earnings.

- **Measure of volatility**: Sum of squared daily returns in the month of earnings release.
- **Measure of earnings uncertainty/volatility**: Standard deviation of quarterly income scaled by total assets, of previous 8 quarters.
- Regress return volatility on measures of earnings uncertainty.

Relationship between attention and return volatility
Result

- Strong association between earnings uncertainty and stock return volatility during earnings release.
- Attention is the channel through which uncertainty about future cash flows increases return volatility.
- Also looks at effect on trading volumes and under-reaction of prices to earnings surprises when investors pay more attention to high uncertainty firms.

Interesting paper
Contribution

(a) Earnings uncertainty → (b) Investor attention → (c) Return volatility

- (a) → (c): Loughran and McDonald (2011)
- (b) → (c): Andrei and Hasler (2014)
- Kottimukkalur (2019): Ties all 3 together and shows that uncertain language can capture earnings uncertainty better than historical earnings volatility.

Capturing investor attention-I

- A lot of the ‘attention’ will be due to exposure.
- Counting the number of searches for specific firms. The number of investors searching would be larger for:
  1. Big companies (e.g. Walmart, Apple, Amazon)
  2. Companies with more dispersed shareholding
- Size and ownership concentration would affect the headcounts of *who pays attention*.

Capturing investor attention-II

- There can be two types of investors paying attention to firms.
  1. Those with exposure will want to devote attention to the most unncertain and volatile stocks
  2. Those with zero exposure and interested in placing bets will pay attention to firms which have high uncertainty, high volatility in a high liquidity environment.

Role of attention

- Link between uncertainty, attention and return volatility.
- Analysis finds a positive association between uncertainty-attention and between uncertainty-returns volatility.
- ‘Attention’ is missing in the second link.
- High earnings uncertainty firms exhibit greater stock returns volatility. Is this because of greater investor attention or something else?

Effect on returns volatility

- Regression of stock returns volatility on measures of earnings uncertainty (earnings vol, fraction of uncertain words etc).
- Earnings surprise, and the volatility of earnings surprise generate stock returns volatility.
- Use the ‘surprise’ component in the regression instead of earnings volatility.
- How will fraction of uncertain words fit here?

Miscellaneous

- Distinguish between calm and stress periods in the market
- Attention to what exactly?
- Theoretical model in appendix?

Can we do this for India?

- Are there similar annual or quarterly filings by listed companies that can be analysed?
- Do we know earnings release dates of all listed companies?
- The same list of 'uncertain' words can be used from the Loughran and McDonald (2011) paper.
- We should explore the feasibility of this kind of work for India.