What Moves Stock Prices?
The Roles of News and Trading Round-the-Clock

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Eric K. Kelley and Paul C. Tetlock
News, Trading, and Volatility All Coincide

- Example: HP announces low earnings and PC spinoff

- Does news or trading move stock prices?
Possible Reasons Why Stock Prices Move

• Public information ("News")
  – Example: HP announces unexpectedly low quarterly earnings at 4:10pm ET after the close of trading. Its stock price decreases by 10% almost immediately, despite very low or no trading volume.

• Informed trading ("Private Information")
  – Example: Knowing that there are few interested buyers, SAC Capital determines that HP will get a low price for its PC business. The firm decides to sell its entire $500M stake in HP, lowering its stock price.

• Noise trading ("Noise")
  – Example: Joe Smith, a buy-side analyst with a Harvard MBA, carelessly assumes HP’s currently low margins (from selling PCs) will persist in his valuation, producing an equity value of $20B instead of $50B. Joe advises his firm to sell its HP stock, lowering HP’s price.
Our Analysis

• Examine news and trading of individual US stocks
  – Focus on the years 2001 to 2010 (after Regulation FD)

• Compare the properties of stock returns and volume during regular hours to those in extended hours
  – 4 partitions: 7am; 9:30am (open); 4pm (close); and 6:30pm
  – Periods: Pre-market, regular, after hours, and overnight

• Measure market responses to Dow Jones newswires
  – Stock return variance and turnover (volume / outstanding)

• Distinguish the impacts of news and trading by looking at which coincides with price movements
12:16: Rumor of PC Spinoff and Autonomy Bid
2:55: Trading Halts
3:02: HPQ Press Release
3:12: Trading Resumes
5:00: Conference Call Begins
6:42: Needham downgrades HPQ to Neutral
1:18: Moody’s revises HPQ rating to negative

HP Price and Volume by the Minute
Does the HP Example Generalize?

- We use data on US stocks from 2001 to 2010 to scrutinize two main features of the example:

  1) Do stock prices respond in the same period as news occurs? *I.e.*, is return variance highest in this period?

  2) For news stories occurring outside normal trading hours, does volume mainly respond during the subsequent regular trading period? *I.e.*, when is turnover highest?
Responses to News in the Regular Period

Number of Periods After the News Occurs (period=0)

Increase in Turnover (in bp) After News in the Regular Period

Increase in Variance (in %) After News in the Regular Period

Turnover

Variance
Responses to News in the Pre-market

Increase in Turnover (in bp) After News in the Pre-Market Period

Increase in Variance (in %) After News in the Pre-Market Period

Number of Periods After the News Occurs (period=0)
Responses to News Overnight

Increase in Variance (in %) After News in the Overnight Period

Increase in Turnover (in bp) After News in the Overnight Period

Number of Periods After the News Occurs (period=0)
Responses to News After Hours

Increase in Variance (in %) After News in the After Hours Period

Increase in Turnover (in bp) After News in the After Hours Period

Number of Periods After the News Occurs (period=0)
Preliminary Conclusions and Implications

• Most news now occurs in extended trading hours
  – Attracts sophisticated traders who monitor the market continuously and rapidly process information
    • The fact that informed traders do not wait until 9:30am to trade suggests that their edge lasts only hours
  – Uninformed traders avoid extended hours markets

• It is relatively cheap to trade during regular hours
  – Attracts uninformed traders seeking to minimize costs