



News Analytics for Alpha Generation & Risk Management

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Leverage our 30+ years of Big Data and turning data into revenues & profits



Oliver Schmalholz

Oliver Schmalholz is the co-founder and CEO of News Quantified. With over 15 years of experience in the global technology and finance industries.



Jay Larmee

Jay Larmee has 25 years of application development experience in IT as well as nine years in the trading industry.

Turn Event Driven Signals Into Profits

7,266 daily news events for daily opportunities

1

Out-of the box
backtesting

2

Single dataset, no
need to overlay with
market data

3

Tick-level
accuracy

4

No programmers
needed

5

Extensive history as
far back as 1/1/2006

6

Variety of delivery
options

Why are News Analytics valuable?

News Quantified analyzed a **total of 25,285** unique US equities since 2006.

On an average day:

12

Stocks experience news events

49%

Experience higher volume

298

News impacted stocks with **>3x** normal volume

52

News impacted stocks with **>10x** normal volume

60

Experience a **>10%** price move to close

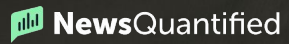
95


Metrics
per event

NewsWire Analytics: Business Wire, PR Newswire, Globe Newswire, Marketwired, Reg FD Required releases – earnings announcements, mergers & acquisitions, new product launches, officer changes, changes in company strategy, legal cases and settlements, regulatory actions

SEC EDGAR: Data derived from public filings

Additional publisher options: The Fly, Benzinga, Zacks (requires additional licensing)



The solution



Use the ultimate news analytics solution to generate alpha and manage risk in a single data set, no programmers needed

Historic data

Single record per news event allows extremely fast backtesting. Extended sessions + Main session datasets

95 Fields

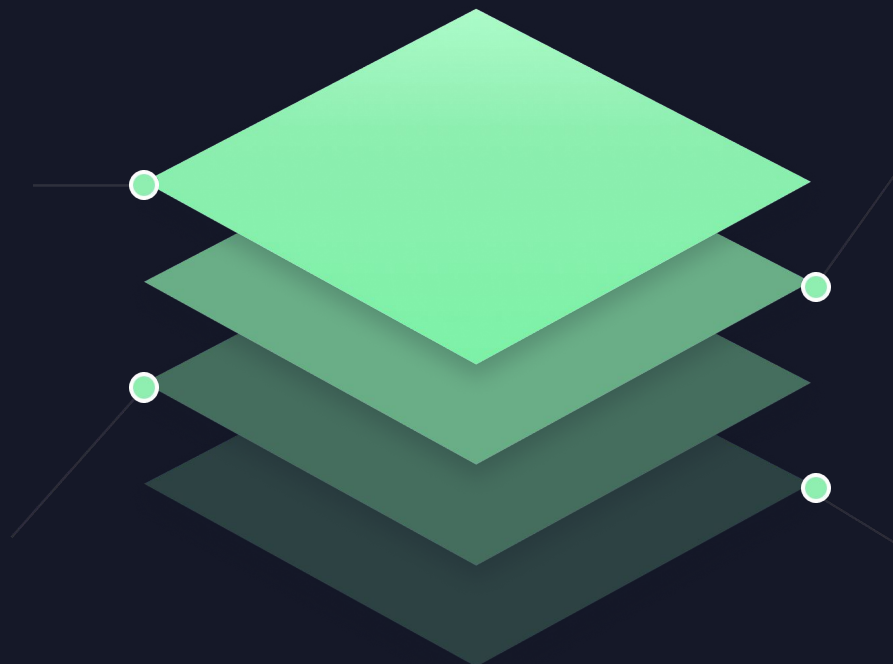
No need to overlay with market data to get tick-level precision for each news event

Return matrix

Quickly benchmark against a basket of similar news events with hold times from 1 day (intra-day) to one year.

Generate Alpha & Manage Risk

News Quantified users utilize the news analytics to 1) generate alpha and 2) manage risk better



News feeds turn
into structured data

Enrich

Calculate

Metrics
Benchmark

Delivery

Newswire Sources



Over 200 Event
Types



Full Market
Coverage



95 Metrics
(out of the box)



Custom
Alerts



Price, Volume +
Volatility Impact

News Analytics North America (US & Canada)



North American Coverage



North American Press Releases

filtered for mentions of public and private companies from PR Newswire, Business Wire, Marketwired US*, GlobeNewswire, Reuters One US Press Releases, Canada Newswire, PR Web, Accesswire, NewsFile, Filing Services Canada**



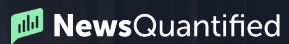
Event calendar & Earnings data*

Wall Street Horizon, Zacks



Premium Content*

TheFly, Benzinga, Dow Jones



Academic Study



Is After-Hours Trading Informative?



Shai Levi

Tel Aviv University



Joshua Livnat

New York University



Li Zhang

Rutgers University



Xiao Jun Zhang

University of California

Overview

Research Questions:

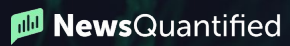
Is trading in the After-Hours or Pre sessions informative about returns in the subsequent Main session?

Is there drift beyond the subsequent Main session?

Research Design:

Examine the association of returns during the Main session with prior returns in the After-Hours or Pre sessions.

Repeat for earnings announcements, analyst recommendation changes and SEC filings.

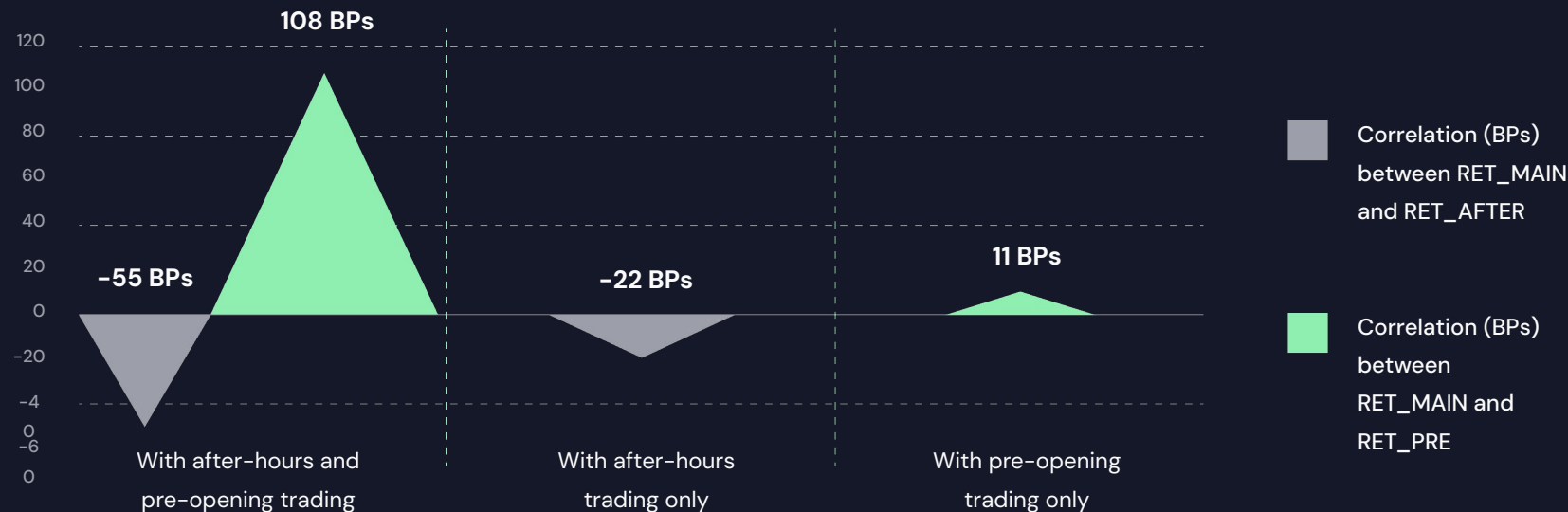


Results

Results

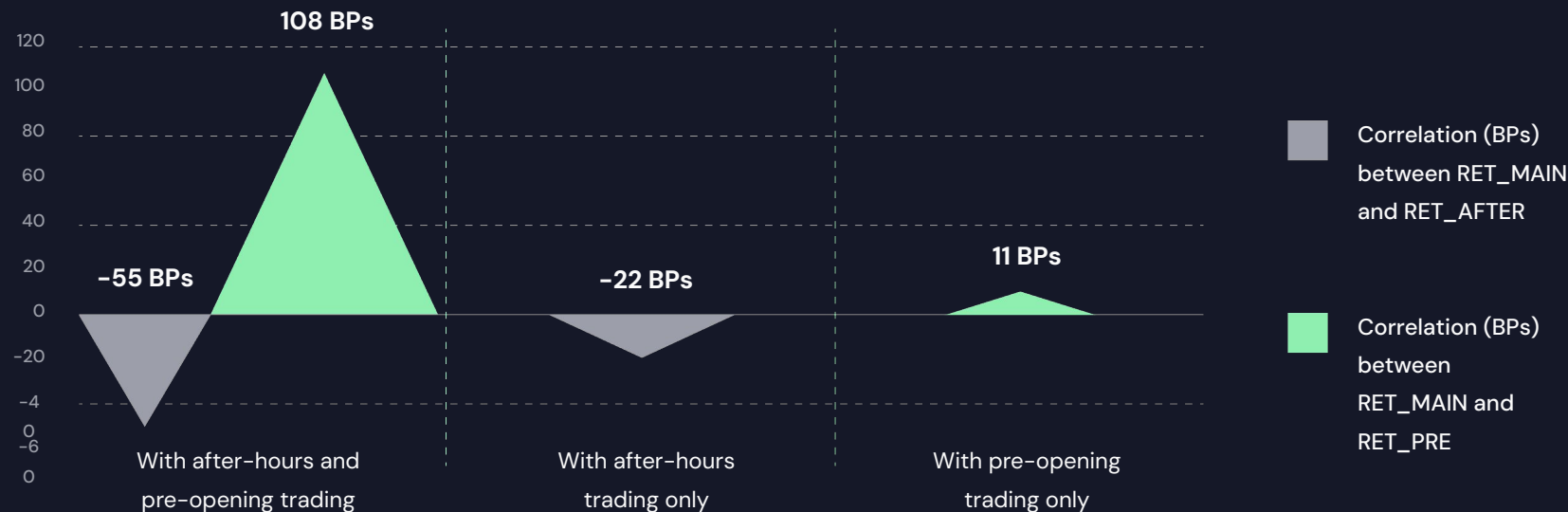
- ✓ On typical (non-news days) there is a **negative** correlation between after-hours or Pre trading and the subsequent Main session return.
- ✓ On news days such as earnings, analyst recommendation changes, and SEC filings, the correlation is **positive** and significant.
- ✓ The after-hour return, when earnings are announced, is **positively** associated with drift returns through the following quarterly earnings announcement.

All Firm-Days: The correlation between Main session return and After-Hours return/Pre return

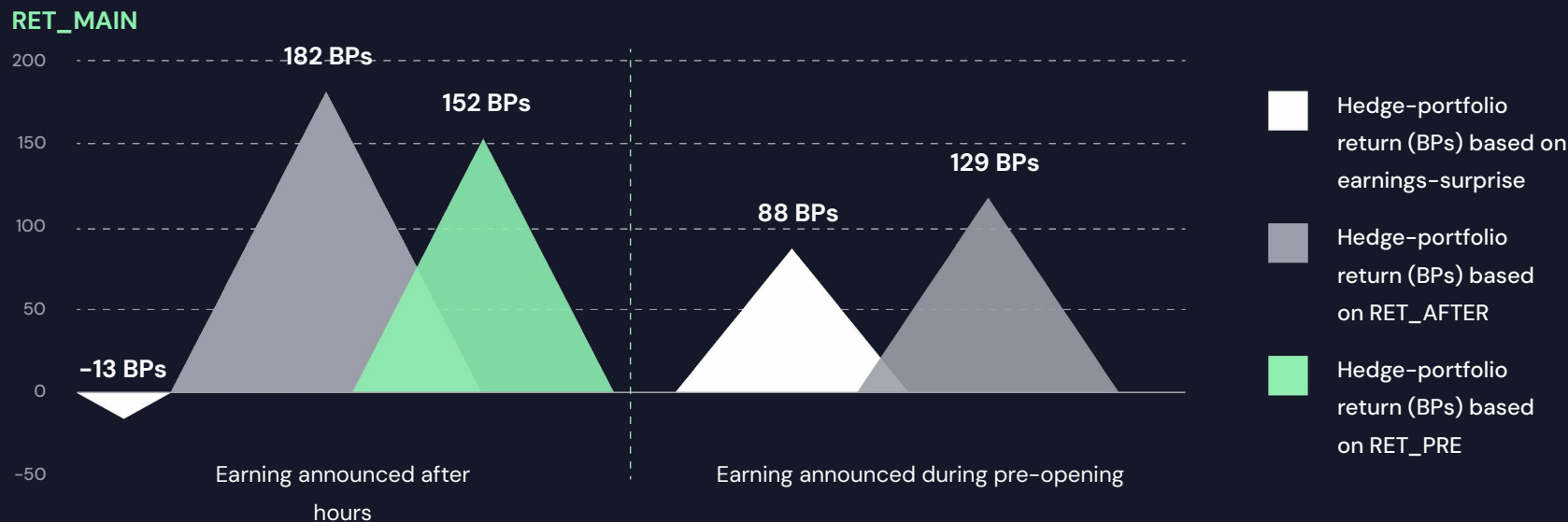




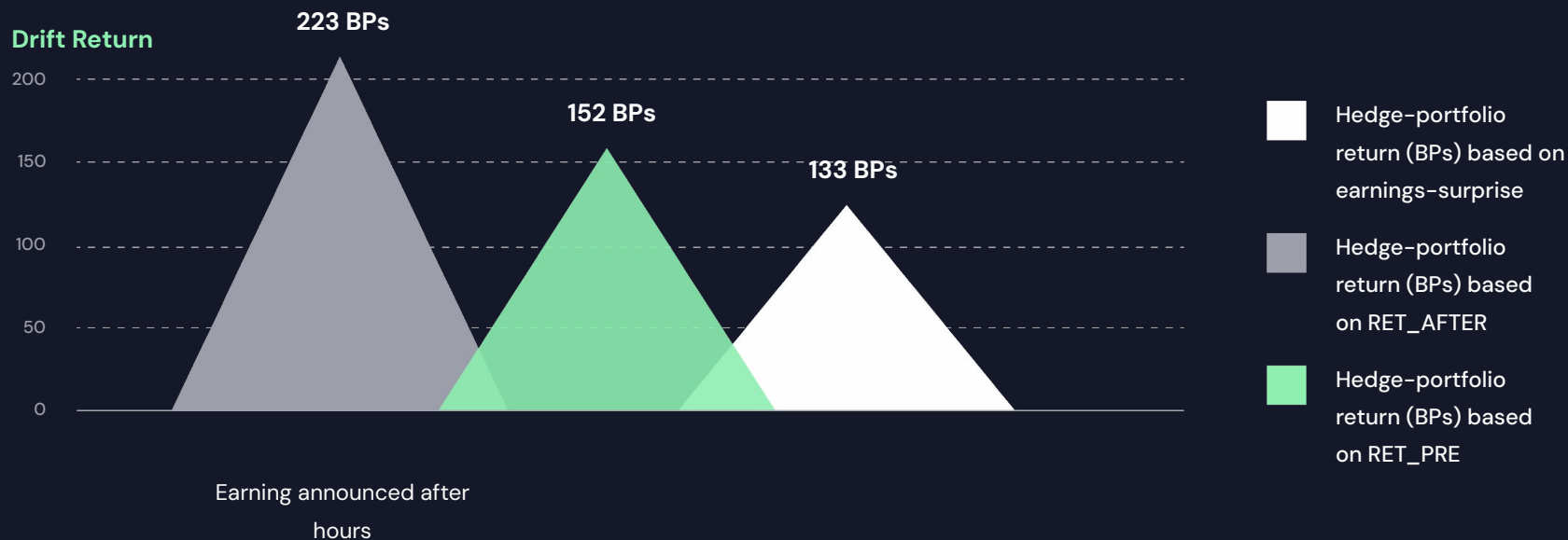
All Firm-Days: The correlation between Main session return and After-Hours return/Pre return



Earnings announced after hours: The hedge portfolio return that holds long position in the top-decile firms and short position in the bottom-decile firms



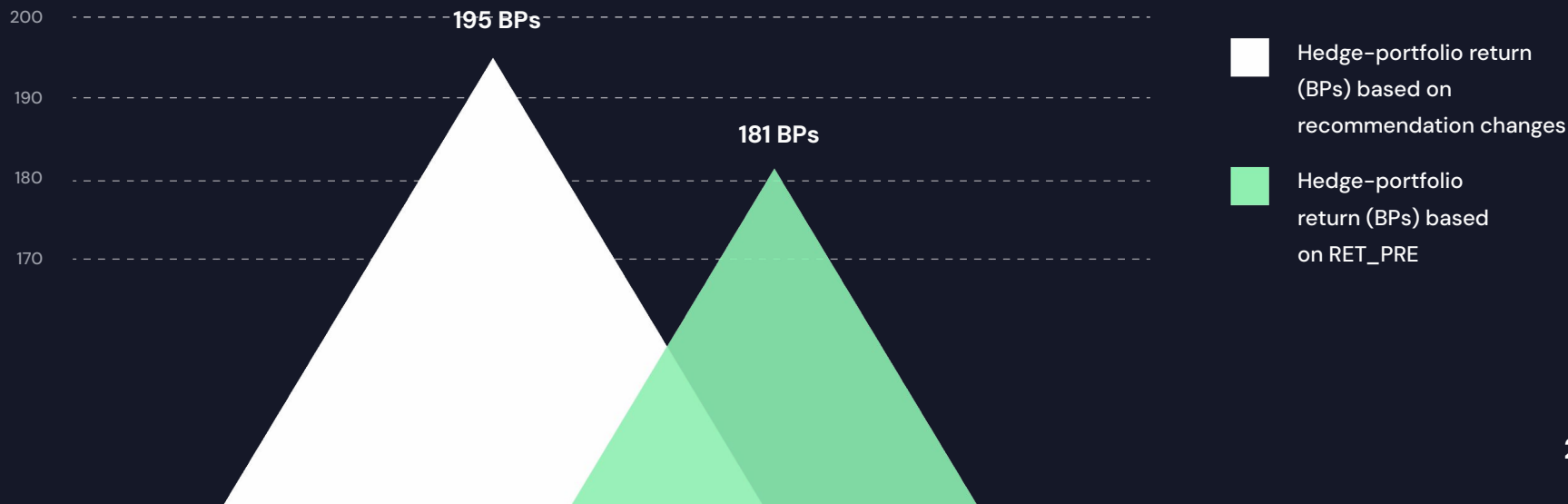
Earnings announced after hours: Trading strategy based on After-Hours return and earnings surprise



Recommendation changes during pre-opening session:

The hedge portfolio return that holds long position in the top firms and short position in the bottom firms

RET_MAIN



10-K/Qs and 8-Ks filed After Hours: The hedge portfolio return that holds long position in the top-decile firms and short position in the bottom-decile firms

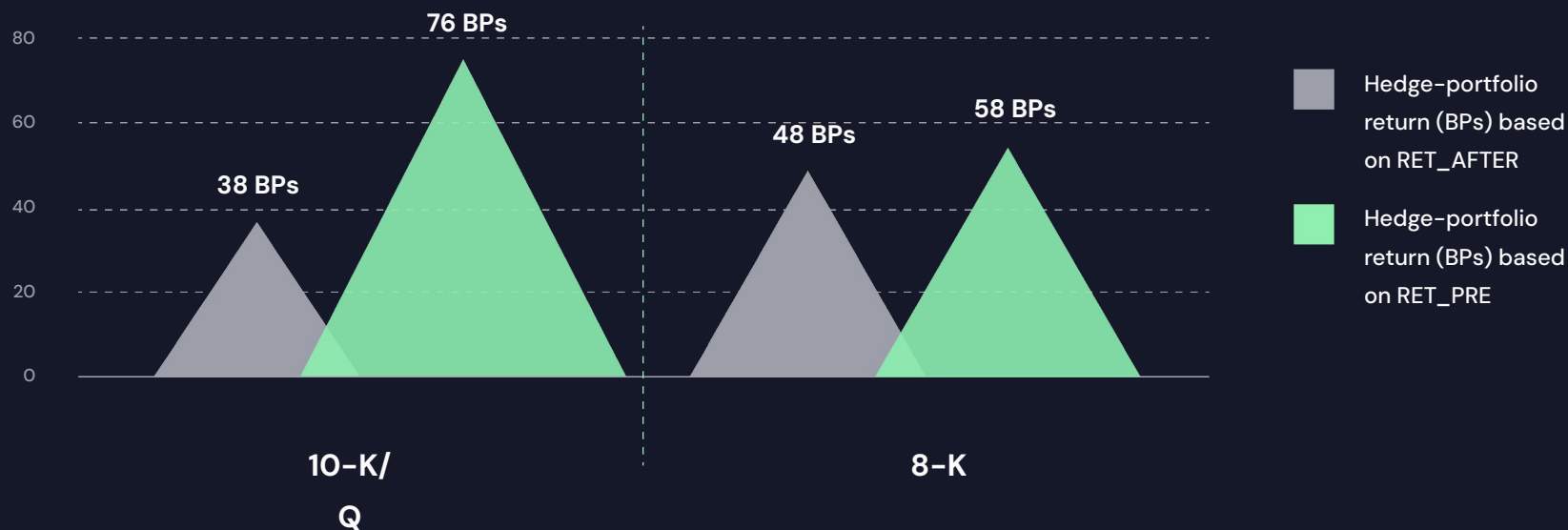


Table 1: All Firm-Days Return Analysis

Dependent Variables	With after-hours and pre-opening trading				No pre-opening trading		No after-hours trading	
	RET_PRE (1)	RET_PRE (2)	RET_MAIN (3)	RET_MAIN (4)	RET_MAIN (5)	RET_MAIN (6)	RET_MAIN (7)	RET_MAIN (8)
INTERCEPT	0.015 (0.58)	0.100 (1.40)	***-0.061 (-2.38)	** -0.641 (-11.43)	0.009 (0.37)	** -0.179 (-3.31)	** -0.076 (-2.01)	***-0.236 (-3.60)
RET_AFTER	***0.018 (4.27)	***0.017 (4.21)	-0.008 (-1.23)	-0.006 (-0.86)	-0.003 (-0.61)	-0.002 (-0.50)		
RET_PRE			**0.011 (2.62)	***0.011 (2.61)			0.001 (0.06)	0.001 (0.11)
BM		***-0.045 (-2.85)		***-0.102 (-6.10)		***-0.072 (-6.72)		***-0.123 (-4.94)
SIZE		*-0.008 (-1.67)		***0.080 (15.23)		***0.035 (6.30)		***0.038 (4.84)
Numbers of months	108	108	108	108	108	108	108	108
Average number of observations for each month	17,568	17,568	17,568	17,568	34,861	34,861	5,504	5,504
Mean R-Squared	0.16%	0.20%	0.23%	0.59%	0.04%	0.20%	0.52%	0.77%

Table 2: Return Analysis for Earnings Announced After Hours

Dependent Variables	RET_PRE (1)	RET_PRE (2)	RET_MAIN (3)	RET_MAIN (4)	RET_MAIN (5)	RET_MAIN (6)
INTERCEPT	***-0.215 (-3.39)	***-0.214 (-3.48)	***-0.123 (-2.87)	*-0.132 (-3.11)	-0.091 (-1.24)	-0.084 (-1.12)
RSUE	***4.639 (7.02)	***5.195 (6.05)	**0.969 (-2.21)	-0.792 (-1.14)	-0.133 (-0.26)	-0.908 (-0.95)
RSUE x ANALYST	***-1.992 (-2.96)		**0.974 (2.32)		0.125 (0.23)	
RSUE x LARGE		***-2.486 (-2.84)		0.744 (1.06)		0.979 (1.02)
RET_AFTER_RANK			0.579 (1.58)	0.444 (0.68)	***1.520 (2.78)	1.018 (1.13)
RET_AFTER_RANK x ANALYST			**0.872 (2.42)		-0.755 (-1.28)	
RET_AFTER_RANK x LARGE				0.976 (1.54)		-0.199 (-0.21)
RET_PRE_RANK					***1.818 (3.40)	0.764 (0.84)
RET_PRE_RANK x ANALYST			-0.770 (-1.30)			
RET_PRE_RANK x ANALYST				0.296 (0.31)		

Table 4: Return Analysis for Earnings Announced during Pre-Opening Session

Dependent Variables	RET_PRE (1)	RET_PRE (2)	RET_MAIN (3)	RET_MAIN (4)
INTERCEPT	***-0.226 (-5.37)	***-0.226 (-5.40)	***-0.356 (-4.26)	***-0.351 (-4.21)
RSUE	***1.840 (5.67)	***2.405 (4.64)	*0.883 (1.93)	***2.323 (3.05)
RSUE x ANALYST	***-0.803 (-2.27)		*-0.785 (-1.85)	
RSUE x LARGE		** -1.318 (-2.25)		***-2.307 (-3.20)
RET_AFTER_RANK			***1.288 (2.85)	**1.904 (2.71)
RET_AFTER_RANK x ANALYST			-0.449 (-0.94)	
RET_AFTER_RANK x LARGE				-1.054 (-1.47)

Table 8: Drift Return Analysis for Earnings Announced After Hours and during Pre-Opening Session

Earnings are announced after hours;
With pre-opening trading

Earnings are announced after hours;
No pre-opening trading

Earnings are announced in the
pre-opening session

Dependent Variables	XRET_NEX T	XRET_NEXTAN N	XRET_DRIF T	XRET_NEX T	XRET_NEXTAN N	XRET_DRIF T	XRET_NEX T	XRET_NEXTAN N	XRET_DRIF T
INTERCEPT	0.003 (0.58)	-0.001 (-0.57)	0.004 (0.61)	0.002 (0.55)	-0.0002 (-0.20)	** -0.179 (-3.31)	0.006 (1.43)	0.0003 (-0.47)	0.005 (1.26)
RET_AFTER_RANK	***0.022 (4.87)	0.001 (0.71)	***0.022 (4.07)	0.0001 (0.01)	0.005 (1.18)	-0.002 (-0.50)			
RET_PRE_RANK	*0.008 (1.73)	**0.006 (2.64)	**0.015 (2.54)				**0.012 (2.35)	-0.003 (-1.24)	0.009 (1.66)
RSUE	***0.016 (2.97)	-0.002 (-1.20)	**0.013 (2.31)	***0.026 (2.94)	-0.0003 (-1.14)	***-0.072 (-6.72)	**0.020 (4.44)	0.002 (0.85)	***0.023 (4.27)
Numbers of months	35	35	35	35	35	35	35	35	35
Average number of observations for each month	704	704	704	385	385	385	847	847	847
Mean R-Squared	0.86%	0.54%	0.92%	1.23%	0.84%	1.07%	0.52%	0.44%	0.55%

Table 9: Return Analysis for Recommendation Changes

Time Period When Recommendation Changes Occur	Day 0			Day 1		Day 2	
	Pre-opening session	Pre-opening session	Main trading session	Pre-opening session	Pre-opening or Main session	Pre-opening session	Pre-opening or Main session
Dependent Variables	RET_PRE (1)	RET_MAIN (2)	RET_MAIN (3)	XRET (4)	XRET (5)	XRET (6)	XRET (7)
INTERCEPT	***-0.93 (-4.15)	** -0.106 (-2.57)	0.024 (0.55)	*-0.0004 (-1.69)	*0.0004 (-1.88)	*0.0004 (1.76)	***0.001 (3.35)
CHANGE	***0.554 (23.73)	***0.195 (8.27)	***0.562 (13.92)	***0.001 (3.61)	***0.001 (6.37)	***0.001 (4.56)	***0.001 (9.47)
RET_PRE_RANK		**0.181 (2.04)		0.001 (1.00)		0.001 (1.49)	
RET_MAIN_RANK				-0.001 (-0.76)	-0.0001 (-0.17)	0.0003 (0.47)	0.0003 (0.59)
Numbers of months	47	47	46	42	42	42	42
Average number of observations for each month	889	889	216	720	1,206	719	1,205
Mean R-Squared	6.41%	0.94%	4.15%	0.92%	0.20%	0.63%	0.31%

Table 10: Stock Return and Abnormal Trading Volume Analysis for 10-K/Q Filings

Dependent Variables	10-K/Q filed after hours; With pre-opening trading		10-K/Q filed after hours; No pre-opening trading		10-K/Q filed in the pre-opening session	
	RET_MAIN (1)	VOL_MAIN (2)	RET_MAIN (3)	VOL_MAIN (4)	RET_MAIN (5)	VOL_MAIN (6)
INTERCEPT	0.084 (-0.76)	***1.539 (18.23)	-0.075 (-0.86)	***1.367 (35.15)	** -0.376 (-2.13)	***2.083 (15.91)
RET_AFTER_RANK	0.382 (1.47)		*1.302 (1.97)			
RET_PRE_RANK	**0.764 (2.86)				0.674 (1.21)	
VOL_AFTER		***0.102 (3.61)		***0.078 (2.04)		
VOL_PRE		**0.070 (7.63)				***0.075 (10.78)
Numbers of months	20	20	22	42	19	19
Average number of observations for each month	194	194	252	252	122	595
Mean R-Squared	1.88%	31.29%	1.41%	7.77%	2.58%	24.87%

Table 11: Stock Return and Abnormal Trading Volume Analysis for 8-K Filings

	8-K filed after hours; With pre-opening trading		8-K filed after hours; No pre-opening trading		8-K filed in the pre-opening session	
Dependent Variables	RET_MAIN (1)	VOL_MAIN (2)	RET_MAIN (3)	VOL_MAIN (4)	RET_MAIN (5)	VOL_MAIN (6)
INTERCEPT	***-0.161 (-2.83)	***1.711 (25.34)	-0.032 (-0.61)	***1.398 (36.93)	** -0.138 (-2.16)	***1.908 (39.43)
RET_AFTER_RANK	***0.475 (4.18)		***0.710 (3.50)			
RET_PRE_RANK	***0.587 (3.66)				***0.897 (5.66)	
VOL_AFTER		***0.068 (6.91)		***0.027 (2.82)		
VOL_PRE		**0.088 (18.52)				***0.117 (19.39)
Numbers of months	29	29	29	29	29	129
Average number of observations for each month	572	572	640	640	551	551
Mean R-Squared	0.83%	30.209%	0.55%	1.94%	0.62%	21.90%

Thanks for your time

Online

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