

Internet Appendix to “Driven to Distraction: Extraneous Events and Underreaction to Earnings News”*

* Citation format: Hirshleifer, David, Sonya Seongyeon Lim, and Siew Hong Teoh, 2009, Internet Appendix to “Driven to Distraction: Extraneous Events and Underreaction to Earnings News,” *Journal of Finance* 64, 2289-2325, <http://www.afajof.org/IA/2009.asp>. Please note: Wiley-Blackwell is not responsible for the content or functionality of any supporting information supplied by the authors. Any queries (other than missing material) should be directed to the authors of the article.

Table IA.I
Number of Announcements by Day of Week, Month, and Industry

Panel A reports the mean and median daily number of announcements by day of week and by month. Panel B reports the percentage of announcements from each of the Fama-French 10 industry classification by the number-of-announcements deciles.

Panel A. Mean and Median Number of Announcements a Day, by Day of Week and Month

	Monday	Tuesday	Wednesday	Thursday	Friday
Mean	103.7	140.2	138.9	152.2	68.8
Median	62	78	77	90	53

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean	116.8	145.4	78.5	195	155.2	32.7	176.5	148.7	34	174.1	154.3	32.4
Median	86	147	68.5	142	123	30	122.5	107	32	128	118.5	31

Panel B. Industry Composition

NRANK	1 Consumer Nondurables	2 Consumer Durables	3 Manufacturing	4 Energy	5 HiTech	6 Telecom	7 Shops	8 Health	9 Utilities	10 Others
1	8.40%	3.86%	15.26%	2.16%	20.38%	2.01%	23.67%	7.56%	0.95%	15.73%
2	6.77%	2.92%	14.68%	3.81%	19.32%	2.72%	21.15%	8.38%	3.17%	17.07%
3	4.55%	2.82%	13.03%	5.34%	20.73%	3.02%	13.18%	10.51%	4.03%	22.79%
4	4.90%	2.89%	11.49%	6.33%	19.71%	4.23%	10.96%	12.57%	2.97%	23.95%
5	5.09%	3.19%	12.88%	4.92%	22.00%	3.56%	10.50%	11.59%	3.12%	23.13%
6	5.42%	3.28%	14.65%	4.52%	24.97%	2.57%	9.30%	9.69%	3.89%	21.72%
7	5.27%	2.70%	14.71%	4.40%	26.08%	2.80%	8.38%	10.14%	3.67%	21.85%
8	4.90%	2.87%	16.25%	4.36%	26.08%	2.40%	8.48%	9.79%	4.12%	20.76%
8	5.05%	2.37%	15.70%	4.33%	26.79%	2.48%	7.82%	10.02%	4.19%	21.25%
10	4.86%	2.46%	15.72%	4.79%	25.98%	2.71%	9.05%	10.52%	4.24%	19.67%

Table IA.II
Market Reactions to Earnings News: Standardized Regression

Table IA.II reports the standardized regressions where all independent variables are standardized to mean zero and standard variation of one before being interacted. The dependent variable is indicated under each column heading. *FE* is the earnings surprise decile (*FE*=1: lowest, 10: highest) and *NRANK* is the number-of-announcements decile, based on quarterly independent sorts by forecast error and the number of announcements on the day of announcement. Control variables include size and book-to-market deciles, $\log(1+\# \text{ Analysts})$, *Reporting Lag*, *Reporting Lag* squared and cubed, institutional ownership (*IO*), *Earnings Volatility*, *Earnings Persistence*, *Share Turnover*, and indicator variables for year, month, day of week, and Fama-French 10-industry classification. See Section III.A for variable definitions. Coefficients on *FE* and its interaction terms are shown, except for the interaction terms with indicator variables. Standard errors adjusted for heteroskedasticity and clustering by the day of announcement are in parentheses. * significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

	(1)	(2)
	CAR[0,1]	CAR[2,61]
FE	23.977*** (0.355)	4.929*** (0.344)
FE×NRANK	-1.610*** (0.506)	1.470*** (0.551)
FE×SIZE	-1.975*** (0.554)	-1.423*** (0.487)
FE×BM	-2.249*** (0.348)	0.158 (0.373)
FE×Reporting Lag	-2.185*** (0.511)	-1.341*** (0.495)
FE×Log(1+#Analysts)	0.952* (0.508)	-1.210** (0.504)
FE×IO	2.712*** (0.390)	0.090 (0.384)
FE×Earnings Volatility	-0.796*** (0.266)	0.297 (0.509)
FE×Earnings Persistence	0.755** (0.366)	0.854** (0.389)
FE×Share Turnover	2.020*** (0.502)	-1.418*** (0.480)
FE×(Reporting Lag) ²	0.295 (0.457)	0.252 (0.430)
FE×(Reporting Lag) ³	0.000 (0.000)	0.000 (0.000)
Constant	-0.274 (0.348)	-0.056 (0.420)
Observations	112,839	112,839
R ²	6.2%	1.1%

Table IA.III
Pre-announcement Reaction and Announcement Reaction over Days [-1,1]

FE is the earnings surprise decile (*FE*=1: lowest, 10: highest) and *NRANK* is the number-of-announcements decile, based on quarterly independent sorts by forecast errors and the number of announcements on the day of announcement. The dependent variable is indicated under each column heading. Control variables include size and book-to-market deciles, $\log(1+\# \text{ Analysts})$, *Reporting Lag*, *Reporting Lag* squared and cubed, institutional ownership (*IO*), *Earnings Volatility*, *Earnings Persistence*, *Share Turnover*, and indicator variables for year, month, day of week, and Fama-French 10 industry classification. See Section III.A for variable definitions. All control variables are interacted with *FE*. Standard errors adjusted for heteroskedasticity and clustering by the day of announcement are in parentheses. * significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

	(1)	(2)
	CAR[-30, -1]	CAR[-1,1]
FE	1.540***	1.223***
	(0.221)	(0.106)
FE×NRANK	-0.006	-0.014**
	(0.013)	(0.006)
Controls, interacted with FE	X	X
Constant	-5.517***	-6.023***
	(1.322)	(0.633)
Observations	117,639	112,838
R ²	2.9%	6.4%

Table IA.IV
Which Competing Announcements Are More Distracting? Additional Analyses

We split competing announcements into two groups and compare the distraction effect of different types of competing announcements. We consider three different splits: 1) industry related vs. unrelated announcements, 2) big vs. small absolute earnings surprises, and 3) large vs. small firm announcements. *FE* is the earnings surprise decile (*FE*=1: lowest, 10: highest) based on quarterly sorts by forecast errors. In the first set of regressions, we calculate the number of quarterly earnings announcements by same-industry firms (“related announcements”) and the number of quarterly earnings announcements by firms in other industries (“unrelated announcements”) using the Fama-French 10 industry classification, after excluding firms in Industry 10 (‘Others’). *#RelatedNews* (*#UnrelatedNews*) is the decile rank of the number of related (unrelated) announcements (10: highest, 1: lowest) based on quarterly sorts by the number of related (unrelated) announcements. In the second set of regressions, we split announcements in each calendar quarter into two groups by the absolute earnings surprises (small vs. big news). *#SmallNews* (*#BigNews*) is the decile rank of the number of competing announcements with small (big) absolute earnings surprise. In the third set, we split announcements into two groups by firm size (small vs. large firms). *#SmFirmNews* (*#LgFirmNews*) is the decile rank of the number of competing announcements by small (large) firms. Control variables include size and book-to-market deciles, $\log(1+\#Analysts)$, *Reporting Lag*, *Reporting Lag* squared and cubed, institutional ownership (*IO*), *Earnings Volatility*, *Earnings Persistence*, *Share Turnover*, and indicator variables for year, month, day of week, and Fama-French 10-industry classification. See Section III.A for variable definitions. The dependent variable is indicated under each column heading. All control variables are interacted with *FE*. Standard errors adjusted for heteroskedasticity and clustering by the day of announcement are in parentheses. * significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

	(1)	(2)	(3)	(4)
	CAR[0,1]	CAR[2,61]	CAR[0,1]	CAR[0,1]
FE	0.983*** (0.119)	0.928** (0.374)	1.012*** (0.098)	1.045*** (0.104)
FE×#RelatedNews	-0.004 (0.009)	-0.014 (0.032)		
FE×#UnrelatedNews	-0.013 (0.016)	0.023 (0.056)		
FE×#LgFirmNews	0.028 (0.022)	-0.141* (0.074)		
FE×#SmFirmNews	-0.002 (0.012)	0.017 (0.040)		
FE×#BigNews	-0.021 (0.016)	0.137*** (0.052)	-0.016*** (0.006)	
FE×#SmallNews	-0.006 (0.018)	0.038 (0.054)		-0.012** (0.006)
Constant	-5.543*** (0.716)	-9.028*** (2.262)	-5.282*** (0.575)	-5.354*** (0.619)
Observations	89,095	89,095	112,839	112,839
R ²	6.4%	1.4%	6.2%	6.2%

Table IA.V

Variation in the Distraction Effect across Institutional Ownership and Analyst Following

We examine how the distraction effect ($FE \times NRANK$) varies with institutional ownership and analyst following. $NRANK$ is the number-of-announcements deciles based on quarterly sorts by the number of announcements on the day of the announcement. Regressions (1) and (2) include $FE \times NRANK \times IO$ and $NRANK \times IO$ as additional variables, and regressions (3) and (4) include $FE \times NRANK \times \text{Log}(1 + \#Analysts)$ and $NRANK \times \text{Log}(1 + \#Analysts)$. Control variables include size and book-to-market deciles, $\text{log}(1 + \#Analysts)$, *Reporting Lag*, *Reporting Lag* squared and cubed, institutional ownership (*IO*), *Earnings Volatility*, *Earnings Persistence*, *Share Turnover*, and indicator variables for year, month, day of week, and Fama-French 10-industry classification. See Section III.A for variable definitions. All control variables are interacted with FE . Standard errors adjusted for heteroskedasticity and clustering by the day of announcement are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

	(1)	(2)	(3)	(4)
	CAR[0,1]	CAR[2,61]	CAR[0,1]	CAR[2,61]
FE	1.076*** (0.105)	0.770** (0.354)	1.129*** (0.109)	0.853** (0.369)
FE×NRANK	-0.024*** (0.008)	0.086*** (0.030)	-0.033*** (0.010)	0.072* (0.037)
FE×NRANK×IO	0.020 (0.014)	-0.086* (0.047)		
FE×NRANK×Log(1+#Analysts)			0.010** (0.004)	-0.012 (0.016)
Controls, interacted with FE	X	X	X	X
Constant	-5.366*** (0.625)	-7.002*** (2.152)	-5.686*** (0.656)	-7.410*** (2.216)
Observations	112,839	112,839	112,839	112,839
R ²	6.2%	1.1%	6.2%	1.1%