

Online Appendix

Cross-regional differences in news tone and local stock ownership

The online appendix contains frequency distribution of the top 20 negative and positive words, definition of control variables, descriptive statistics, and robustness analyses.

Table A1. List of top 20 negative and positive words

The table presents the top 20 negative and positive words that occur in the data, along with their frequency distribution and Swedish translation.

Negative words				Positive words			
Obs.	Frequency	English	Swedish	Obs.	Frequency	English	Swedish
1	897,680	SUING	STÄMMA	1	608,169	GREAT	STOR
2	614,053	AGAINST	MOT	2	295,907	GOOD	BRA
3	519,591	MISS	MISS	3	194,783	LEADING	LEDANDE
4	429,728	LATE	SENT	4	153,452	GAIN	VINST
5	269,007	CLOSEOUT	REA	5	132,584	CONFIDENT	SÄKER
6	229,257	DISRUPTS	STÖR	6	121,811	HONOR	ÄRA
7	160,681	DISGORGES	LÄMNA	7	120,962	OPPORTUNITY	MÖJLIGHET
8	150,715	DEMOLISH	RIVA	8	118,734	GREATEST	STÖRSTA
9	140,602	VERDICT	DOM	9	88,597	EFFICIENT	EFFEKTIV
10	131,948	FORCE	KRAFT	10	87,985	COLLABORATION	SAMARBETE
11	126,075	DISRUPTED	STÖRS	11	80,520	FRIENDLY	VÄNLIG
12	123,058	QUIT	AVSLUTA	12	68,278	ENHANCE	FÖRBÄTTRA
13	101,150	DIMINISH	MINSKA	13	68,231	PROFITABLE	LÖNSAM
14	98,849	CONCERN	ORO	14	59,493	BOOSTED	ÖKAT
15	94,455	ALLEGING	AVSEENDE	15	58,678	BETTER	BÄTTRE
16	90,468	IMPLICATE	OMFATTA	16	56,592	OPPORTUNITIES	MÖJLIGHETER
17	80,323	STRAIN	STAM	17	51,237	PROFITABILITY	LÖNSAMHET
18	79,890	TERMINATED	AVSLUTAS	18	48,355	SUCCESS	FRAMGÅNG
19	73,159	THREAT	HOT	19	45,764	POSITIVE	POSITIVT
20	67,982	EMBARRASS	GENERA	20	45,319	STABLE	STABIL

Table A2. Descriptive statistics on the change in local and non-local portfolios

The table presents descriptive statistics on the measures of change in portfolios. Adjustment to share held for splits, reverse splits, own share bonuses, and share bonuses via M&As are made. Adjustment factors are obtained from FinBas. Values are winsorized at 1 and 99 pct. levels. The unit of analysis is the investor-time. The test of mean difference of the measures in local and non-local portfolios is provided. The standard errors are clustered on district. Bold marked difference coefficients and t-values indicate significance at the 5% level.

	Local portfolios			Non-local portfolios		
	d in share	d in adj. share	d in value	d in share	d in adj. share	d in value
	(1)	(2)	(3)	(4)	(5)	(6)
Min	-0.836	-0.874	-0.806	-0.833	-0.859	-0.809
Mean	0.125	0.161	0.107	0.114	0.145	0.115
Std. error	0.004	0.007	0.003	0.002	0.002	0.004
Max	5.556	7.286	4.596	5.233	6.665	4.78
Std. dev.	0.748	0.949	0.638	0.701	0.868	0.656
N	14,697,625	14,697,625	14,697,625	39,220,400	39,220,400	39,220,400
	(1-4)	(2-5)	(3-6)			
Mean diff.	0.011	0.016	-0.008			
t-value	2.23	2.37	-1.618			

Table A3. Definition of the control variables

Firm/Stock time (quarter/year) level variables	
<i>Leverage:</i>	The ratio of debt to total assets of the firm at year end.
<i>ROA:</i>	Return on Assets is measured by dividing net income by average total assets: $ROA_t = \frac{Net\ Income_t}{(TA_t + TA_{t+1})/2}$, where <i>Net Income</i> _{<i>t</i>} and Total Assets (<i>TA</i>) are at year end.
<i>Tangibility:</i>	The ratio of the firm's fixed assets to total assets at year end.
<i>MktCap:</i>	The natural logarithm of the market capitalization of the firm at quarter end.
<i>MTB:</i>	The market to book ratio of the stock at quarter end.
<i>Liquidity:</i>	The average trading volume of the stock during quarter divided by the stock market valuation at quarter end.
<i>Return:</i>	The average monthly stock return of the firm over the quarter. The monthly closing prices are used to measure returns.
<i>Volatility:</i>	The standard deviation of the firm's daily returns during a quarter.
<i>Dist. float:</i>	The ratio of the stock market capitalization of the firm to its free float. Free float ownership is calculated as: $DISTFLOAT_t = \frac{Market\ Value_t}{(Market\ Value_t - Price_t * (TSO_t - OS_t))}$, where <i>Market Value</i> _{<i>t</i>} is the market value of the stock <i>j</i> , <i>TSO</i> _{<i>t</i>} is total shares outstanding and <i>OS</i> _{<i>t</i>} is firm's own shares.
<i>Div. yield:</i>	The current dividend yield of the firm is calculated as dividing the cash dividend payment at <i>t</i> by the unadjusted price at <i>t</i> . Div. yield is then matched to the following quarter since dividend payment can occur during the quarter.
<i>Basspread:</i>	The bid–ask spread of stock is calculated as the volume-weighted average of the daily closing bid–ask spread during the quarter.
<i>Beta:</i>	The beta coefficient of the CAPM during a quarter is estimated using daily stock returns and the Nasdaq OMX return index as the return of the market portfolio. Closing daily stock prices are obtained from the national finance data center via SHoF, closing OMX index prices are obtained from Nasdaq OMX, and daily risk free rate of returns, three-months treasury bills (SSVX3M), are obtained from the Central Bank of Sweden (Riksbanken). Since SSVX3M is presented as simple yearly treasury bills rate on Riksbanken's webpage, it is divided by 365 to obtain the daily rf.
<i>Firm age:</i>	Firm age is measured as the logarithm of the number of months from the IPO.
<i>Fixed assets:</i>	Fixed assets (in MSEK) of firm is at quarter end.
<i>Size:</i>	The natural logarithm of the firm's total assets at year end.
<i>Revenue:</i>	Sales (in MSEK) are at year end.
Individual variables	
<i>Gender:</i>	Gender dummy takes the value of 1 for males and 0 for females.
<i>Age:</i>	The age of the individual investors. Individuals below age 18 and above age 75 are dropped.
<i>No. trades:</i>	The number of trades the individual makes on a stock in the dataset.
<i>No. passive period:</i>	The number of periods the investor has been passive until the trade at <i>t</i> .

Table A4. Robustness analyses of the measurement of republishing news

The table shows results from the robustness analyses of the measurement of republishing news. The sample that news is republished in the next quarter in different locations (see Table 3 in the paper) is used. Analyses are rerun by comparing the current news to previous five (Panel A), ten (Panel B), and fifteen (Panel C) news stories by using dissimilarity index cutoff value of 50, 100, and 150. To save space, the results from local trades and the measure change in adjusted share are shown, although all the regressions include the intercept, control variables, district and time fixed effects are suppressed in the panels below. Standard errors are clustered on district and time. The bold marked coefficients (and t-values) are significant at the 5% level.

Panel A. Results from comparing the current news to previous five news stories.

Measure 5-50	First news is national		National news is republished		First news is local		Local news is republished	
	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
News	0.004	67.02	0.004	66.18	-0.001	-14.13	-0.0002	-3.13
First pos	0.059	4.70	-0.176	-7.00	0.034	9.43	0.000	.
First neg	0.040	25.48	0.041	1.71	-0.077	-37.35	-0.155	-3.10
News*First pos	0.008	3.46	-0.033	-3.56	0.005	4.89	0.000	.
News*First neg	-0.007	-13.58	-0.015	-1.43	0.004	10.70	0.096	3.74
Obs.	3,187,164		3,187,164		1,595,120		1,595,120	
R-square	0.093		0.093		0.078		0.076	
F-value	218.98		218.45		202.08		223.93	

Measure 5-100	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
	News	0.004	69.38	0.004	68.09	-0.001	-15.06	-0.0002
First pos	-0.196	-7.40	0.114	9.69	0.022	7.83	-0.143	-3.61
First neg	0.068	45.30	-0.068	-25.39	-0.067	-37.28	-0.154	-3.09
News*First pos	0.041	7.52	-0.051	-8.97	0.011	14.84	0.000	.
News*First neg	-0.009	-25.33	-0.001	-2.93	0.002	5.99	0.077	3.03
Obs.	3,187,164		3,187,164		1,595,120		1,595,120	
R-square	0.093		0.093		0.078		0.076	
F-value	219.90		218.64		202.54		224.33	

Measure 5-150	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
	News	0.005	75.91	0.005	73.18	-0.001	-15.74	-0.0002
First pos	-0.187	-29.34	-0.162	-13.62	-0.001	-0.40	-0.003	-0.07
First neg	0.058	38.66	0.139	42.23	-0.052	-31.65	0.010	0.15
News*First pos	0.038	17.56	-0.013	-2.27	0.012	16.17	0.000	.
News*First neg	-0.004	-14.73	-0.023	-61.13	0.002	9.02	-0.024	-0.73
Obs.	3,187,164		3,187,164		1,595,120		1,595,120	
R-square	0.094		0.095		0.078		0.076	
F-value	219.18		226.48		201.78		224.34	

Panel B. Results from comparing the current news to previous ten news stories.

Measure 10-50	First news is national		National news is republished		First news is local		Local news is republished	
	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
News	0.005	79.75	0.004	66.42	-0.001	-13.93	-0.0002	-3.05
First pos	0.0001	0.03	-0.169	-6.92	0.034	9.32	0.000	.
First neg	0.108	40.96	0.072	7.55	-0.074	-36.11	-0.156	-3.12
News*First pos	0.002	0.81	-0.033	-3.43	0.005	4.91	0.000	.
News*First neg	-0.018	-27.08	-0.031	-7.28	0.004	9.51	0.101	4.00
Obs.	3,187,164		3,187,164		1,595,120		1,595,120	
R-square	0.094		0.093		0.078		0.076	
F-value	220.05		218.24		200.95		224.30	

Measure 10-100	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
News	0.005	80.05	0.004	67.39	-0.001	-15.94	-0.0002	-3.20
First pos	-0.136	-6.67	0.088	7.47	0.018	6.42	-0.053	-1.92
First neg	0.079	41.49	-0.048	-21.03	-0.066	-35.57	0.015	1.60
News*First pos	0.032	6.96	-0.046	-7.96	0.011	14.82	0.000	.
News*First neg	-0.017	-39.94	-0.002	-6.88	0.002	5.69	-0.009	-2.62
Obs.	3,187,164		3,187,164		1,595,120		1,595,120	
R-square	0.094		0.093		0.078		0.076	
F-value	219.16		218.95		204.04		224.29	

Measure 10-150	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
News	0.004	72.96	0.004	71.51	-0.001	-13.64	-0.0002	-3.42
First pos	-0.134	-24.85	-0.119	-12.98	-0.016	-6.03	-0.032	-1.15
First neg	0.037	29.11	0.093	34.94	-0.038	-25.13	-0.010	-1.22
News*First pos	0.030	16.81	-0.012	-2.68	0.013	18.59	0.000	.
News*First neg	-0.003	-12.85	-0.018	-55.43	0.004	15.48	-0.008	-2.44
Obs.	3,187,164		3,187,164		1,595,120		1,595,120	
R-square	0.093		0.094		0.077		0.076	
F-value	218.83		222.66		205.62		224.27	

Panel C. Results from comparing the current news to previous fifteen news stories.

Measure 15-50	First news is national		National news is republished		First news is local		Local news is republished	
	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
News	0.005	80.43	0.004	66.42	-0.001	-15.96	-0.0002	-3.03
First pos	-0.019	-1.93	-0.169	-6.92	0.040	10.42	0.000	.
First neg	0.108	43.24	0.072	7.55	-0.083	-35.59	-0.156	-3.12
News*First pos	-0.003	-1.15	-0.033	-3.43	0.004	3.39	0.000	.
News*First neg	-0.016	-27.45	-0.031	-7.28	0.005	20.01	0.094	3.73
Obs.	3,187,164		3,187,164		1,595,120		1,595,120	
R-square	0.094		0.093		0.078		0.076	
F-value	220.11		218.24		298.07		224.00	

Measure 15-100	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
News	0.005	79.50	0.004	67.55	-0.001	-14.20	-0.0002	-3.29
First pos	-0.176	-13.55	0.066	5.61	0.006	2.30	-0.034	-1.21
First neg	0.077	43.99	-0.032	-15.27	-0.055	-31.46	0.011	1.20
News*First pos	0.041	12.91	-0.041	-7.07	0.012	16.00	0.000	.
News*First neg	-0.019	-50.66	-0.003	-10.12	0.004	15.56	-0.014	-4.25
Obs.	3,187,164		3,187,164		1,595,120		1,595,120	
R-square	0.094		0.093		0.077		0.076	
F-value	219.87		218.48		202.09		224.19	

Measure 15-150	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
News	0.004	75.27	0.004	71.74	-0.001	-13.50	-0.0002	-3.50
First pos	-0.132	-23.95	-0.117	-12.81	-0.015	-5.62	-0.019	-0.67
First neg	0.035	25.71	0.092	35.58	-0.037	-24.81	-0.008	-0.94
News*First pos	0.031	18.18	-0.012	-2.60	0.013	17.45	0.000	.
News*First neg	-0.003	-11.48	-0.017	-55.37	0.003	15.12	-0.014	-4.01
Obs.	3,187,164		3,187,164		1,595,120		1,595,120	
R-square	0.093		0.094		0.077		0.076	
F-value	218.18		222.01		205.32		223.82	

Table A5. Excluding the capital city

The table shows results from the analyses excluding the firms located in Stockholm (the capital) and the individuals who live in Stockholm. The sample covering news republished in the next quarter in different locations is used (see Table 3 in the paper). To save space, the results only from the dependent variable, change in adjusted share are shown, although all the regressions include the intercept, control variables, district and time fixed effects. Standard errors are clustered on district and time. The bold marked coefficients (and t-values) are significant at the 5% level.

Local stocks	First news is national		National news is republished		First news is local		Local news is republished	
	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
News	-0.003	-18.46	-0.002	-13.07	-0.009	-22.99	-0.0008	-3.30
First pos	-0.158	-25.91	0.085	7.18	-0.051	-5.68	0.1076	10.93
First neg	0.013	5.31	-0.061	-24.00	-0.148	-26.15	-0.041	-9.00
News*First pos	0.048	26.29	-0.057	-7.53	0.009	2.55	-0.012	-5.91
News*First neg	-0.004	-7.14	-0.004	-13.78	0.013	23.81	0.008	10.25
Obs.	813,715		813,715		418,921		418,921	
R-square	0.090		0.093		0.147		0.314	
F-value	522.84		521.86		243.86		304.04	

Non-local stocks	First news is national		National news is republished		First news is local		Local news is republished	
	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values	d in adj. share	t-values
News	-0.003	-35.25	-0.002	-17.90	-0.009	-68.03	-0.0031	-30.25
First pos	-0.003	-0.81	0.039	6.03	-0.107	-30.99	0.1502	29.98
First neg	-0.043	-26.67	-0.026	-19.62	-0.116	-79.66	-0.069	-40.72
News*First pos	0.031	31.66	-0.039	-9.11	0.053	44.43	-0.010	-9.38
News*First neg	0.002	6.78	-0.002	-9.69	0.008	41.82	0.014	43.16
Obs.	2,235,422		2,235,422		1,303,258		1,303,258	
R-square	0.099		0.097		0.145		0.139	
F-value	668.06		648.73		268.57		246.98	

Table A6. Cross regional differences in tone and the change in portfolio holdings

The table shows the effects when the same news event is republished across regions and when it is republished in the same region. All the regressions include the main effects, control variables, district fixed effects, and time fixed effects, but the results from these variables are omitted to save space. The main variables of interest are the interaction effects. Standard errors are clustered on district and time. The unit of analysis is investor-time as the tables shows changes in local and non-local investors portfolio holdings separately. The bold marked coefficients (and t-values) are significant at the 5% level.

	Locals			Non-locals		
	d in share	d in adj. share	d in value	d in share	d in adj. share	d in value
News	-0.0002	-0.0002	-0.0003	-0.0002	-0.0002	-0.0002
t-stat	-30.46	-30.55	-56.91	-94.81	-97.17	-114.49
News L1	0.00005	0.0001	0.0001	0.00005	0.0001	0.0001
t-stat	21.96	21.83	26.56	39.59	41.39	48.8
News*First neg	-0.0003	-0.0003	-0.0003	-0.001	-0.001	-0.001
t-stat	-25.64	-17.11	-24.55	-62.77	-49.35	-75.08
News*First pos	0.0001	0.0002	0.00004	0.0001	0.0002	0.0002
t-stat	6.85	11.62	2.79	18.67	21.33	24.52
News*Across neg	0.0000	0.0001	0.0001	0.00002	0.00003	0.0001
t-stat	-0.65	6.36	15.16	5.44	6.82	19.29
News*Across pos	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002
t-stat	20.01	16.84	18.87	29.24	19.19	27.73
News*Same neg	-0.00001	-0.00006	-0.00002	0.00000	-0.00002	-0.00002
t-stat	-1.45	-6.60	-3.58	0.860	-4.300	-4.020
News*Same pos	-0.00013	-0.00019	-0.00005	0.00001	0.00001	0.00010
t-stat	-13.80	-16.87	-4.98	2.26	1.25	19.70
News*First local neg	-0.00001	-0.00004	-0.00007	-0.00002	-0.00005	-0.00009
t-stat	-2.32	-7.67	-16.88	-8.00	-16.04	-39.12
News*First local pos	0.00002	-0.00004	-0.00001	0.00004	0.00003	0.0001
t-stat	1.56	-3.08	-1.27	7.29	5.61	10.27
News*Same local neg	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.00003
t-stat	-14.22	-14.91	-18.89	-31.66	-26.84	-16.21
News*Same local pos	0.0000	0.0001	0.0004	0.00002	0.00003	0.00002
t-stat	0.89	2.49	14.17	2.01	2.66	2.18
News*Across local neg	0.0001	0.0001	0.0000	0.0001	0.0001	0.00004
t-stat	25.08	25.56	18.68	49.48	50.94	37.81
News*Across local pos	0.00001	0.00004	0.00003	0.00002	0.00004	0.00001
t-stat	2.13	5.73	6.44	5.84	11.58	6.95
Intercept	0.326	0.355	0.977	0.205	0.170	1.014
t-stat	15.31	13.35	43.62	21.91	14.04	104.44
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
District fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	7,640,267	7,640,267	7,640,267	19,207,278	19,207,278	19,207,278
R-square	0.07	0.08	0.09	0.07	0.08	0.09
F-value	100.44	101.80	171.59	143.58	136.39	144.30

Table A7. Additional news categories and the change in portfolio holdings

The table shows the effects of news tone in different news categories on trading activity. The unit of analysis is investor-time as the tables show results from local and non-local investors' portfolios separately. Web news and printed news as well as their interactions with news tone are included in the models. Local portion of the investor portfolio is studied by the variable logarithm of local value. All the regressions include the main effects, control variables, district fixed effects, and time fixed effects but the results from these variables are omitted to save space. The main variables of interest are the interaction effects. Standard errors are clustered on district and time. The bold marked coefficients (and t-value) are significant at the 5% level.

	d in share	d in adj. share	d in value
News	-0.0005	-0.0005	-0.0004
t-stat	-192.60	-193.50	-185.41
News L1	0.0005	0.0005	0.0004
t-stat	198.76	195.6	196.17
Log local value	-0.052	-0.062	-0.055
t-stat	-139.64	-131.25	-159.18
News*Local neg	0.0001	0.0001	0.0005
t-stat	2.15	1.98	13.78
News*Local pos	-0.0001	-0.0002	-0.0005
t-stat	-2.72	-7.45	-18.78
News*National neg	-0.001	-0.001	-0.002
t-stat	-10.40	-5.96	-14.42
News*National pos	-0.00003	0.00006	0.00044
t-stat	-0.58	1.020	6.14
News*Local neg*Log local value	0.00001	0.00001	0.00004
t-stat	2.00	1.89	12.29
News*Local pos*Log local value	0.00001	0.00003	0.00004
t-stat	5.17	9.77	18.09
News*National neg*Log local value	0.0002	0.0002	0.0001
t-stat	16.12	10.63	9.95
News*National pos*Log local value	0.0000	0.0000	-0.00002
t-stat	0.28	-1.08	-3.09
News*First neg	-0.0004	-0.0004	-0.0006
t-stat	-9.64	-8.40	-17.83
News*First post	-0.0001	-0.0001	-0.0003
t-stat	-4.57	-4.83	-22.90
News*Following neg	-0.0001	-0.0001	-0.0001
t-stat	-10.16	-12.64	-5.95
News*Following pos	-0.0001	-0.0001	-0.00005
t-stat	-8.88	-7.99	-3.24
News*Print neg	0.0002	0.0001	0.0001
t-stat	25.96	9.39	8.11
News*Print pos	0.00002	0.00015	0.00006
t-stat	1.83	10.59	5.86
News*Web neg	0.0002	0.0001	0.0002
t-stat	10.34	2.60	12.82
News*Web pos	-0.0001	-0.0001	-0.0001
t-stat	-7.17	-7.42	-8.06
Intercept	-0.449	-0.433	-0.298
t-stat	-20.45	-16.34	-11.61
Main Effects	Yes	Yes	Yes
Control variables	Yes	Yes	Yes
District fixed effects	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes
Obs.	9,699,807	9,699,807	9,699,807
R-square	0.14	0.14	0.14
F-value	209.76	213.41	344.57

Table A8. News dispersion in tone across regions and the change in portfolio holdings

The tables show the effects of dispersion in tone across regions on the change in portfolio holdings. All the regressions include control variables, district fixed effects, and time fixed effects. Standard errors are clustered on district and time. The unit of analysis is at investor-time level. The bold marked coefficients (and t-values) are significant at the 5% level.

	d in share	d in adj. share	d in value
News	-0.00005	-0.00008	-0.00003
t-stat	-10.88	-15.63	-6.71
News L1	0.00002	0.00004	0.00002
t-stat	12.33	16.17	10.99
Dispersion in tone first	-0.017	-0.006	-0.048
t-stat	-7.29	-2.13	-22.70
Dispersion in tone same	0.003	0.029	0.035
t-stat	1.05	8.91	15.37
Dispersion in tone across	-0.018	-0.025	-0.044
t-stat	-8.10	-8.58	-22.20
Dispersion in tone first local	0.059	0.044	0.065
t-stat	22.75	13.00	26.03
Dispersion in tone same local	-0.018	-0.033	-0.004
t-stat	-2.26	-3.25	-0.61
Dispersion in tone across local	0.057	0.044	0.048
t-stat	19.51	11.77	18.64
News*Dispersion in tone first	-0.0001	-0.0001	-0.0001
t-stat	-10.35	-8.62	-12.26
News*Dispersion in tone same	-0.0001	-0.0001	-0.0001
t-stat	-8.36	-12.94	-9.94
News*Dispersion in tone across	-0.00001	0.000	0.000
t-stat	-2.41	-0.07	-0.72
News*Dispersion in tone first local	-0.0001	-0.0001	-0.0001
t-stat	-21.23	-9.06	-17.46
News*Dispersion in tone same local	0.00004	0.000	0.000
t-stat	2.50	-0.03	0.75
News*Dispersion in tone across local	0.000	0.000	0.000
t-stat	-1.25	1.62	-0.81
Intercept	0.349	0.328	0.847
t-stat	1.52	1.45	2.72
Control variables	Yes	Yes	Yes
District fixed effects	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes
Obs.	5,346,257	5,346,257	5,346,257
R-square	0.09	0.11	0.13
F-value	174.11	183.63	196.73

Table A9. Placebo tests on trading activity

The table shows results from four different placebo tests on trading activity. In all the analyses control variables, district fixed effects, and time fixed effects are included in the regressions but their results are not shown to save space. Standard errors are clustered on district and time. The analysis in **Placebo 25p (Placebo 50p)** regressions are based on the sample that news is republished in the next quarter in different locations. Non-news observations are selected and 25 (50) percent of these observations are randomly assigned as news. The analysis in **Placebo 25p (0,-3 days)** regressions are based on the sample that collects all the non-news observations between 3 days before a quarter end and at the quarter end. It then randomly assigns 25 percent of these non-news observations as news. Finally, the analysis in **Placebo 50p (0,-3 days)** randomly assigns 50 percent of the non-news observations as news in the same sample. The bold marked coefficients (and t-values) are significant at the 5% level.

Obs. 627,046,70	d in share	t-values	d in adj. share	t-values	d in value	t-values
Intercept	0.175	78.18	0.124	61.42	0.126	127.40
Placebo 25p	0.0001	1.36	0.00004	0.35	0.0005	1.10
R-square	0.080		0.085		0.126	
F-value	176.00		193.70		563.60	
<hr/>						
Obs. 627,046,70						
Intercept	0.175	78.18	0.124	61.41	0.264	127.38
Placebo50p	0.00002	0.21	0.00001	0.14	0.0001	1.02
R-square	0.080		0.085		0.126	
F-value	176.90		193.60		563.50	
<hr/>						
Obs. 598,655,01						
Intercept	0.104	41.72	0.078	38.14	0.233	103.69
Placebo 25p (0,-3days)	0.00003	0.35	0.00007	0.60	0.00001	0.06
R-square	0.083		0.090		0.133	
F-value	173.40		190.00		518.00	
<hr/>						
Obs. 598,655,01						
Intercept	0.104	41.70	0.078	38.13	0.233	103.64
Placebo 50p (0,-3days)	0.00005	0.60	-0.00004	-0.45	0.0001	1.34
R-square	0.083		0.090		0.133	
F-value	173.30		190.60		519.00	

Table A10. The common trends tests on the event study

The table shows results from the test of the common trends assumption in event studies. Dependent variable is the cumulative abnormal returns (CARs). The results are shown for all news and each news category separately. The results from the F-test, that all the lead event coefficients are zero, are also presented at the bottom of each column. The bold marked coefficients (and t-values) are significant at the 5% level.

Event	CARs	CARs	CARs	CARs	CARs	CARs	CARs	CARs	CARs
	All news	fist loc pos	fist loc neg	first nat pos	first nat neg	repub. loc neg	repub. loc pos	repub. nat pos	repub. nat neg
lag1 news	-0.0005 -2.94	-0.0010 -2.91	-0.0003 -1.21	-0.0003 -1.27	-0.0006 -3.42	-0.0003 -0.57	0.0001 0.13	-0.0004 -1.12	-0.0008 -2.59
lag2 news	0.0011 1.23	-0.0001 -0.33	-0.0002 -1.19	-0.0006 -2.01	0.0021 1.26	-0.0008 -2.43	-0.0007 -2.00	-0.0004 -1.64	0.0018 0.95
lag3 news	0.0008 0.96	0.0001 0.19	-0.0003 -1.07	-0.0005 -2.04	0.0017 1.07	-0.0020 -3.18	-0.0008 -1.17	-0.0004 -1.01	0.0011 0.6
lag4 news	0.0002 0.24	-0.0002 -0.37	-0.0007 -1.94	-0.0006 -3.36	0.0010 0.62	-0.0025 -3.11	-0.0008 -0.89	-0.0006 -1.06	0.0002 0.12
lag5 news	-0.0005 -0.61	-0.0009 -1.39	-0.0012 -2.66	-0.0012 -4.84	0.00001 0.01	-0.0024 -2.57	-0.0012 -1.16	-0.0002 -0.33	-0.0010 -0.57
lag6 news	-0.0014 -1.63	-0.0012 -1.56	-0.0020 -3.37	-0.0024 -6.89	-0.0012 -0.71	-0.0034 -3.25	-0.0018 -1.44	-0.0010 -1.21	-0.0021 -1.15
news	0.0033 11.42	0.0044 7.05	0.0010 2.77	0.0061 11	0.0020 6.62	0.0009 2.11	0.0053 5.09	0.0069 9.01	0.0018 4.02
lead1 news	-0.0011 -1.23	0.0005 0.6	-0.0019 -1.88	-0.0011 -1.93	-0.0010 -0.6	-0.00314 -0.98	0.0000 0.02	0.0005 0.55	-0.0021 -1.14
lead2 news	-0.0005 -0.59	-0.0009 -1.16	-0.0012 -0.47	-0.0011 -0.13	-0.0001 -0.06	-0.0029 -1.05	-0.0010 -0.95	0.0000 0.03	-0.0011 -0.63
lead3 news	0.0003 0.37	-0.0004 -0.58	-0.0008 -1.85	-0.0002 -1.01	0.0009 0.56	-0.0013 -1.54	-0.0003 -0.3	0.0001 0.16	0.0000 0.02
lead4 news	0.0009 1.07	0.0006 1.2	-0.0000 -0.05	-0.0003 -1.17	0.0018 1.14	-0.0024 -1.23	-0.0006 -0.75	-0.0000 -0.1	0.0010 0.56
lead5 news	0.0013 1.46	0.0006 1.52	-0.0002 -0.67	0.0000 0.12	0.0023 1.37	-0.0008 -1.56	-0.0008 -1.49	-0.0001 -0.31	0.0017 0.93
lead6 news	0.0015 1.67	-	-	0.0000	0.0025	-	-	-	0.0025 1.27
Obs.	5,624,917	102,183	291,229	330,179	1,853,436	49,208	33,309	134,397	887,972
R-square	0.016	0.074	0.040	0.041	0.018	0.113	0.169	0.060	0.040
F-test of Lead1-6=0	1.88	0.92	2.01	2.08	0.70	1.39	1.01	0.24	1.91

Table A11. Daily trade volume data, including institutional investors

The table shows results from the analyses that relate all the news variables to the daily trade volume that includes both individual and institutional investors' trades. The trade volume on stocks is obtained from Bloomberg. The dependent variable in the regressions is the natural logarithm of trade volume. All the regressions include the intercept and main effects, but the results are shown from the interaction effects to save space. Standard errors are clustered on firm and date. The bold marked coefficients (and t-values) are significant at the 5% level.

	Log volume	t-values	Log volume	t-values	Log volume	t-values	Log volume	t-values
News	0.010	5.74	0.008	4.68	0.008	4.76	0.004	3.01
Lagged news	0.005	3.43	0.006	4.66	0.003	2.38	0.003	2.42
News*First loc pos	0.041	2.41	0.017	1.05	0.049	3.31	0.020	1.35
News*First nat pos	0.038	4.43	0.046	5.94	0.040	5.15	0.046	6.49
News*First loc neg	-0.012	-2.14	-0.006	-0.96	-0.006	-1.16	0.002	0.30
News*First nat neg	-0.020	-5.61	-0.012	-3.71	-0.015	-5.13	-0.011	-3.99
News*Same loc pos	0.165	3.78	0.162	3.81	0.130	3.86	0.121	3.52
News*Same nat pos	0.077	5.43	0.075	5.72	0.057	4.32	0.065	5.28
News*Same loc neg	-0.023	-1.40	-0.024	-1.48	-0.016	-1.37	-0.013	-1.05
News*Same nat neg	-0.017	-3.42	-0.013	-2.80	-0.016	-4.01	-0.013	-3.40
News*Across loc pos	0.182	4.38	0.128	3.16	0.051	1.37	0.028	0.73
News*Across nat pos	0.073	2.71	0.073	2.71	0.076	3.37	0.089	3.89
News*Across loc neg	-0.004	-0.20	0.000	-0.01	0.030	2.49	0.027	2.27
News*Across nat neg	0.009	1.13	0.010	1.25	-0.010	-1.46	-0.006	-0.84
Control variables	No		No		Yes		Yes	
Media district FE	Yes		No		Yes		No	
Firm district FE	No		Yes		No		Yes	
Obs.	367,463		419,078		247,234		289,322	
R-square	0.006		0.043		0.395		0.413	
F-value	26.76		76.96		224.67		266.82	