Managerial Learning from Decoding Noisy Stock Prices: New(s) Evidence

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2023 ABFER

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“Is stock market a sideshow?”

- Yes, since no capital in/out of firms
- No, real effects stemming from the informational role of market :
  - Incentive channel: Pay for performance
  - Financing channel: Reduces financing costs
  - **Learning channel**: Managerial learning
- See Bond, Edmans, and Goldstein (2012)

Learning channel: Insider learning from outsiders

- Traditional theory: Insiders know everything
- But what if outsiders collectively reveal information unknown to insiders via prices?
- Testing framework of learning from prices
  - Investment sensitivity to Q
    - When managers are learning → Investment-price sensitivity ↑
  - M&A deals
    - Negative M&A announcement returns → Withdraw deals

The current evidence

- Infer from: price informativeness ↑ → learning ↑
  - Price nonsynchronicity/probability of informed trading (Chen, Goldstein, and Jiang, 2007)
  - Cross-listing (Foucault and Frésard, 2012)
  - Reg SHO Pilot Program (Lin, Liu, and Sun, 2019)
  - EDGAR (Bird et al., 2021; Goldstein et al., 2023)
  - Tick Size Pilot Program (Ye, Zheng, and Zhu, 2023)
- M&A deal withdraws
  - Negative announcement return (Luo, 2005)
  - Negative social media (Cookson et al., 2023)

The novelty of our paper

- However, price informativeness ≠ learning
- Can we have a measure that better resembles learning?
- Yes, use corporate news consumption as a proxy for one type of managerial learning activities
- A firm's reading of corporate news ↑ → Learning is taking place → investment-price sensitivity ↑
- That is, firm reads the news to decode the noisy information in the price.

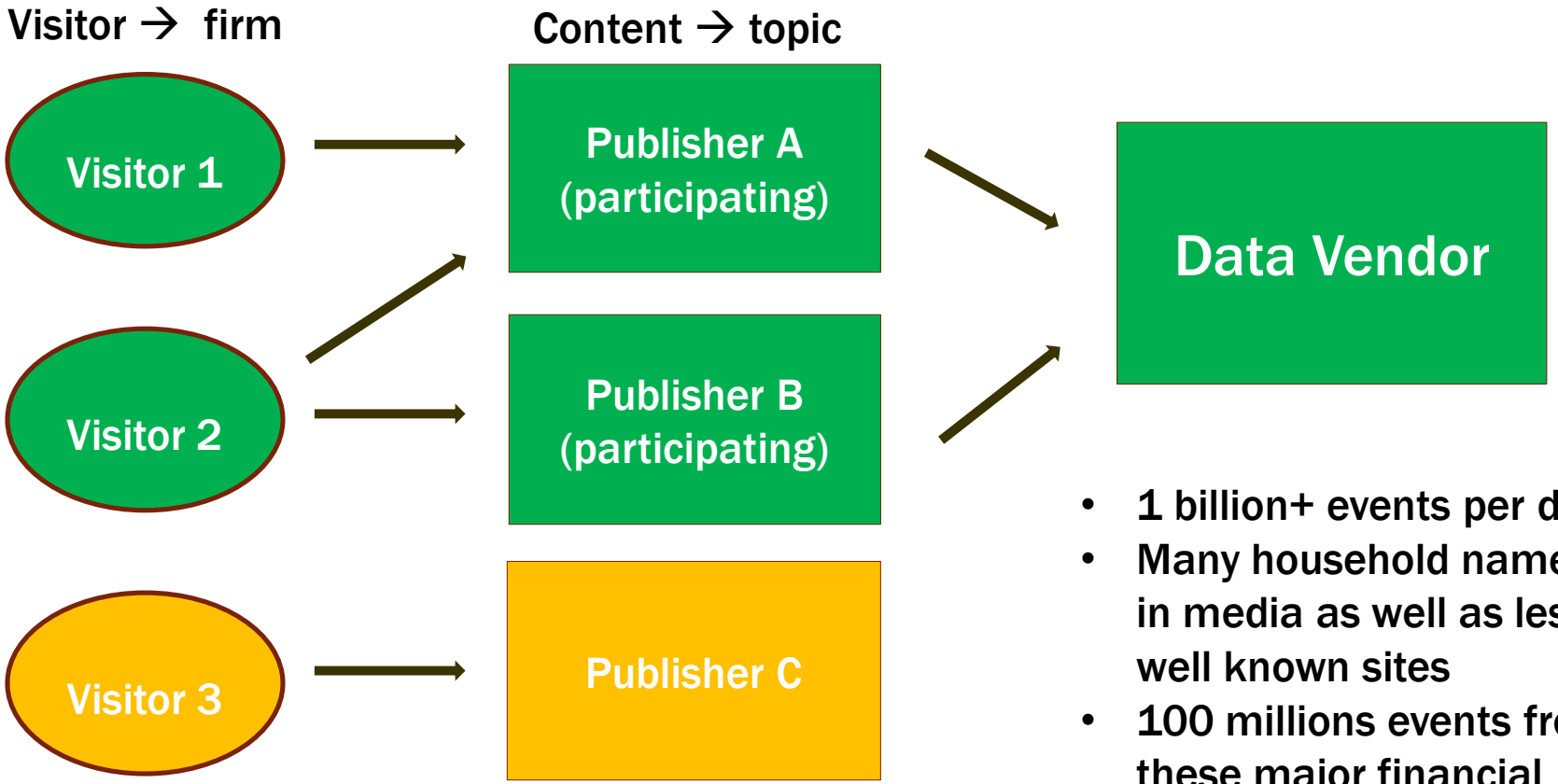
Main findings

- Learning: reading news about own firms
- Reading ↑ → investment-Q sensitivity ↑
- Not proxy for insider information, analyst information, or corporate news supply
- Which types of news reading matter?
  - HQ reading
  - Own > peers
  - Negative news

Corporate reading data

- “The Data Partner” is a data analytics company
- “Event-level”: Instances of page visits by firms
- Timestamp / reader (company) / URL being read
- Mapped to RavenPack news data to identify which firm reads what news
- Sample period is from 2017-11 to 2021-07

Corporate reading news from major financial publishers



- 1 billion+ events per day
- Many household names in media as well as less well known sites
- 100 millions events from these major financial publishers

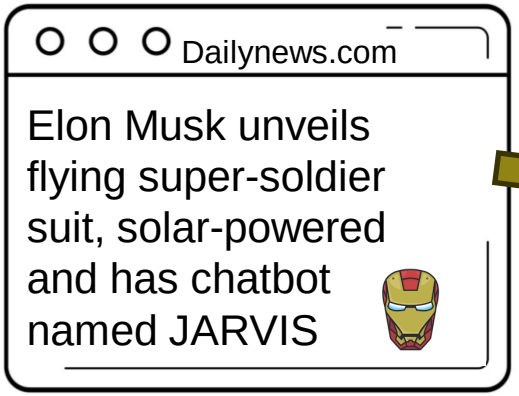
- **Reading data: website visited; timestamp of access; content of article**
- **Meta data: Domain (company user works for); IP address; approximate location.**

Browser ID	Domain	IP address	Website	Time	Loc.	User agent
AK	hku.hk	147.8.113.XXX	https://wallstreetnews.xyz/what_is_workfromhome/	2/10/2023, 9:50am	HKU	"google chrome laptop"
AK	hku.hk	147.8.113.XXX	https://randomeconwebsitesxyz/what_is_`identification`/	2/10/2023, 10:30am	HKU	"google chrome PC"
AK	hku.hk	147.8.113.XXX	https://healthline.xyz/how_much_coffee_is_overdose/	2/10/2023, 11:25am	HKU	"google chrome PC"
…						
TC	hku.hk	147.8.113.XXX	https://golf.xyz/how_to_say_no_to_annoying_colleagues_for_golf_unverifiable_ankle_injury	2/10/2023, 8:01am	HKU	"iPhone via Porsche Carplay"
TC	hku.hk	147.8.113.XXX	https://theonepercent.xyz/which_make_happier?_two_porsche_or_one_porsche_plus_airplane/	2/10/2023, 8:25am	HKU	"safari mac"

- **This is a stylized example**
- **Users are anonymous and never identifiable in the data**

Join news headline to reading events

Web Event dataset



Fuzzy or Exact Match on Best Headline/Time Match

Ravenpack

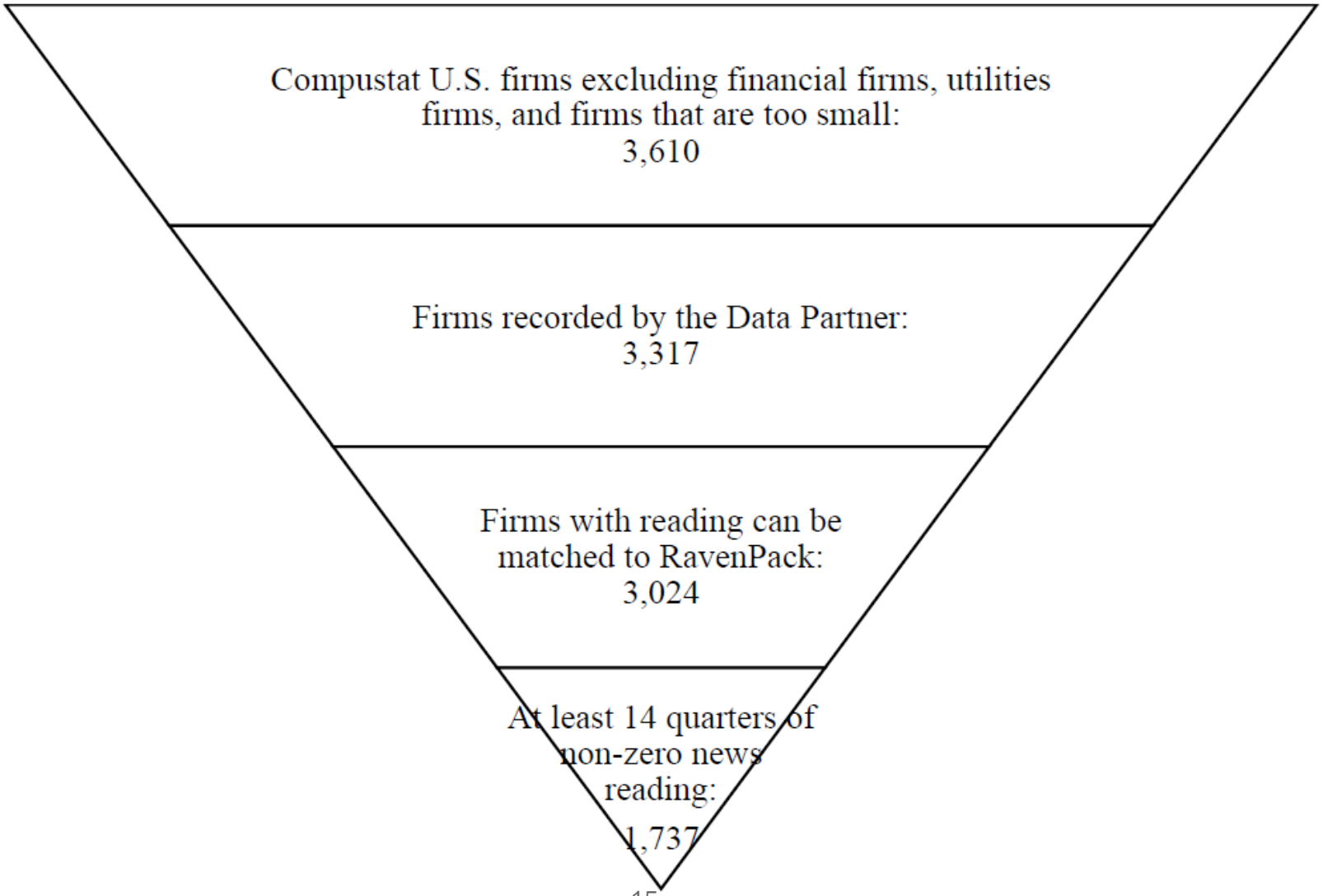
Result: count firms self-reading

Firm	Topic	Date	Count
Tesla	Tesla	2020-01-05	1
~~Apple~~	~~Tesla~~	~~2020-01-05~~	~~2~~
~~GM~~	~~Tesla~~	~~2020-01-05~~	~~1~~
~~HKU~~	~~Tesla~~	~~2020-01-05~~	~~1~~

Construction of corporate reading

- $Reading_{i,t-1}$
  - ReadOwnNews
    - Reading news mentioning own company
    - $ReadOwnNews = \log\left(1000 \times \frac{N_{ReadOwnNews}}{ATQ} + 1\right)$
  - ReadPeerNews
    - Reading news mentioning TNIC3 peers
    - Textual Network Industry Classifications database (Hoberg and Phillips, 2016)
    - Textual similarity of 10K reports
    - Like SIC 3-digit
  - ReadMacroNews
    - Reading news mentioning non-company entities

Sample firm selection process



Main regression

$$Expenditure_{it} = \beta_1 Q_{it-1} \times Read_{it-1} + \beta_2 Read_{it-1} + \beta_3 Q_{it-1} + Controls_{it-1} + FE + \epsilon_{it}$$

- Expenditure is either R&D or R&D + CAPX.
- We expect β_1 to be positive that corporate news reading helps managerial learning.
- We expect β_3 to be positive, which captures other forms of managerial learning or financial constraints.

Main regression

- $Control_{i,t-1}$
  - Cash flow
  - 1/asset: common denominator
  - Insider: volume share of insider trading
  - Analyst: log(Number of analysts + 1)
    - Earnings forecast / price target / recommendation
  - News Supply: number of news mentioning the firm, normalized

Summary statistics: News

	N	Mean	Std. Dev.	P25	Median	P75
$ReadNews^{Own}$	27,126	1.415	1.763	0	0.56	2.547
$ReadNews^{Own,\ Ktot}$	25,851	1.413	1.748	0	0.58	2.536
$ReadNews^{Own,\ HQ}$	26,204	0.889	1.465	0	0	1.355
$ReadNews^{Own,\ Non\text{-}HQ}$	26,204	0.7	1.214	0	0	0.986
$ReadNews^{Own,\ Non\text{-}Pos}$	27,126	0.788	1.311	0	0	1.204
$ReadNews^{Own,\ Pos}$	27,126	0.721	1.225	0	0	1.051
$ReadNews^{Own,\ Full\text{-}Article}$	27,126	1.122	1.543	0	0.114	1.973
$ReadNews^{Own,\ PR\ /\ Flash}$	27,126	0.691	1.312	0	0	0.803
$ReadNews^{Peer}$	23,645	1.503	1.868	0	0.569	2.703
$ReadNews^{General}$	27,493	6.964	1.663	6.088	7.113	8.061
NewsSupply	26,844	5.445	1.526	4.347	5.288	6.471

Summary statistics: Firms

	N	Mean	Std. Dev.	P25	Median	P75
Core						
R&D	27,515	1.204	2.222	0	0	1.548
R&D+CAPX	27,429	2.18	2.525	0.535	1.263	2.886
ι^{int}	26,194	2.646	2.747	0.804	1.936	3.442
ι^{tot}	26,131	3.559	2.984	1.715	2.76	4.282
Q	27,288	2.432	1.904	1.194	1.715	2.88
Q^{tot}	24,864	1.747	2.314	0.455	0.927	1.975
Controls						
CF	27,194	0.861	4.982	–0.031	1.781	3.185
CF^{Ktot}	25,904	1.201	4.979	0.002	1.69	3.075
1/AT	27,515	7.707	20.771	0.214	0.8	3.679
$1/K^{tot}$	26,194	6.283	16.004	0.205	0.795	3.314
Insider	27,515	0.015	0.051	0	0.001	0.007
Analyst	27,515	2.521	1.28	1.946	2.773	3.466

	ReadNews^{Own}		ReadNews^{Peer}		ReadNews^{General}	
	(1)	(2)	(3)	(4)	(5)	(6)
NewsSupply	0.8369***	1.0251***	0.6035***	0.7427***	0.4021***	0.5675***
	(0.0452)	(0.0583)	(0.0580)	(0.0700)	(0.0509)	(0.0623)
CashFlow	–0.0119*	–0.0123	–0.0248***	–0.0137*	–0.0076	–0.0138**
	(0.0064)	(0.0085)	(0.0072)	(0.0080)	(0.0048)	(0.0057)
Size	0.6486***	0.7982***	0.2452***	0.4176***	–0.0180	0.1259**
	(0.0401)	(0.0512)	(0.0524)	(0.0623)	(0.0457)	(0.0543)
Leverage	0.0013	0.0012	0.0016	0.0006	0.0013*	0.0004
	(0.0009)	(0.0011)	(0.0012)	(0.0012)	(0.0008)	(0.0009)
Tangibility	–0.0021	–0.0024	–0.0064***	–0.0060***	–0.0002	–0.0008
	(0.0015)	(0.0018)	(0.0018)	(0.0019)	(0.0020)	(0.0021)
Profitability	0.0077***	0.0091***	0.0021	0.0081***	0.0173***	0.0185***
	(0.0017)	(0.0020)	(0.0023)	(0.0023)	(0.0020)	(0.0023)
Volatility	12.6002***	12.8802***	2.5068	0.7107	–3.5393**	–4.6934**
	(1.5775)	(2.3988)	(1.8526)	(2.4474)	(1.4672)	(2.1226)
Return4Q	0.0815***	0.1127**	–0.0271	–0.0156	–0.0511**	–0.0265
	(0.0280)	(0.0545)	(0.0322)	(0.0533)	(0.0212)	(0.0423)
QuotedSpread	–15.7427***	–16.2034***	–19.9014***	–13.7233**	2.7640	4.3770
	(3.2485)	(4.1622)	(4.9239)	(5.3695)	(3.5966)	(4.1941)
Analyst	0.1366***	0.0869*	0.2636***	0.1400***	0.0089	–0.0130
	(0.0397)	(0.0483)	(0.0486)	(0.0505)	(0.0478)	(0.0544)
InstitutionOwn	0.2485***	0.1905*	0.2638**	0.3460***	0.3622***	0.3229***
	(0.0954)	(0.1102)	(0.1096)	(0.1196)	(0.1084)	(0.1215)
ProdMktFluidity		0.0060		0.1151***		–0.0214*
		(0.0114)		(0.0108)		(0.0113)
Industry FE	NAICS2	NAICS2	NAICS2	NAICS2	NAICS2	NAICS2
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	23,769	12,747	21,571	11,796	23,798	12,735
Adjusted R^2	0.2677	0.2699	0.2477	0.2783	0.3370	0.2792

Main result

	R&D		R&D+CAPX	
	(1)	(2)	(3)	(4)
Q×ReadNews^{Own}	0.0170***	0.0162***	0.0202***	0.0191***
	(0.0042)	(0.0043)	(0.0052)	(0.0052)
Q	0.1144***	0.0941***	0.2228***	0.1994***
	(0.0193)	(0.0187)	(0.0226)	(0.0226)
ReadNews^{Own}	0.0104*	0.0108*	0.0037	0.0042
	(0.0063)	(0.0061)	(0.0096)	(0.0097)
CF		–0.0217***		–0.0088*
		(0.0035)		(0.0049)
1/AT		0.0244***		0.0259***
		(0.0069)		(0.0084)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	26,998	26,703	26,949	26,661
Adjusted R^2	0.8857	0.8904	0.7819	0.7843

$$Expenditure_{it} = \beta_1 Q_{it-1} \times Read_{it-1} + \beta_2 Read_{it-1} + \beta_3 Q_{it-1} + Controls_{it-1} + FE$$

Robustness checks

- Our results are robust to
  - Controlling for insiders' or analysts' information set
  - Controlling for the news supply (#articles)
  - Replacing Missing R&D with the industry average
  - Controlling for the financial constraints
  - Using intangible investment (R&D plus 30% of SG&A, Peters and Taylor, 2017) as the dependent variable and total Q as the independent variable

	R&D		R&D+CAPX	
	(1)	(2)	(3)	(4)
Q×ReadNews^{Own}	0.0167***	0.0142***	0.0211***	0.0181***
	(0.0042)	(0.0044)	(0.0053)	(0.0055)
Q×Insider	0.1525	0.1945**	0.1240	0.1689
	(0.0971)	(0.0975)	(0.1241)	(0.1250)
Q×Analyst	–0.0089	0.0214*	–0.0230	0.0109
	(0.0109)	(0.0111)	(0.0142)	(0.0142)
Q	0.1365***	0.0386	0.2792***	0.1682***
	(0.0310)	(0.0309)	(0.0415)	(0.0414)
ReadNews^{Own}	0.0104*	0.0121**	0.0028	0.0043
	(0.0063)	(0.0060)	(0.0096)	(0.0098)
Insider	–0.0007	0.0081	0.2299	0.2709
	(0.1138)	(0.1143)	(0.2249)	(0.2257)
Analyst	–0.1731***	–0.0945***	–0.0668	0.0325
	(0.0363)	(0.0346)	(0.0523)	(0.0542)
CF		–0.0216***		–0.0087*
		(0.0035)		(0.0048)
1/AT		0.0242***		0.0266***
		(0.0070)		(0.0086)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	26,998	26,703	26,949	26,661
Adjusted R^2	0.8863	0.8908	0.7821	0.7844

	R&D		R&D+CAPX	
	(1)	(2)	(3)	(4)
Q×ReadNews^{Own}	0.0116***	0.0124***	0.0159***	0.0164***
	(0.0041)	(0.0042)	(0.0052)	(0.0053)
Q×NewsSupply	0.0514***	0.0401***	0.0324***	0.0208**
	(0.0085)	(0.0078)	(0.0108)	(0.0100)
Q	0.0318*	0.0320*	0.1569***	0.1534***
	(0.0192)	(0.0185)	(0.0244)	(0.0244)
ReadNews^{Own}	–0.0018	0.0012	–0.0129	–0.0100
	(0.0063)	(0.0061)	(0.0097)	(0.0099)
NewsSupply	0.2086***	0.1639***	0.2989***	0.2597***
	(0.0223)	(0.0224)	(0.0309)	(0.0322)
CF		–0.0195***		–0.0061
		(0.0034)		(0.0049)
1/AT		0.0229***		0.0249***
		(0.0078)		(0.0096)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	26,676	26,385	26,631	26,346
Adjusted R^2	0.8881	0.8917	0.7844	0.7861

	$R\&D^{fillavg}$		$R\&D^{fillavg}$+CAPX	
	(1)	(2)	(3)	(4)
$Q \times ReadNews^{Own}$	0.0242***	0.0221***	0.0273***	0.0246***
	(0.0083)	(0.0078)	(0.0089)	(0.0083)
Q	0.1815***	0.1553***	0.2868***	0.2588***
	(0.0340)	(0.0322)	(0.0358)	(0.0344)
$ReadNews^{Own}$	0.0064	0.0092	0.0009	0.0042
	(0.0175)	(0.0176)	(0.0195)	(0.0198)
𝟙(MissingR&D)	3.8753***	3.8456***	3.7557***	3.7257***
	(0.4016)	(0.4032)	(0.4111)	(0.4128)
CF		–0.0284***		–0.0127
		(0.0067)		(0.0077)
1/AT		0.0335***		0.0324***
		(0.0111)		(0.0120)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	25,035	24,761	24,990	24,722
Adjusted R^2	0.6458	0.6473	0.6171	0.6180

	R&D+CAPX						
	AVG^z	PCA^z	$MktCap^z$	$DivPos^z$	$KZ4^z$	WW^z	SA^z
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
$Q \times ReadNews^{Own}$	0.0164***	0.0165***	0.0167***	0.0159***	0.0150***	0.0180***	0.0143***
	(0.0046)	(0.0045)	(0.0046)	(0.0047)	(0.0045)	(0.0047)	(0.0043)
Q	0.1674***	0.1548***	0.1778***	0.1589***	0.1868***	0.1512***	0.1527***
	(0.0237)	(0.0234)	(0.0248)	(0.0245)	(0.0245)	(0.0235)	(0.0234)
$ReadNews^{Own}$	–0.0335**	–0.0340***	–0.0371***	–0.0356***	–0.0303**	–0.0379***	–0.0333**
	(0.0131)	(0.0130)	(0.0136)	(0.0136)	(0.0130)	(0.0137)	(0.0131)
Q×Constraint	0.0550***	0.0361***	–0.0072*	0.0372*	0.0139	0.0236***	0.0013
	(0.0203)	(0.0106)	(0.0042)	(0.0207)	(0.0091)	(0.0085)	(0.0241)
Constraint	–0.0490	–0.0284	0.2023***	–0.0973	–0.0357	–0.0488*	2.4475***
	(0.1106)	(0.0456)	(0.0582)	(0.0660)	(0.0615)	(0.0281)	(0.4019)
CF	–0.0067	–0.0064	–0.0085*	–0.0086*	–0.0085	–0.0064	–0.0049
	(0.0054)	(0.0054)	(0.0049)	(0.0048)	(0.0054)	(0.0049)	(0.0050)
1/AT	0.0300***	0.0295***	0.0257***	0.0257***	0.0315***	0.0258***	–0.0122
	(0.0069)	(0.0069)	(0.0084)	(0.0085)	(0.0069)	(0.0088)	(0.0110)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	25,060	25,060	26,661	26,661	25,362	25,967	26,661
Adjusted R^2	0.7877	0.7878	0.7845	0.7844	0.7857	0.7882	0.7885

Intangible Investment and Total Q

	I^{int}		I^{tot}	
	(1)	(2)	(3)	(4)
$Q^{tot} \times ReadNews^{Own, Ktot}$	0.0158**	0.0143**	0.0192**	0.0169**
	(0.0067)	(0.0063)	(0.0081)	(0.0077)
Q^{tot}	0.3616***	0.3311***	0.4861***	0.4505***
	(0.0289)	(0.0269)	(0.0329)	(0.0312)
$ReadNews^{Own, Ktot}$	0.0357***	0.0320***	0.0392***	0.0337***
	(0.0092)	(0.0087)	(0.0115)	(0.0113)
CF^{Ktot}		–0.0226***		–0.0102
		(0.0055)		(0.0069)
$1/K^{tot}$		0.0744***		0.0785***
		(0.0128)		(0.0161)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	24,621	24,390	24,588	24,358
Adjusted R^2	0.8895	0.8965	0.8094	0.8134

Additional tests

- News reading from IPs close by the HQs drives the results
- Some evidence of learning from reading peers' news
- Managers learn from negative news
- Managers learn from full-length articles, not press releases or news flashes
- Industry leaders, in terms of sales, learn less

	R&D		R&D+CAPX	
	(1)	(2)	(3)	(4)
$Q \times ReadNews^{Own, HQ}$	0.0162***	0.0133**	0.0149**	0.0114*
	(0.0053)	(0.0053)	(0.0066)	(0.0065)
$Q \times ReadNews^{Own, Non-HQ}$	0.0009	0.0035	0.0076	0.0106
	(0.0058)	(0.0055)	(0.0081)	(0.0079)
Q	0.1177***	0.0974***	0.2239***	0.2005***
	(0.0195)	(0.0189)	(0.0228)	(0.0228)
$ReadNews^{Own, HQ}$	0.0086	0.0098	0.0043	0.0063
	(0.0078)	(0.0075)	(0.0124)	(0.0122)
$ReadNews^{Own, Non-HQ}$	–0.0013	–0.0033	–0.0050	–0.0073
	(0.0096)	(0.0089)	(0.0136)	(0.0129)
CF		–0.0219***		–0.0086*
		(0.0036)		(0.0050)
1/AT		0.0248***		0.0266***
		(0.0071)		(0.0087)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	26,091	25,798	26,043	25,757
Adjusted R^2	0.8852	0.8901	0.7846	0.7872

	R&D		R&D+CAPX	
	(1)	(2)	(3)	(4)
Q×ReadNews^{Own}	0.0122**	0.0115**	0.0198***	0.0185***
	(0.0048)	(0.0050)	(0.0061)	(0.0062)
Q×ReadNews^{Peer}	0.0140**	0.0167***	0.0082	0.0117*
	(0.0057)	(0.0054)	(0.0073)	(0.0070)
Q×ReadNews^{General}	0.0089	0.0050	–0.0033	–0.0080
	(0.0071)	(0.0058)	(0.0096)	(0.0081)
Q	0.1029***	0.0884***	0.2119***	0.1938***
	(0.0211)	(0.0200)	(0.0247)	(0.0244)
ReadNews^{Own}	–0.0055	0.0009	–0.0204*	–0.0137
	(0.0073)	(0.0071)	(0.0107)	(0.0108)
ReadNews^{Peer}	–0.0103	–0.0132	–0.0162	–0.0198*
	(0.0088)	(0.0082)	(0.0118)	(0.0117)
ReadNews^{General}	0.1178***	0.0868***	0.1531***	0.1256***
	(0.0177)	(0.0161)	(0.0251)	(0.0236)
CF		–0.0236***		–0.0078
		(0.0040)		(0.0055)
1/AT		0.0300**		0.0301**
		(0.0120)		(0.0143)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	23,425	23,188	23,416	23,179
Adjusted R^2	0.8889	0.8932	0.7853	0.7868

	R&D		R&D+CAPX	
	(1)	(2)	(3)	(4)
Q×ReadNews$^{Own, Non-Pos}$	0.0178***	0.0214***	0.0262***	0.0304***
	(0.0067)	(0.0063)	(0.0076)	(0.0072)
Q×ReadNews$^{Own, Pos}$	0.0016	0.0023	–0.0011	–0.0007
	(0.0063)	(0.0061)	(0.0074)	(0.0071)
Q	0.1271***	0.1046***	0.2361***	0.2103***
	(0.0195)	(0.0189)	(0.0229)	(0.0226)
ReadNews$^{Own, Non-Pos}$	0.0139*	0.0144**	–0.0086	–0.0049
	(0.0083)	(0.0073)	(0.0111)	(0.0104)
ReadNews$^{Own, Pos}$	–0.0095	–0.0083	0.0091	0.0096
	(0.0084)	(0.0078)	(0.0112)	(0.0111)
CF		–0.0220***		–0.0092*
		(0.0035)		(0.0049)
1/AT		0.0247***		0.0262***
		(0.0069)		(0.0085)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	26,998	26,703	26,949	26,661
Adjusted R^2	0.8856	0.8906	0.7819	0.7846

	R&D		R&D+CAPX	
	(1)	(2)	(3)	(4)
$Q \times ReadNews^{Own,\ Full\text{-}Article}$	0.0125***	0.0167***	0.0147**	0.0193***
	(0.0047)	(0.0046)	(0.0061)	(0.0059)
$Q \times ReadNews^{Own,\ PR\ /\ Flash}$	0.0130**	0.0090*	0.0163**	0.0120*
	(0.0053)	(0.0053)	(0.0066)	(0.0065)
Q	0.1148***	0.0947***	0.2227***	0.1994***
	(0.0194)	(0.0188)	(0.0227)	(0.0227)
$ReadNews^{Own,\ Full\text{-}Article}$	0.0028	0.0038	–0.0018	0.0011
	(0.0068)	(0.0064)	(0.0098)	(0.0097)
$ReadNews^{Own,\ PR\ /\ Flash}$	0.0111	0.0109	0.0026	0.0014
	(0.0096)	(0.0090)	(0.0143)	(0.0145)
CF		–0.0218***		–0.0089*
		(0.0035)		(0.0049)
1/AT		0.0246***		0.0261***
		(0.0069)		(0.0085)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	26,998	26,703	26,949	26,661
Adjusted R^2	0.8857	0.8906	0.7820	0.7845

	R&D		R&D+CAPX	
	(1)	(2)	(3)	(4)
Q×ReadNews^{Own}	0.0160***	0.0151***	0.0213***	0.0201***
	(0.0046)	(0.0047)	(0.0056)	(0.0057)
Q×ReadNews^{Own}×**Sales**^{RelToPeers}	–0.0100**	–0.0102**	–0.0103*	–0.0104*
	(0.0050)	(0.0049)	(0.0055)	(0.0054)
Q	0.1150***	0.1004***	0.2207***	0.2024***
	(0.0206)	(0.0193)	(0.0243)	(0.0238)
Q×**Sales**^{RelToPeers}	0.0249*	0.0273**	0.0229	0.0258*
	(0.0142)	(0.0134)	(0.0148)	(0.0144)
ReadNews^{Own}	0.0092	0.0108	–0.0019	0.0008
	(0.0069)	(0.0066)	(0.0105)	(0.0106)
ReadNews^{Own}×**Sales**^{RelToPeers}	0.0062	0.0046	–0.0014	–0.0023
	(0.0087)	(0.0088)	(0.0104)	(0.0105)
Sales^{RelToPeers}	0.0221	0.0219	0.0254	0.0247
	(0.0244)	(0.0236)	(0.0259)	(0.0256)
CF		–0.0227***		–0.0077
		(0.0039)		(0.0055)
1/AT		0.0323***		0.0328**
		(0.0120)		(0.0145)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	23,441	23,224	23,431	23,215
Adjusted R^2	0.8885	0.8930	0.7848	0.7867

Conclusion

- We provide a new measure, based on corporate news consumption, that resembles managerial learning.
- Higher corporate news consumption, stronger investment sensitivity to Q.
- Robustness checks and additional analyses corroborate that reading news help managers to decode noisy signals in the stock prices.

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