

Beyond dissemination: Social media as a disclosure channel for original firm information

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Beyond dissemination: Social media as a disclosure channel for original firm information

Abstract

While prior research views social media as a complement to traditional disclosure channels—used to increase dissemination and investor attention—we provide evidence that corporate tweets also frequently serve as a distinct channel through which firms communicate original, market-moving information to investors. First, a large portion of corporate tweets occur on days without concurrent earnings announcements, regulatory filings, or traditional media releases, suggesting firms use social media to share news not yet disclosed elsewhere. Second, intraday trading reactions in the two minutes surrounding corporate tweets are economically meaningful even in the absence of concurrent events, suggesting that investors extract value-relevant information directly from these posts. Third, this effect is particularly pronounced when tweets contain more textual content, numbers, and financial information. Surprisingly, despite the apparent materiality of corporate tweets, few firms explicitly designate Twitter as a recognized channel in regulatory filings, as required by the SEC. Moreover, we find no significant change in investor response or tweet content following formal designation or informal mention of Twitter in firm regulatory filings. This disconnect raises questions about whether Regulation Fair Disclosure is effective for social media.

Keywords: firm communication, disclosure, social media, Twitter, regulation, designation.

1. Introduction

The rise of social media has transformed the financial information environment, creating new dynamics in both the production and consumption of corporate information (see Cookson et al., 2024 for a review). For example, social media can serve an intermediary role, akin to non-professional analysts, increasing information production. Similarly, social media can change information consumption, facilitating information gathering through increased dissemination. However, while social media has reshaped the information landscape, the extent to which managers leverage it as a distinct disclosure channel to provide original market-relevant firm information remains uncertain.

To date, prior research has focused on social media as a complement to traditional disclosure channels. That is, managers use social media in conjunction with traditional channels to enhance their disclosure objectives. For example, companies increase dissemination of their press releases with social media to reduce information asymmetry (Blankespoor et al., 2014). Further, companies use visuals in social media around earnings announcements to increase investor attention (Nekrasov et al., 2022). Finally, earlier findings (in the life of social media) suggest companies use social media strategically to increase good news dissemination and limit bad news dissemination (Jung et al., 2018) though more recent work suggests a greater focus on disseminating material news, both good and bad (Crowley et al., 2024).

We propose that managers also use social media as a distinct channel to communicate new information to investors—rather than merely reiterating and amplifying conventional disclosures. This hypothesis is motivated by at least three empirical observations. First, while conventional disclosures are largely moving outside of trading hours, original social media posts made by the

firm are just as likely to occur during trading hours as outside.¹ Second, companies are increasingly issuing social media posts, whereas their use of corporate press releases is declining.² Third, a considerable number of publicly traded firms reference their social media outlets in regulatory filings (more than 500 firms), with a subset explicitly designating those channels for release of potentially material non-public disclosure.

We study how firms use social media using a large panel of original corporate tweets from Twitter (now known as X). We focus on corporate tweets because they are widely used by publicly traded companies in the U.S. and their exact posting times are known. For example, as of 2022, 70% of S&P 1500 firms in our sample have corporate Twitter accounts. Furthermore, we find a considerable portion regularly use the platform, with more than 1,000 firms tweeting at least 10 times in 2022 and nearly 600 firms tweeting at least 100 times in the year. We identify more than 8 million original corporate tweets made by these firms on trading days from 2007-2022, more than half of which (4.4 million) are made during trading hours. Our analyses focus on these in-hours original firm tweets.

We conduct multiple analyses to determine whether corporate managers use tweets as a channel to provide original value-relevant information to investors. First, we assess the timing of corporate tweets with respect to conventional forms of disclosure. We find 65% of in-trading-hours corporate tweets occur on non-information event days (i.e., on trading days absent earnings

¹ Original tweets are those that originate from the firm rather than those reposting or replying to existing posts. Figure 1 shows that corporate tweets inside and outside market hours have largely moved in tandem over time (Panel A) with approximately 50% of firms' original tweets posted during market hours. This percentage has remained relatively constant from 2010-2022 (Panel B). In contrast, Figure 2 Panel A shows a much smaller proportion of corporate press releases are disclosed during market hours, with this percentage declining from 32% in 2010 to 23% in 2022. We discuss these figures more thoroughly in Section 2.

² Figure 1 Panel A (Figure 2 Panels B and C) document the increasing (decreasing) usage of corporate Tweets (press releases). For example, from 2010 to 2022 total corporate tweets increased from 82K to 1.4M for our sample firms, whereas total press releases declined from 229K to 188K over the same time period.

announcements, regulatory filings, and other media releases), suggesting they are not merely complementary. Moreover, while the literature often focuses on tweets around earnings announcements, we find only 2% of the in-hours tweets occur on the earnings announcement day and only 4.4% (7.4%) are in the 3-day (5-day) trading window centered on the earnings announcement.

Second, we examine whether in-hours tweets convey information content. We focus on high-frequency intraday trading data to identify the immediate stock price impact of the tweets. Results are consistent with investors gleaning value-relevant information from the tweets, as measures of investor trading in the two-minutes surrounding the tweet are economically meaningful. For example, the average abnormal absolute return is 12.6 basis points higher than the typical return for the same day and time. Further, absolute returns and share turnover are 0.14 and 0.13 standard deviations higher, respectively, than a control window average (again from the same day of week and time window). Most importantly, these market responses are observed on days with no other observable events—suggesting that investors are reacting to new, standalone information in the tweets.

Third, we examine what tweet characteristics are associated with the largest market consequences, with an emphasis on those occurring on non-event days (i.e., days without earnings announcements, regulatory filings, or media coverage). Results suggest investor responses are stronger when the tweets are more likely to contain material information. Abnormal absolute returns are positively associated with both longer tweets and tweets with more numbers. However, absolute returns are not associated with links, indicating returns are unlikely to reflect dissemination effects. Likewise, absolute returns are not associated with visuals (e.g., pictures or

videos), suggesting attention effects are minimal. These findings are robust to a variety of firm and event controls, as well as firm and time fixed effects.

We also assess the content of the corporate tweets. We fit a BERTopic model on a random sample of corporate tweets and then apply the trained model to categorize the full sample. The model successfully categorizes more than 1.3 million corporate tweets, with advertising and customer engagement being the most prevalent (29% of the categorized tweets), followed by technology and innovation (22%), health and wellness (9%), hiring and employee-related (8%), diversity/social issues (7%), financial news (7%), and four other topics making up the remainder. Consistent with the idea that social media conveys original market-relevant information, we find that corporate tweets classified as financial news-related have significantly greater absolute abnormal returns than the other topics, while other topics are generally indistinguishable in terms of average market response. These results control for earnings announcements, regulatory filings, and other media releases, consistent with material financial news being disclosed on Twitter even on days when conventional channels are absent.³

Having provided strong evidence that corporate tweets frequently convey market-moving information, we now turn toward understanding whether these communication patterns are consistent with the expectations of regulators. In 2013, the SEC made it clear that “companies can use social media outlets like Facebook and Twitter to announce key information... so long as investors have been alerted about which social media will be used to disseminate such information” (SEC, 2013b). Prior to this guidance, companies communicating material news were bound more broadly by Regulation Fair Disclosure.

³ We also examine the prevalence of financial news tweets surrounding the announcement event. We find only 1.2% of the in-hours financial tweets occur on the earnings announcement day and only 3.8% (6.4%) are in the 3-day (5-day) trading window centered on the earnings announcement.

Given the material nature of corporate tweets, we expect a significant number of firms to follow regulator guidance and designate Twitter as a channel for material non-public information after the 2013 guidance. We scrape all regulatory filings for Twitter references and then evaluate whether they constitute an explicit designation. Surprisingly, few filings explicitly designate Twitter as a channel that investors should monitor: 29 firms did so by the end of 2014 with the number rising only to 57 by the end of 2022. Firms do frequently mention their social media platforms—with just over half of the tweeting firms (593 of 1,128) mentioning their corporate Twitter accounts by 2022—however these firms do not advise investors to monitor the channel for material news.

Given this disconnect between the use of Twitter to convey market-moving information and the lack of formal designation, we examine whether explicit designation, or informal mention, of firm social media channels have implications for investor responses to corporate tweets following the SEC regulation guidance. On one hand, regulatory interventions could be expected to strengthen both firms' use of social media and investors' trust of such disclosures given regulatory acceptance of it as a disclosure channel. On the other, few firms choosing to designate could indicate that there is limited benefit to the regulation and resulting designations. This could reflect the considerable obstacles Regulation Fair Disclosure has faced, such as the unfavorable precedent set in the *SEC v. Siebel Systems, Inc.* case calling in question its enforceability (Allee et al., 2022). It is therefore unclear whether adherence to the regulatory guidelines is important for corporate tweets to convey material information to investors.

We examine this question by testing whether market responses change for firms after they designate or mention social media in a regulatory filing following the 2013 SEC guidance. Even though the guidance explicitly mandates that firms designate a (social media) channel as a source

of material information to acknowledge its use in that manner, we do not find significant differences in market responses to tweets post-designation or post-mention. This is true for the short window around the guidance (2012-2014), for a longer window around the guidance (2010-2016), and when we examine only the tweets identified as relating to financial news.

Finally, we complement these results by examining whether firms that designate or mention Twitter change their in-market-hours corporate tweets following the regulatory action. Findings show no significant changes in tweet length, numerical content, or proclivity to provide financial news after designating or mentioning, indicating no increase in material content.

Our study provides several important contributions. First, we contribute to the literature examining the role of social media in capital markets, particularly with respect to corporate communication. To date, the literature has predominantly focused on how social media outlets provide an additional platform for firms to enhance the dissemination of conventional disclosures, thereby reaching more investors and reducing processing costs (Blankespoor et al., 2020). Our evidence suggests corporate tweets often contain original information that investors act upon. This highlights the potential for social media to serve not just as a dissemination tool, but as an independent source of firm-initiated, market-relevant information.

Second, we contribute to research examining what moves prices during the trading day. While prior research documents a trend of firms shifting conventional disclosures, such as earnings announcements, outside of hours (deHaan et al., 2015), there continues to be significant volatility during the day, sometimes even resulting in intraday information-related trading halts (Marshall et al., 2023). We provide evidence suggesting that at least some of the in-hours trading volatility could result from information-based trades stemming from modern disclosure channels, which firms are using more prominently in recent times.

Finally, our study contributes to the stream of research speaking to recent disclosure regulations, particularly Regulation Fair Disclosure. While the SEC allows firms to provide material non-public information via social media channels, it requires firms to designate such channels as ones investors should monitor (SEC, 2013a,b). Our evidence shows that very few firms follow the letter of the law, and yet a growing number of tweets appear to convey material information. This has implications for both the efficacy of Regulation Fair Disclosure and the extent to which disclosures are made on a level playing field.

2. Related literature and empirical predictions

Prior research has largely considered social media as a complement to traditional disclosure channels, with managers using it alongside conventional outlets to enhance their disclosure objectives. For instance, companies leverage social media to broaden news dissemination and reduce information asymmetry. Blankespoor et al. (2014) provides evidence of this effect by exploiting cases where firms tweet links to press releases initially disclosed through traditional channels. Additionally, earlier research (in the scheme of Twitter's existence) showed social media can serve as a strategic tool to shape information flows, as firms promote good news more widely while limiting the dissemination of bad news (Jung et al., 2018). However, more recent work suggests firms use social media to disseminate material news, regardless of direction (Crowley et al., 2024). Social media may also help firms shape market reactions in high-stakes disclosure settings by improving dissemination and message control; for example, Lee et al. (2015) find that firms facing product recalls can use social media alongside standard channels to alert consumers more quickly, potentially reducing future damage and limiting the negative stock price impact. Moreover, social media can amplify investor engagement with traditional disclosures; Nekrasov

et al. (2022) documents that firms incorporate visuals in social media posts to increase investor attention to earnings announcements.⁴

Despite this prevailing view of social media as a complementary channel, three empirical observations suggest that managers may increasingly view it as a viable channel to directly communicate material information to investors.

2.1. Empirical observation #1: Timing of social media versus traditional disclosure channels

First, while conventional corporate disclosures have shifted outside of trading hours, firms' original tweets are just as likely to occur during trading hours as outside of trading hours. Nearly all firms now announce earnings when markets are closed (deHaan et al., 2015), reinforcing a broader trend toward pre- or post-market disclosures. In contrast, our analysis of original corporate tweets by Execucomp firms (i.e., S&P 1500 firms) highlights a different pattern.

Figure 1, Panel A shows that the number of tweets posted during trading hours has increased at a similar rate to those posted outside of trading hours. For example, in-hours tweets by S&P 1500 firms rose from approximately 45,000 in 2010 to 620,000 in 2022, while out-of-hours tweets grew from roughly 32,000 to 520,000 over the same period.

Figure 1, Panel B further illustrates the relative proportion of in-hours versus out-of-hours tweets. Here, we find that the percentage of in-hours tweets has remained stable, slightly exceeding 50% in most years. We also replicate this analysis for all corporate press releases (available on Ravenpack). Figure 2, Panel A provides a stark contrast to the trend in tweets. As with earnings announcements (deHaan et al., 2015), corporate press releases are generally outside of trading hours, and the proportion of in-hour releases has trended downwards from 32% in 2010 to 23% in

⁴ See also Blankespoor et al. (2024), which examines the association between firms' participation in trending public discourse and investor attention. The paper focuses on visibility and engagement effects in public conversations, rather than on firm-initiated disclosures.

2022. The persistence of in-hour tweets around 50% contrasts with the data on conventional disclosures suggesting that firms may actively use social media to communicate information while markets are open, potentially offering real-time information not reflected in traditional disclosure timing patterns.

2.2. Empirical observation #2: Trends in social media and press releases

Second, evidence suggests firms are increasingly issuing social media posts, both in general and to convey important information (e.g., financial information), whereas their use of conventional channels may be declining. For example, Jung et al. (2018) show that the percentage of firms adopting Twitter rose from zero at inception (2007) to nearly 50% by 2013. In terms of Twitter posts, Al Guindy et al. (2024) show that the percent of trading days with corporate tweets (corporate tweets with financial key words) has risen from approximately 25% to 53% (3% to 14%) from 2010 to 2021. These findings are consistent with the pattern shown in our sample (e.g., Figure 1 Panel A). In contrast to the increase in Twitter posts, the use of conventional channel disclosures has been flat or declining. As shown in Figure 2 Panel B, the average number of press releases per year has been declining since 2015, from 196 to 154 in 2022. Given the clustering seen in the issuance of press releases, this translates to a decline from an average of 41 trading days with press releases in 2015 down to an average of 38 trading days in 2022. This declining pattern is consistent with findings over the 2010-2021 time period (Al Guindy et al, 2024).

However, while corporate use of social media has increased, there is some evidence that the market response to corporate tweets has weakened over time (Al Guindy et al. 2024). Although this evidence is at the daily level—and may therefore be comingled with other contemporaneous disclosures or events—it presents the possibility that as social media disclosures have become more prevalent, investor reactions to them may be diminishing. Thus, it remains unclear whether

market reactions associated with tweets reflect information dissemination, informational content, or both.

2.3. Empirical observation #3: Social media disclosure practices

Third, anecdotal evidence indicates that (at least some) firms formally acknowledge the role of social media as part of their disclosure practices. Several firms explicitly state in regulatory filings that social media channels may be used to disseminate material information. For example:

Netflix (8-K filed 4/10/2013):

*...investors and others should note that we announce material financial information to our investors using our investor relations website (<http://ir.netflix.com>), SEC filings, press releases, public conference calls and webcasts. We use these channels as well as social media to communicate with our subscribers and the public about our company, our services and other issues. **It is possible that the information we post on social media could be deemed to be material information.** Therefore, in light of the SEC's guidance, **we encourage investors, the media, and others interested in our company to review the information we post on the U.S. social media channels listed below...The Netflix Twitter Feed** (<https://twitter.com/netflix>) [Emphasis added].⁵*

Sysco (press release, 8-K filed 5/6/2013):

***For important news** regarding Sysco, visit the Investor Relations portion of the company's Internet home page at www.sysco.com/investors, **follow us at www.twitter.com/SyscoStock** and download the new Sysco IR App, available on the iTunes App Store and the Google Play Market. In addition, investors should also continue to review our press releases and filings with the Securities and Exchange Commission. **It is possible that the information we disclose through any of these channels of distribution could be deemed to be material information.** [Emphasis added].⁶*

T-Mobile (10-K filed 2/19/2015):

*Investors and others should note we announce material financial and operational information to our investors using our investor relations website, press releases, SEC filings and public conference calls and webcasts. **T-Mobile intends to also use @TMobileIR** (<https://twitter.com/TMobileIR>) and @JohnLegere (<https://twitter.com/JohnLegere>), which Mr. Legere also uses as a means for personal communications and observations, **as a means of disclosing information about the Company**, its services and other matters and for complying with its disclosure obligations under Regulation FD. **The information we post through***

⁵ Available at: <https://www.sec.gov/Archives/edgar/data/1065280/000119312513149406/d519782d8k.htm>.

⁶ Available at: <https://www.sec.gov/Archives/edgar/data/96021/000119312513200387/d532371dex991.htm>.

*these social media channels may be deemed material. Accordingly, investors should monitor these social media channels in addition to following the Company's press releases, SEC filings, public conference calls and webcasts. [Emphasis added].*⁷

These examples suggest that firms may be institutionalizing social media as part of their investor communication strategy and, in so doing, are likely to convey material non-public information through the channel to investors.

2.4. Empirical prediction

The extent to which social media merely amplifies traditional disclosures versus provides original, market-moving information remains an open empirical question. The three empirical observations presented above suggest that social media is not just a dissemination tool, but it may increasingly be used by managers to share information not disclosed elsewhere. Moreover, prior research suggests that traditional disclosure channels have grown increasingly formulaic, lengthy, and cognitively demanding for investors to process (Guay et al., 2016; Dyer et al., 2017; Arif et al., 2019). In contrast, social media may enable firms to convey information in more digestible, streamlined formats. Given this potential has not been explored thus far in the literature, we propose and test the hypothesis that managers use social media—particularly Twitter—to convey original, material non-public information to investors.

3. Data and summary statistics

3.1. Corporate tweet data

We study how firms use social media using a large panel of original corporate tweets from Twitter. We begin with the list of Execucomp (S&P 1500) firms from 2007-2022 and manually match them with corporate Twitter identifiers (i.e., @handles). Of the 2,415 firms in the sample

⁷ Available at: <https://www.sec.gov/Archives/edgar/data/1283699/000128369915000010/tmus12312014form10-k.htm>.

over that window, 70.4% (1,701 firms) have a corporate Twitter handle. We then use the Twitter Application Programming Interface (API) to identify the universe of original tweets made by these corporations from 2007 through 2022. We focus on tweets that originate with the company (original tweets) and exclude all retweets and replies.⁸ We also require matching identifiers in CRSP and TAQ. This yields a sample of 10.01 million tweets. Given our focus on tweets that may be relevant to capital market behavior, we remove 1.65 million non-trading day tweets from the sample, yielding 8.36 million tweets, of which 53% (4.42 million) are posted during trading hours.

As described in Section 2, Figure 1 displays the makeup of in- versus out-of-hours tweets by year. Aside from this analysis, we generally focus on the 4,417,509 original corporate tweets that are posted during market hours by S&P 1500 firms. We provide descriptive statistics on this corporate tweet sample in Table 1. Panel A summarizes the usage of Twitter by our sample firms. The number of Execucomp firms using Twitter increased from 599 in 2010 to 1,128 in 2022. Similarly, 517 firms posted at least 10 tweets in 2010 while 1,041 did so in 2022. Higher frequency posting patterns followed these trends as firms posting at least 50 tweets (100 tweets) in a year rose from 292 (130) to 827 (570) over the same window. These patterns further emphasize the increased corporate usage of Twitter that we describe in empirical observation #2 above in Section 2.2. Panel B summarizes the composition of original corporate tweets by GICS sector. The largest industry sector represented is Information Technology (GICS 45, 24%), with Consumer Discretionary (GICS 25, 31%) and Financials (GICS 40, 11%) rounding out the top three. Real Estate (GICS 60, 0.6%) and Energy (GICS 10, 1.3%) are the least represented.

⁸ We remove retweets and replies using “referenced tweets” metadata returned by the API.

3.2. Measures of information content

Our study requires us to proxy for information content to assess the extent to which corporate tweets provide new, market-relevant information. Our primary measures of information content are based on the abnormal absolute returns immediately surrounding the tweet post time. Absolute returns have been used in prior work using intra-day data to assess information content of disclosures (e.g., Matsumoto et al., 2011). We calculate the absolute return from one minute prior to the tweet post time to one minute after the tweet post time using TAQ data. Specifically, the two-minute absolute tweet return ($|RET^{tweet}|$) is the absolute value of the difference in quote midpoints at the start and end of the two-minute window, scaled by the quote midpoint at the start of the window.⁹ We use a two-minute window to capture tweet-related market reactions—long enough to reflect investor responses, yet short enough to minimize contamination from unrelated news.¹⁰

Next, we consider measures to control for potential patterns in intra-day trading as the expected value of absolute tweet returns is not zero. First, following prior work, we use the median absolute return from a control window to control for time-period-specific price movements that occur on a typical day and time (e.g., Matsumoto et al., 2011). For the control window, we gather the two-minute absolute returns for the same firm, on the same day of the week, and at the same time of the day over the prior quarter. The difference between $|RET^{tweet}|$ and the median absolute return from this control window is our first measure ($AbnAbsRet_Med$). Second, we also consider the full distribution of the control returns. Here, we subtract the mean absolute control return from

⁹ We use quote data rather than trade data to calculate returns to avoid the bid-ask bounce problem. This approach (and calculation) is consistent with prior work (e.g., Lee 1992, Matsumoto et al., 2011).

¹⁰ Prior work shows that high-frequency traders react in milliseconds, with even a two-second advantage yielding economically meaningful returns (Rogers et al., 2017), while human-driven price responses often occur within the first few minutes of disclosure (Patell and Wolfson, 1984; Rogers et al., 2016).

$|RET^{tweet}|$ and then scale it by the standard deviation of the control window returns. This measure complements the measure from prior work by taking into consideration the distribution of control returns and provides easier economic interpretation as the measure is standardized with respect to the standard deviation of the control returns (*AbnAbsRet_Std*).

While we consider absolute returns to be the best proxy for information content, we also evaluate a measure that incorporates trading volume. This measure follows the convention of *AbnAbsRet_Std* for ease of interpretation but uses share turnover in lieu of absolute returns. Specifically, we measure the dollar volume (i.e., price * # of shares) in the two-minute tweet window and then scale it by the prior trading day's market value of equity. We calculate this same measure for the entire control window (again, same firm, same day of week, and same time over the prior quarter) and calculate the mean and standard deviation. *AbnTurn_Std* is the tweet window turnover less the control window mean turnover, scaled by the control window standard deviation. While trading volume is sometimes used to proxy for information content, positive abnormal volumes frequently occur around announcements even when prices do not change in response to those announcements (Kandel and Pearson, 1995). As such, trading volume is more frequently used to reflect investor disagreement or opinion divergence. Therefore, we present *AbnTurn_Std* in the results largely for illustrative purposes.

We follow standard filters in the literature for TAQ data. For the return measures, we set price estimates (and the corresponding return measures) to missing when the spread is greater than 90% of the midpoint. We also set price estimates to missing if they are below five dollars. For volume measures, we eliminate trades with non-normal condition and correction codes.¹¹ Finally,

¹¹ Specifically, we remove trades with condition codes that contain (B,G,L,O,P,U,W, or Z) and require correction codes to be in (00 or 01).

for both return and volume measures, we require at least 5 non-missing control observations to calculate the measure. While there are 4.4 million corporate tweets, only 3.8 million of them meet these TAQ criteria and contain non-missing control variables.

Panel C provides descriptive statistics for this 3.8 million tweet sample used in our primary regressions. First, we present summary statistics for the abnormal absolute return measures, and the abnormal turnover measure. The means are all reliably positive, consistent with tweets potentially conveying market-moving information. The medians, however, are negative suggesting that some tweets are more likely to provide material information than others. This adds further motivation for our analysis on whether tweets have intraday market consequences, on average, after accounting for controls, time trends, firm types, etc.

Second, we present descriptive statistics for a series of tweet characteristics in our sample. The average tweet contains nearly 117 non-link characters (*TweetCharacters*), with less than one number on average (*TweetLnNumbers*). Approximately 58% of our sample tweets contain a link (*TweetLink*), while 36% contain some sort of visual element (*TweetVisual*), such as an image. Finally, the tone of the tweets (*TweetTone*) is modestly positive, with an average value of 0.34 on a scale of -1 to +1. Finally, we present a series of firm controls, which are generally consistent with the composition of S&P 1500 firms: sizeable market cap (*LnMVE*), meaningful analyst following (*LnAnalyst*), and a significant number of media articles on average (*LnMedia*).

4. Research design and empirical results

4.1. Do corporate tweets convey original, market-relevant information?

We conduct multiple analyses to determine whether corporate managers use tweets as a channel to provide original value-relevant information to investors. These tests largely center on

whether and when corporate tweets convey market-moving information to investors, controlling for other information events (i.e., earnings announcements, regulatory filings, or media coverage).

4.1.1. Timing of corporate tweets

First, we assess the timing of corporate tweets with respect to conventional forms of disclosure. To do so, we identify all firm trading days that have an earnings announcement (*EA*), 10-Ks, 10-Qs, and 8-Ks filed with the SEC (*SEC*), or more than one media article about the firm (*Media*).¹² We then map our sample of corporate tweets occurring during market hours to this string of conventional disclosure outlet trading days. We present the results of this mapping in Panel A of Table 2. We find that only 1.6% of tweets are posted on earnings announcement days, frequently the focus of prior social media disclosure research (e.g., Nekrasov et al., 2021). Meanwhile, 32.7% are posted on media days while 5.9% are posted on SEC filing days. Importantly, more than 65% of the in-hours original firm tweets occur on a day without any of the above events. This suggests that many tweets are not reiterating conventional disclosures but instead may contain original information not available elsewhere.

Panel B of Table 2 looks at earnings announcements more closely, given their focus in prior social media disclosure research. Here, we tabulate the number of trading days between each corporate tweet and its most proximate earnings announcement. While 1.6% of these tweets occur on the day of the earnings announcement, 4.4% and 7.4% occur within the three and five days surrounding the event, respectively. Further 67% of the original firm tweets do not have an

¹² For events with announcement or filing times after trading hours, we select the subsequent trading day as the trading date. We control for all events on the same day as the tweet regardless of whether the tweet occurred before or after the event to be conservative (e.g., tweets that occur just prior to an earnings announcement may simply be notifying users that the announcement is upcoming while tweets just after may be disseminating the information). We select more than one media article for our *Media* indicator to ensure that we are capturing economic events related to the firm as it is commonplace for multiple media outlets to pick up significant economic news. For example, most press releases and major news articles for these firms would also be covered by the Dow Jones newswires.

earnings announcement within ten trading days before or after. Therefore, original firm tweets do not appear to cluster around earnings announcements.

4.1.2. Intraday market consequences

Next, we examine whether corporate tweets during market hours convey information content. We focus on high-frequency intraday trading data to identify the immediate stock price impact of the tweets. Specifically, we estimate the following regression model:

$$IntradayResponse_{idt} = \alpha + \beta_{1-4} Firm\ Controls_{id} + \beta_{5-7} Event\ Controls_{id} + \varepsilon_{it}, \quad (1)$$

where, *IntradayResponse* is one of *AbnAbsRet_Med*, *AbnAbsRet_Std*, or *AbnTurn_Std* for firm *i*, on day *d*, in the two-minute window *t* centered on the tweet post time. *Firm Controls* are a vector of controls including firm size (the natural log of market value of equity, *LnMVE*), the market-to-book ratio (*MTB*), analyst following (the natural log of one plus the number of analysts providing earnings forecasts for the firm, *LnAnalyst*), and media coverage (the natural log of one plus the number of media articles, *LnMedia*). All the firm control variables are measured for the fiscal quarter immediately preceding the tweet and are standardized to be mean zero with a standard deviation of one for ease of interpretation. *Event Controls* are indicators to reflect tweets that occur on *EA*, *SEC*, or *Media* days as discussed in section 4.1.1. We cluster standard errors by firm and time (month-year) in all regressions and winsorize continuous variables at 1% and 99%.

We present the results of equation (1) in Table 3. Panel A presents the results for abnormal absolute returns while Panel B presents the results for abnormal turnover. Columns (1) and (5) present the results with no controls for ease of interpretation, while columns (2) and (6) layer on firm controls, and (3) and (7) add event controls. Finally, columns (4) and (8) include firm- and year- fixed effects. In all specifications, the constant term α is the variable of interest, as we are interested in whether corporate tweets convey material market-moving information, on average.

For models with fixed effects, the reported intercept is the average value of the fixed effects suggesting it is a meaningful representation of the average investor response to corporate tweets.¹³

The constant term is significantly positive in all abnormal absolute return specifications. For example, the average abnormal absolute return is 12.6 basis points higher than the median control day (Panel A Column 1). Furthermore, absolute returns are 0.14 standard deviations higher than a control window average (Panel A Column 5). More importantly, the constant is not only significant when tweets occur in conjunction with other news releases but also on days when they are made in isolation. In fact, for *AbnAbsRet_Med*, the average return increases to 12.9 basis points when controls are included (Panel A Column 3), while for *AbnAbsRet_Std* the average return is 0.12 standard deviations (Panel A Column 7). Finally, the average abnormal absolute return remains significantly positive even after we include firm- and year-fixed effects (Panel A Columns 4 and 8). These results are consistent with investors responding to information contained in corporate tweets, suggesting these posts may serve as a distinct source of market-relevant content. Abnormal volume measures are significantly positive in two of four specifications, providing further credence to the information content story but also calling into question their use as a proxy to gauge the level of information content, consistent with the discussion in Section 3.2.

4.1.3. Tweet characteristics and intraday market consequences

In this section, we examine which corporate tweet characteristics have the largest market consequences, with an emphasis on those occurring on non-event days. We expect that tweets containing more non-link content and those with more numbers are more likely to convey material information. Furthermore, we expect tweets containing links to primarily serve as dissemination tools and, therefore, be less likely to convey material information. Finally, we expect tweets with

¹³ See, for example, <https://www.stata.com/support/faqs/statistics/intercept-in-fixed-effects-model/>.

visuals (e.g., images or videos) to primarily attract attention. To test these ideas, we estimate the following regression:

$$\begin{aligned} \text{IntradayResponse}_{idt} = & \alpha + \beta_1 \text{TweetLong}_{idt} + \beta_2 \text{TweetLnNumbers}_{idt} + (2) \\ & \beta_3 \text{TweetLink}_{idt} + \beta_4 \text{TweetVisual}_{idt} + \beta_5 \text{TweetTone}_{idt} + \beta_{6-9} \text{Firm Controls}_{id} \\ & + \beta_{10-12} \text{Event Controls}_{id} + \varepsilon_{it}, \end{aligned}$$

where *IntradayResponse*, *Firm Controls*, and *Event Controls* are as defined in equation (1). We include two variables to proxy for the use of social media to convey material information. First, *TweetLong* is an indicator variable set to one when the number of non-link characters in a tweet is greater than the sample median, zero otherwise. Second, *TweetLnNumbers* is the natural log of one plus the number of numbers in the tweet. We include *TweetLink*, an indicator set to one if the tweet contains a link, to proxy for the use of social media to disseminate information disclosed in other channels. We include *TweetVisual*, an indicator set to one if the tweet contains visual elements (e.g., image or video), to proxy for the use of social media to attract investor attention to the information. Finally, *TweetTone* is the sentiment of the tweet, ranging from -1 (most negative) to +1 (most positive), as calculated by the Valence Aware Dictionary and sEntiment Reasoner (VADER) algorithm. VADER is a pre-trained sentiment analysis model specifically designed for social media text.

We present the results of equation (2) in Table 4. As in Table 3, Panel A presents the results for abnormal absolute returns while Panel B presents the results for abnormal turnover. Columns (1) and (4) omit the event controls for reference, columns (2) and (5) estimate equation (2) as written (i.e., with event controls), while columns (3) and (6) also incorporate firm- and year-fixed effects. The results in Panel A are consistent with corporate tweets spurring stronger investor responses when the tweets are more likely to contain material information. For example, abnormal

absolute returns are positively associated with *TweetLong* in five of the six specifications. Moreover, abnormal absolute returns are also positively associated with *TweetLnNumbers*, again in five of six specifications albeit at slightly lower significance levels. In contrast, abnormal absolute returns are not significant with *TweetLink* at conventional levels, inconsistent with the returns reflecting dissemination. Similarly, the coefficient on *TweetVisual* is not significant at conventional levels, inconsistent with the returns reflecting increased investor attention due to the visual elements. Collectively, these results suggest that certain tweet characteristics—particularly textual length and numerical content—are associated with stronger market responses, consistent with the tweets conveying original information that investors find relevant.

4.1.4. Tweet content and intraday market consequences

We also assess the content of the corporate tweets and the extent to which it is associated with intraday market consequences. To do so, we train a BERTopic model on a random sample of 500,000 corporate tweets from our dataset. The model identifies 3,562 topics within the training sample.¹⁴ We then apply this trained model to the full sample of tweets to assign topics where classifiable. The model is able to successfully categorize more than 1.3 million tweets.

Following the initial topic assignment, we reassign the tweets to a smaller, and more manageable, number of topics with the “reduce topics” function within the BERTopic Python module. This process mapped each of the 3,562 topics into one of 50 broader topics. Finally, as a research team, we performed an iterative process to further collapse these topics. Specifically, we provided the representative words of each topic to ChatGPT and prompted it to collapse the topics

¹⁴ BERTopic automatically returns observations that it is unable to classify, so there are a portion of the random sample tweets that are not classified into any topic.

into meaningful classifications. The co-author team reviewed the initial LLM output and concluded that the topics could be collapsed into ten primary topics.

We present a breakdown of the topics for the 1.3 million classifiable tweets in Figure 3. The largest three categories are Advertising & Customer Engagement (29%), Technology & Innovation (22%), and Health & Wellness (9%). Financial News encompasses 7% of the sample while Industry & Sector News and Business News & Events are each at 5%.

We examine the role of tweet topics by adding tweet topic indicators one-by-one to the equation (1), along with *TweetLong* and its interaction with the topic indicator to account for differential levels of content. We present the results of these regressions in Table 5. Results show that only the Financial News topic has a meaningful association with the market responses, and this response is unaffected by the length of the tweet. Tweets categorized as Financial News are associated with higher abnormal returns (but not abnormal turnover), even after accounting for tweet length. This provides further support that tweets may serve as a distinct channel for disclosing financially relevant information.

We also examine the extent to which Financial News tweets are concentrated around earnings announcements. Specifically, we replicate the analysis from Table 2, Panel B for the subset of Financial News tweets, with results reported in Panel C of Table 2. The timing of financial tweets relative to earnings announcements is similarly dispersed as in the full sample of corporate tweets. Only 1.2% occur on the earnings announcement day, while 3.8% (6.4%) fall within the ± 3 -day (± 5 -day) window. Notably, over 72% of financial tweets have no earnings announcements within 10 trading days. This evidence suggests that most financial tweets during market hours do not convey earnings announcement news, reinforcing our earlier evidence that

corporate tweets frequently serve as standalone communications, independent of conventional disclosures, such as earnings announcements.

4.2. Do firms tweet in accordance with regulations?

Having provided strong evidence that corporate in-hours tweets frequently convey market-moving information, we now turn toward understanding whether these communication patterns are consistent with the expectations of regulators. In 2013, the SEC informed companies that they “can use social media outlets like Facebook and Twitter to announce key information in compliance with Regulation Fair Disclosure (Regulation FD) so long as investors have been alerted about which social media will be used to disseminate such information.” (SEC, 2013b).

Prior to this guidance, companies communicating material news were bound more broadly by Regulation Fair Disclosure (SEC 2000), though in 2008, the SEC put out guidance to firms on the use of company websites to convey material information in compliance with Regulation FD (SEC 2008). The language and principles in this regulation are consistent with the language used in the 2013 guidance (e.g., the company must “alert the market to its website and its disclosure practices,” SEC 2008), with the exception that the 2008 guidance only applied to company websites. Given the potential market relevance of corporate tweets suggested by the evidence thus far, we might expect a significant number of firms to follow regulator guidance and designate Twitter as a channel for material non-public information.

4.2.1. Designation of Twitter as a Reg FD channel

In this section, we analyze the number of firms that explicitly designate Twitter as a Regulation FD compliant channel—as suggested by the SEC—as well as those that at least mention Twitter in a regulatory filing. Despite the importance of this disclosure in regulatory guidance, firms do not use uniform disclosure language to communicate their disclosure channels to investors (nor are they required to do so), making identification challenging. We begin our

identification process by scraping regulatory filings (specifically 8-Ks, 10-Qs, and 10-Ks) for references to Twitter.¹⁵

Next, we further identify those that explicitly designate their handle as a channel to disseminate material information amongst the set of firms that mention Twitter in SEC filings. We begin this process by reviewing numerous designation disclosures—both for website designation and social media designation—and identify the key phrases that companies use when telling investors which disclosure channels to monitor. We start the review with example companies from the *Corporate Counsel Regulation FD Handbook* (e.g., Alphabet, Ford, Microsoft, Netflix, Sun Microsystems) that have designated communication channels including, but not limited to, social media (CCR, 2022). We use the passages from these examples to iteratively identify a list of root words or phrases that are commonly used by companies to designate communication channels.¹⁶ We then search around the Twitter references for these root words or phrases. We hired a research assistant to review the passages identified and iterate on the python script and passage identification to maximize accuracy rates on the classification of Twitter designation, mention, or inadvertent reference. Finally, the research assistant and a member of the co-author team reviewed all passages identified as designations and confirmed 100% accuracy on designation passages.

We present the number of firms that designate Twitter versus mention Twitter in their regulatory filings in Figure 4. Panel A compares the cumulative number of tweeting firms over time to the number that have designated or mentioned the channel in regulatory filings. Panel B

¹⁵ Specifically, we used the SEC Analytics Suite on WRDS Analytics to extract filings that contained any of the following phrases:

twitter|Twitter| twitter.com | www.twitter.com| <https://twitter.com/> | https://twitter.com | <http://twitter.com/> | <http://twitter.com>.

¹⁶ These root words/phrases include iterations of the following: “material information”, “encourage investors”, “deemed material”, “disseminate”, “relevant to investors”, “disclose”, “regulation-fd” and “non-exclusionary.”

displays the percentage of tweeting firms that have designated or mentioned the channel. The results show a surprisingly low number of firms that followed the regulation. Specifically, only 29 firms explicitly designated the Twitter channel by the end of 2014 with the number rising only to 57 by the end of 2022. Firms do frequently mention their social media platforms, however, with just over half of the tweeting firms (593 of 1,128) having mentioned their Twitter channel by 2022. These mentioning firms do not advise their investors to monitor the channel for material news though, so it is challenging to view them as being in compliance with the regulatory guidance.

4.2.2. Implications of designating or mention Twitter

Having observed that firms frequently use Twitter to share potentially market-moving information—but rarely designate the channel in regulatory filings—we next examine whether explicit designation or informal mention influences investor responses to corporate tweets following the SEC guidance. The regulatory intervention has the potential to influence both corporate disclosure practices and investor perceptions in significant ways. On one hand, it could enhance firms’ willingness to use social media as a disclosure channel by providing regulatory legitimacy and reducing concerns about selective disclosure. This, in turn, may strengthen investor use of and trust in corporate social media communications, as regulatory recognition signals that these platforms are acceptable channels for disclosing material information.

On the other hand, the relatively small number of firms that have opted to formally designate social media as a recognized disclosure channel could indicate that the benefits of such regulatory intervention are limited. This could reflect broader challenges associated with Regulation Fair Disclosure. Notably, the *SEC v. Siebel Systems, Inc.* case set a precedent that raised concerns about the enforceability of Reg FD, potentially undermining its effectiveness as a deterrent against selective disclosure (Allee et al., 2022). Given these complexities, it remains

unclear whether adherence to the regulatory guidelines is important for corporate tweets to convey material information to investors.

We examine this question by testing whether market responses change for firms after they designate or mention social media in a regulatory filing following the SEC guidance. Specifically, we estimate the following regression:

$$\begin{aligned} \text{IntradayResponse}_{idt} = & \alpha + \beta_1 \text{PostSEC}_d + \beta_2 \text{PostMention}_{id} + \\ & \beta_3 \text{PostMention}_{id} * \text{PostSEC}_{id} + \beta_4 \text{PostDesignate}_{id} + \beta_{5-8} \text{Firm Controls}_{id} + \beta_{9-11} \text{Event} \\ & \text{Controls}_{id} + \text{Firm FEs} + \text{Year FEs} + \varepsilon_{it}, \end{aligned} \quad (3)$$

where *IntradayResponse*, *Firm Controls*, and *Event Controls* are as defined in equations (1) and (2). *PostSEC* is an indicator variable set to one after the SEC guidance release date (4/2/2013). *PostMention* is an indicator variable set to one for tweets on or after the first date the firm mentions their Twitter channel in a regulatory filing. *PostDesignate* is an indicator set to one for tweets on or after the first date that the firm explicitly designates the Twitter channel to investors in a regulatory filing. Note that *PostDesignate* is, by definition, only able to equal one after the regulation.

We present the results of equation (3) in Table 6. Panel A restricts the sample to the year before and after the regulation (2012-2014). Panel B expands the sample to three years on either side (2010-2016). Columns (1)-(3) use the full sample of tweets in those time periods, while Columns (4)-(6) use only the tweets assigned to the Financial News topic as tweets with this topic were found to have significant market responses in Table 5. Even though the guidance explicitly mandates that firms designate in order to disclose material information on a social media channel, we do not find significant differences in market responses to tweets post-designation or post-mention. This is true for the short window around the guidance (Panel A), for a longer window

around the guidance (Panel B), and when we examine only the tweets identified as relating to financial news.

4.2.3. *Tweet disclosure characteristics after designating or mentioning the channel*

In our final analyses, we examine whether the act of designating or mentioning Twitter as a disclosure channel leads firms to change their use of Twitter for original corporate disclosures following the regulatory action. To do so, we estimate the following regression model:

$$\begin{aligned} TweetCharacteristic_{idt} = & \alpha + \beta_1 PostMention_{id} + \beta_2 PostDesignate_{id} + \beta_3 \\ & \delta Firm Controls_{id} + \beta_7 \delta Event Controls_{id} + Firm FEs + Year FEs + \varepsilon_{it}, \end{aligned} \quad (4)$$

where *TweetCharacteristics* are one of *TweetLong*, *TweetLnNumbers*, or the Earnings and Financial News topic indicator (i.e., those tweet characteristics previously found to be significantly associated with market responses). All other variables are as defined in equations (1)-(3).

We present the results of equation (4) in Table 7. Columns (1), (3), and (5) use industry fixed effects in lieu of the firm fixed effects, while Columns (2), (4), and (6) estimate equation (4) for each of the dependent variables (i.e., include firm fixed effects). The results do not provide any evidence of firms posting tweets with more material content after designating or mentioning, as we do not observe any significant shift in tweet length, numerical content, or the frequency of financial news content following designation or mention, suggesting firms do not materially change their tweeting behavior post-regulation.

5. Conclusion

While prior research emphasizes social media as a complement to traditional disclosure channels, we provide evidence suggesting that corporate tweets frequently serve as a distinct disclosure channel through which firms communicate material market-moving information to investors. Our evidence is consistent with tweets providing material information even in the

absence of other information events. This finding suggests that managers use social media for reasons beyond simply increasing dissemination and attention.

We present three key findings supporting the view that firms use social media as a direct communication channel for material content. First, a significant portion of corporate tweets occur on days without concurrent earnings announcements, regulatory filings, or traditional media releases. Second, intraday trading reactions in the two minutes surrounding corporate tweets are economically meaningful even in the absence of concurrent events, suggesting that investors extract value-relevant information directly from these posts. Third, this effect is particularly pronounced when tweets contain more textual content, numbers, and financial information.

Surprisingly, despite the apparent materiality of these tweets, few firms explicitly designate Twitter as a recognized channel in regulatory filings, as required by the SEC. In fact, we are only able to identify 57 firms that have done so by 2022. We examine whether formal designation or informal mention affects investor responses or tweet content and find no significant changes in market reaction or tweeting behavior following these disclosures. This disconnect raises questions about whether Regulation Fair Disclosure is effective for social media.

Our study contributes to the literature in several ways. First, we contribute to the literature on the role of social media in the capital markets by providing evidence that corporate tweets can serve as a distinct disclosure channel for original news, not merely a tool to complement traditional disclosures. Specifically, corporate tweets have significant short-window market responses—consistent with the revelation of material information—even in the absence of other news.

Second, we contribute to the literature on intraday price movements by providing evidence that social media disclosure may contribute to such in-market-hours movements. While firms increasingly release conventional disclosures outside of market hours, our findings suggest that

corporate tweets continue to be posted during market hours and investors appear to respond.

Finally, our study contributes to the stream of research focused on recent disclosure regulations, particularly Regulation Fair Disclosure. Our evidence shows that, while many firms appear to release material market-moving information via social media, very few firms comply with the SEC-mandated requirement to publicly designate this channel. This raises questions about the regulation's effectiveness and its role in ensuring a level playing field for investors.

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Appendix A: Variable Definitions

Information Content		
<i>AbnAbsRet_Med</i>	$ RET^{tweet} $ less the median absolute return from a control window. $ RET^{tweet} $ is the two-minute absolute tweet return (the absolute value of the difference in quote midpoints at the start and end of the two-minute window surrounding the tweet, scaled by the quote midpoint at the start of the window). The control window returns are measured for the same firm on the same day of week and time of day over the prior quarter.	CRSP
<i>AbnAbsRet_Std</i>	$ RET^{tweet} $ less the mean absolute return from a control window, scaled by the standard deviation of control window returns. $ RET^{tweet} $ is the two-minute absolute tweet return (the absolute value of the difference in quote midpoints at the start and end of the two-minute window surrounding the tweet, scaled by the quote midpoint at the start of the window). The control window returns are measured for the same firm on the same day of week and time of day over the prior quarter.	CRSP
<i>AbnTurn_Std</i>	Share turnover in the two minutes surrounding the tweet less the mean share turnover from a control window, scaled by the standard deviation of share turnover in the control window. Share turnover is calculated as dollar volume (price/share * number of shares) during the two minutes, scaled by MVE from the prior day close. The control window includes two-minute periods for the same firm on the same day of week and time of day over the prior quarter.	CRSP
Tweet Characteristics		
<i>TweetCharacters</i>	The number of characters used in a tweet, excluding characters related to hyperlinks.	Twitter
<i>TweetLong</i>	Indicator variable set to one when <i>TweetCharacters</i> is greater than the sample median, zero otherwise.	Twitter
<i>TweetLnNumbers</i>	Log of one plus the number of numbers in a tweet.	Twitter
<i>TweetLink</i>	Equal to one if the tweet contains a link, zero otherwise.	Twitter
<i>TweetVisual</i>	Equal to one if the tweet contains visual elements (e.g., picture or video), zero otherwise.	Twitter
<i>TweetTone</i>	The sentiment of the tweet text calculated using the Valence Aware Dictionary and Sentiment Reasoner (VADER) algorithm. VADER returns a sentiment score ranging from -1 to +1 where -1 is the most negative sentiment, +1 is the most positive sentiment, and 0 is a sentiment tone.	Twitter

Firm Controls

<i>LnMVE</i>	Log of market value of equity at the end of the fiscal quarter preceding the tweet.	CRSP
<i>MTB</i>	Market to book ratio at the end of the fiscal quarter preceding the tweet.	Compustat, CRSP
<i>LnAnalyst</i>	Log of one plus the number of analysts following the firm in the fiscal quarter preceding the tweet.	I/B/E/S
<i>LnMedia</i>	Log of one plus the number of media articles featuring the firm in the prior quarter. We use articles with a Relevance score of at least 90 to ensure the firm is featured.	RavenPack

Event Controls

<i>EA</i>	Equal to one if there is a firm earnings announcement on the day of the tweet, zero otherwise.	Compustat, I/B/E/S
<i>SEC</i>	Equal to one if the firm files a 10-K, 10-Q, or 8-K with the SEC on the day of the tweet, zero otherwise.	WRDS SEC Analytics
<i>Media</i>	Equal to one if the firm has two or more media articles about the firm on the day of the tweet, zero otherwise.	Ravenpack

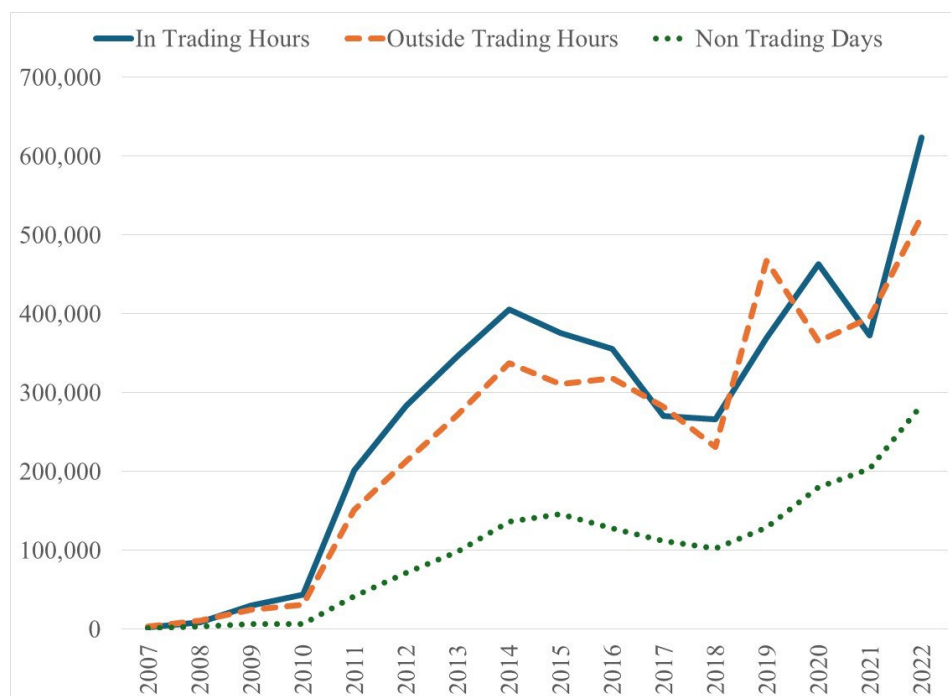
Regulation Variables

<i>PostSEC</i>	Equal to one if the tweet occurs after the SEC's guidance on designating social media as a dissemination channel for material information (4/2/2013), zero otherwise.	
<i>PostMention</i>	Equal to one if the tweet occurs after the firm first mentions their Twitter handle in a 10-K, 10-Q, or 8-K, zero otherwise.	Hand Collection, EDGAR
<i>PostDesignate</i>	Equal to one if the tweet occurs after the firm first designates Twitter as a channel for material information release in a 10-K, 10-Q, or 8-K, zero otherwise.	Hand Collection, EDGAR

Figure 1: Corporate Tweets by Year

This figure presents the breakdown of in-hours versus out-of-hours corporate tweets by year. Tweets are classified as in-hours if they are posted while the U.S. stock exchanges are open, between 9:30 a.m. and 4:00 p.m. Eastern Standard Time (EST). Panel A reports the number of tweets per year, categorized as in-hours, out-of-hours, or on non-trading days. Panel B shows the annual percentage of tweets posted in-hours versus out-of-hours.

Panel A: Count of Corporate Tweets by Year



Panel B: Percent of Trading Day Corporate Tweets In versus Out of Trading Hours

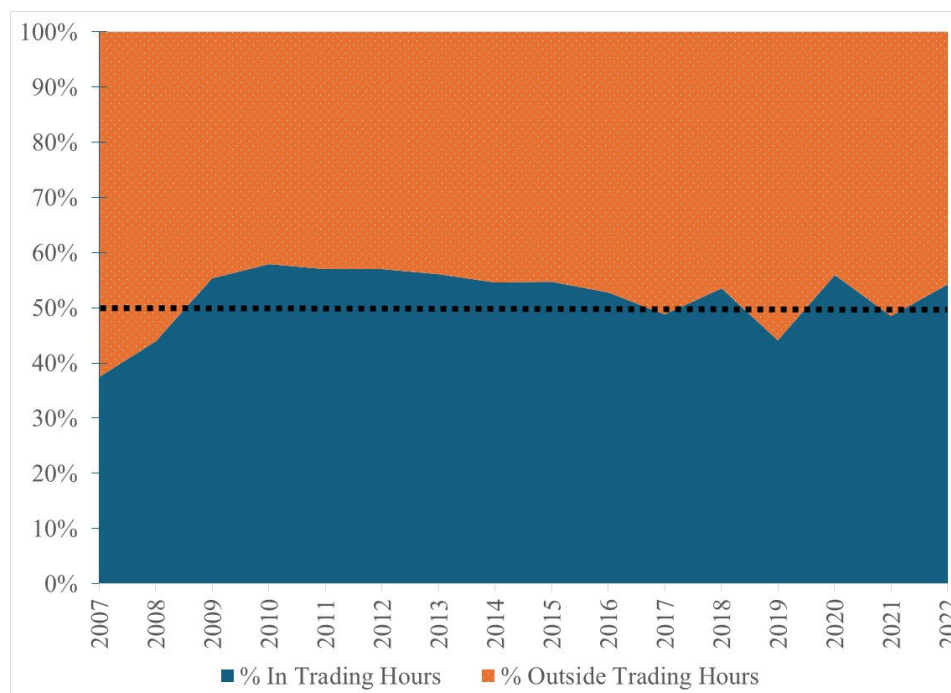
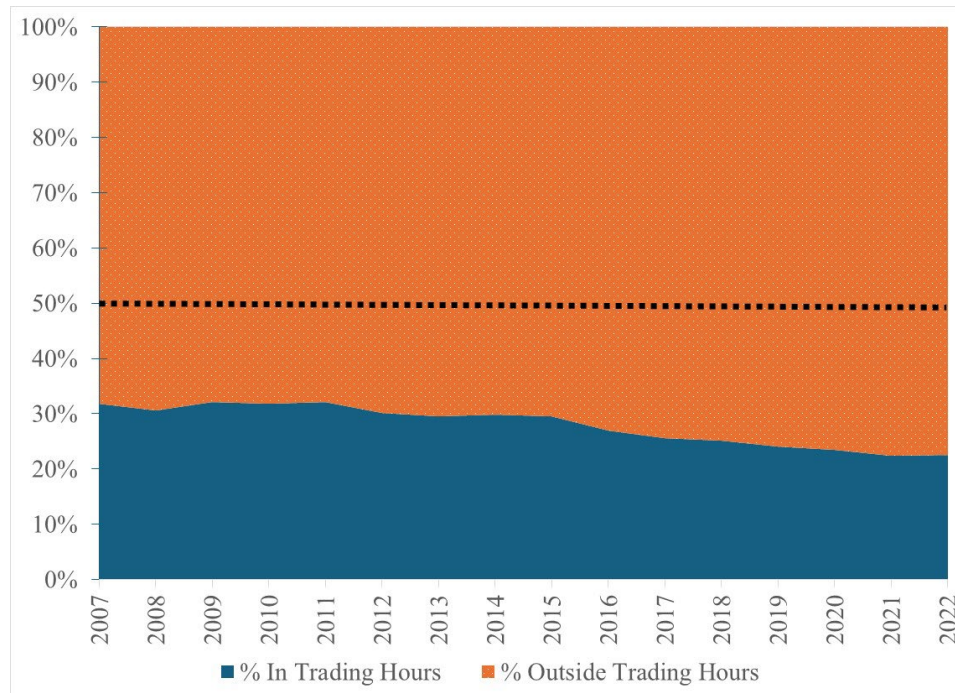


Figure 2: Corporate Press Releases by Year

This figure presents the breakdown of the timing of corporate press releases by year. Panel A reports the percentage of press releases on trading days in-hours versus out-of-hours. Panel B shows the total, mean, and median count of press releases by firm-year. Panel C presents the count of trading days with at least one press release in a firm-year.

Panel A: Percent of Trading Day Press Releases In versus Out of Trading Hours



Panel B: Count of Press Releases by Year from Sample Firms

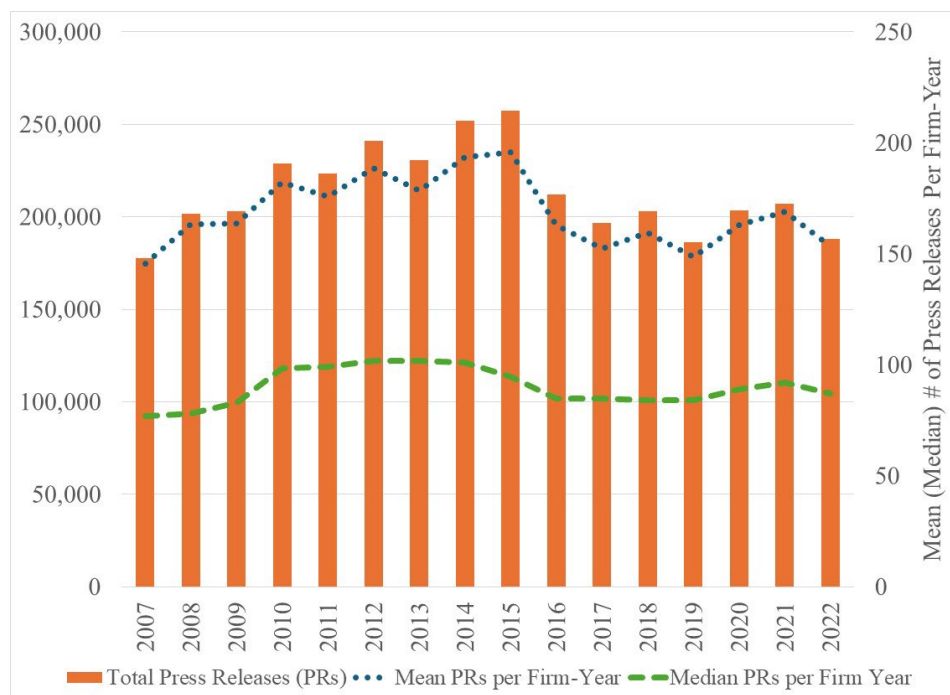


Figure 2 (continued):

Panel C: Trading Days with ≥ 1 Press Release per Firm-Year

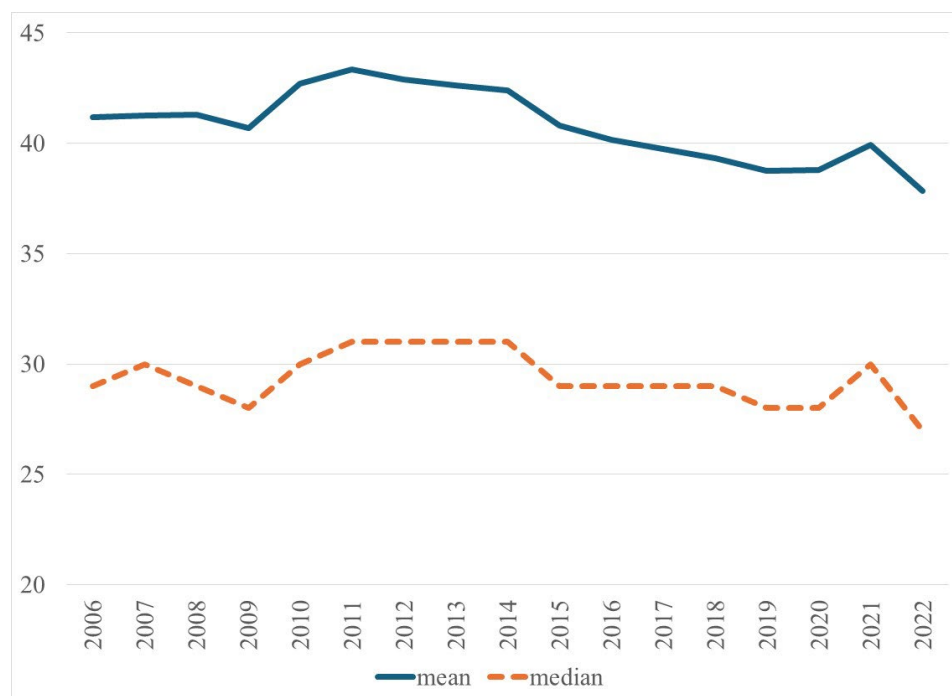


Figure 3: Corporate Tweet Topics Summary

This figure presents the distribution of tweets by topics. It includes the 1.3 million tweets that the BERTopic model successfully categorized.

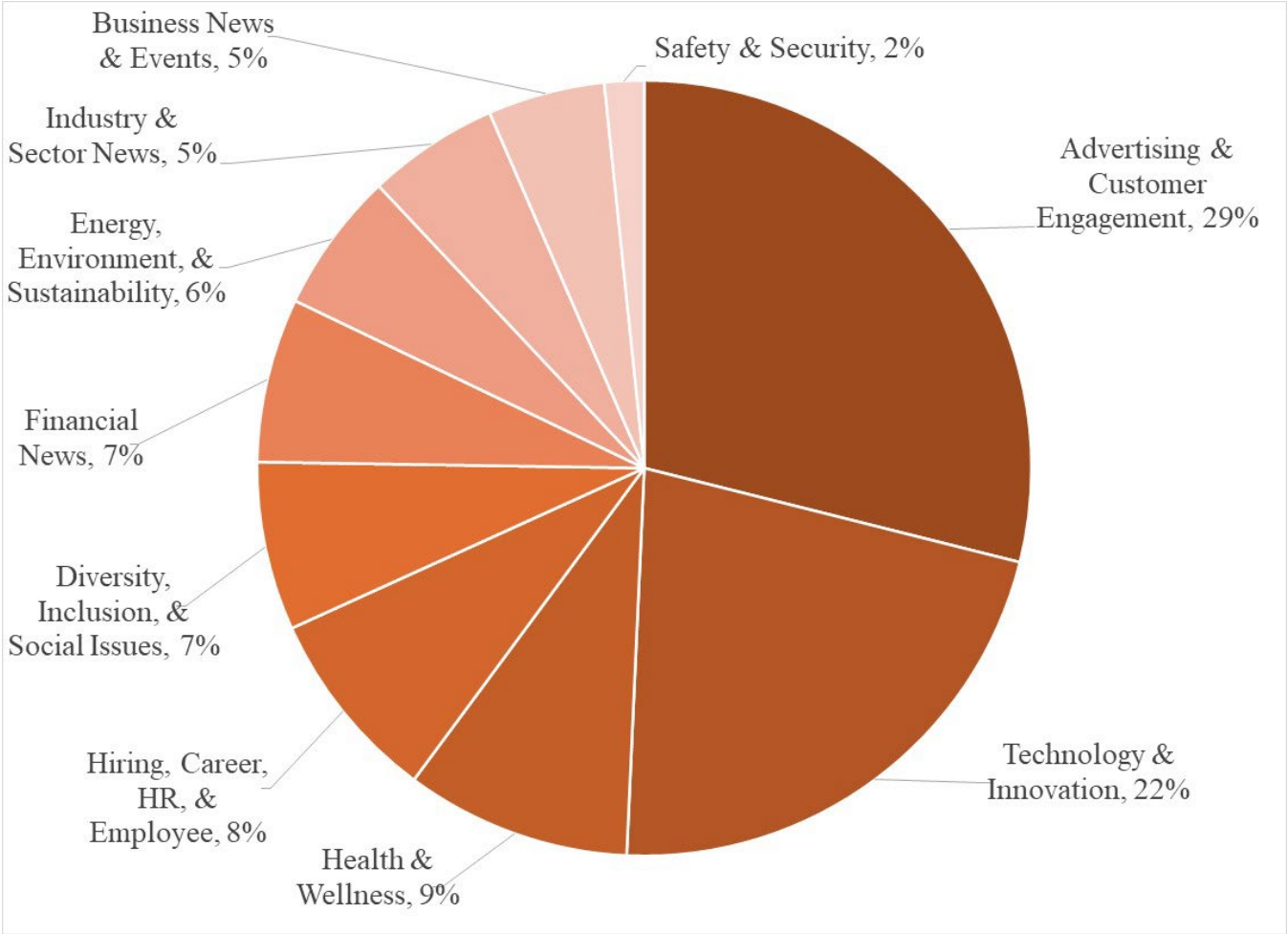
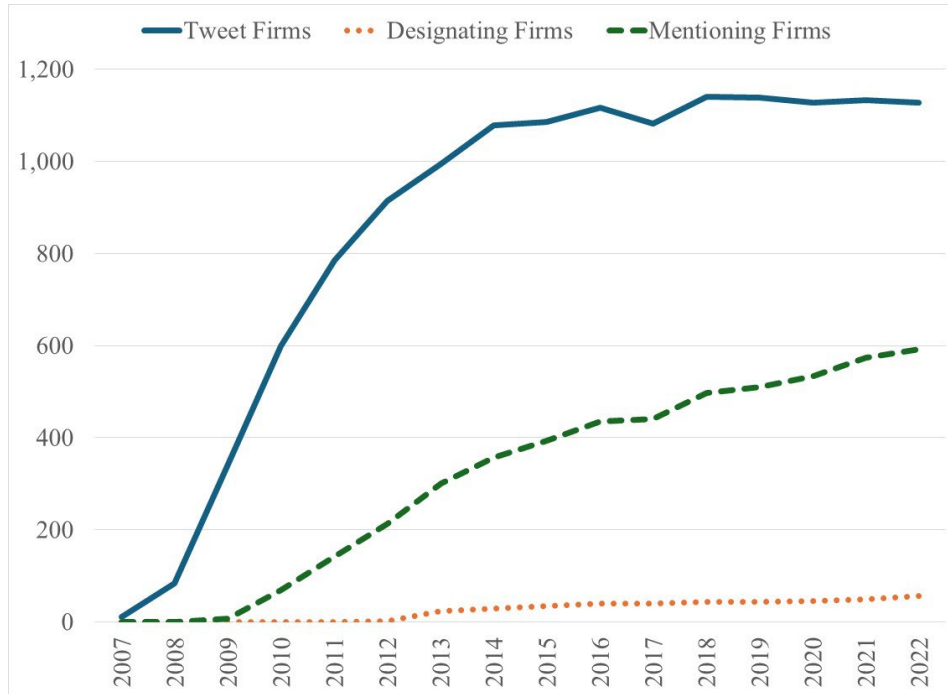


Figure 4: Firms Designating and Mentioning the Twitter Channel by Year

This figure presents the breakdown of firms that opt to mention or designate their Twitter accounts in SEC filings by year. Panel A presents the count of firms that post tweets, mention their Twitter accounts, and designate their Twitter accounts in SEC filings each year. Panel B examines the percent of firms that designate or mention their Twitter handle by year.

Panel A: Count of Firms Tweeting, Mentioning, and Designating by Year



Panel B: Percent of Tweeting Firms Designating or Mentioning by Year

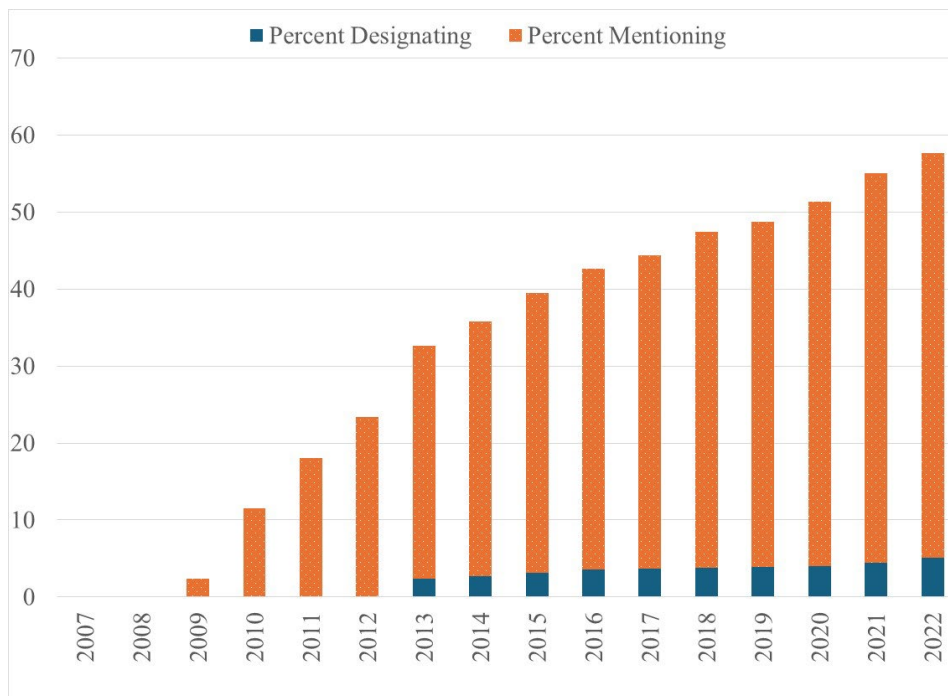


Table 1: Corporate Tweets Descriptives

This table presents descriptive statistics for the sample of original corporate tweets on trading days and within market hours (4.4 million tweets). Panel A summarizes corporate Twitter usage over time, reporting the number of firms that tweet at least once, ten times, fifty times, or one hundred times per year. Panel B presents the distribution of corporate tweets by 2-digit GICS sector. Panel C provides descriptive statistics for the tweet sample used in our primary regressions.

Panel A: Corporate Tweets per Year

Year	≥1 tweet	≥10 tweets	≥50 tweets	≥100 tweets
2007	10	7	5	3
2008	84	61	29	12
2009	343	240	132	85
2010	599	517	292	130
2011	786	709	560	452
2012	915	856	693	569
2013	995	925	774	648
2014	1,078	1,013	836	720
2015	1,085	1,015	846	721
2016	1,116	1,035	875	737
2017	1,083	1,022	809	648
2018	1,140	1,044	835	642
2019	1,138	1,058	827	625
2020	1,128	1,029	812	588
2021	1,133	1,034	828	591
2022	1,128	1,041	827	570

Panel B: Corporate Tweets by Sector

GICS Sector	Count	Percent
10 Energy	59,392	1.3%
15 Materials	77,532	1.8%
20 Industrials	444,659	10.1%
25 Consumer Discretionary	1,367,639	31.0%
30 Consumer Staples	231,949	5.3%
35 Health Care	270,032	6.1%
40 Financials	491,414	11.1%
45 Information Technology	1,058,028	24.0%
50 Communication Services	291,529	6.6%
55 Utilities	100,271	2.3%
60 Real Estate	24,298	0.6%
GICS Sector Missing	766	0.0%
Total	4,417,509	100%

Table 1 (continued):*Panel C: Descriptive Statistics*

<i>Market Consequence Variables</i>						
Variable	N	Mean	SD	p25	p50	p75
AbnAbsRet_Med	3,805,593	0.126	0.625	-0.049	-0.007	0.052
AbnAbsRet_Std	3,805,593	0.142	2.102	-0.622	-0.366	0.103
AbnTurn_Std	3,802,956	0.130	1.583	-0.667	-0.339	0.309
<i>Tweet Characteristics</i>						
Variable	N	Mean	SD	p25	p50	p75
TweetCharacters	3,805,593	116.598	54.798	81.000	103.000	136.000
TweetLong	3,805,593	0.500	0.500	0.000	0.000	1.000
TweetLink	3,805,593	0.581	0.493	0.000	1.000	1.000
TweetLnNumbers	3,805,593	0.290	0.473	0.000	0.000	0.693
TweetVisual	3,805,593	0.356	0.479	0.000	0.000	1.000
TweetTone	3,805,593	0.345	0.382	0.000	0.402	0.674
<i>Firm Controls</i>						
Variable	N	Mean	SD	p25	p50	p75
LnMVE	3,803,044	9.064	1.892	7.512	8.930	10.566
MTB	3,801,864	2.761	207.180	1.405	2.711	5.193
LnAnalyst	3,805,593	2.541	0.727	2.079	2.639	3.091
LnMedia	3,805,593	3.995	1.648	3.664	4.234	4.963

Table 2: Tweets and Conventional Disclosure Channels

This table examines the relationship between the timing of original corporate tweets and the timing of disclosures through conventional channels. Panel A reports the distribution of tweets across trading days with an earnings announcement (*EA*), SEC filing (*SEC*), or media articles (*Media*). Panel B presents the distribution of tweets relative to earnings announcement days, measured by the number of trading days before or after an EA. Panel C presents a similar distribution to Panel B but only for the subsample of tweets in the Financial News topic.

Panel A: Tweet Days by Disclosure Days

EA	SEC	Media	Event Count	Count	% of Tweets	Day-Type Count	% of Days
1	1	1	3	63,573	1.4%	46,041	1.4%
1	1	0	2	1,236	0.0%	1,308	0.0%
1	0	1	2	4,434	0.1%	4,528	0.1%
0	1	1	2	113,991	2.6%	91,424	2.7%
1	0	0	1	1,907	0.0%	1,271	0.0%
0	1	0	1	80,115	1.8%	39,480	1.2%
0	0	1	1	1,264,067	28.6%	1,104,999	32.8%
0	0	0	0	2,888,186	65.4%	2,083,960	61.8%
			Total	4,417,509		3,373,011	

Panel B: Tweets around Earnings Announcement Days

Trading Day Relative to EA	Before EA	After EA	Total	Percent	Cumulative Percent
0	/	/	71,150	1.6%	1.6%
1	60,061	65,306	125,367	2.8%	4.4%
2	69,162	59,087	128,249	2.9%	7.4%
3	54,683	61,134	115,817	2.6%	10.0%
4	62,026	59,821	121,847	2.8%	12.7%
5	70,820	85,025	155,845	3.5%	16.3%
6	58,828	65,371	124,199	2.8%	19.1%
7	65,819	76,444	142,263	3.2%	22.3%
8	118,118	61,309	179,427	4.1%	26.4%
9	85,234	62,430	147,664	3.3%	29.7%
10	68,792	66,040	134,832	3.1%	32.7%
<i>Tweets with no EAs within 10 trading days</i>			2,970,849	67.3%	100.0%
			Total	4,417,509	100.0%

Table 2 (continued):*Panel C: Financial Tweets around Earnings Announcement Days*

Trading Day Relative to EA	Before EA	After EA	Total	Percent	Cumulative Percent
0	/	/	1,057	1.2%	1.2%
1	1,020	1,302	2,322	2.6%	3.8%
2	1,224	1,094	2,318	2.6%	6.4%
3	1,067	1,148	2,215	2.5%	8.8%
4	1,083	1,109	2,192	2.4%	11.3%
5	1,098	1,129	2,227	2.5%	13.8%
6	1,102	1,218	2,320	2.6%	16.4%
7	1,131	1,426	2,557	2.9%	19.2%
8	1,160	1,380	2,540	2.8%	22.1%
9	1,083	1,171	2,254	2.5%	24.6%
10	1,174	1,204	2,378	2.7%	27.2%
<i>Financial Tweets with no EAs within 10 trading days</i>			65,107	72.8%	100.0%
Total			89,487	100.0%	

Table 3: Corporate Tweets and Intraday Market Consequences

This table examines the intraday market response to in-hours corporate tweets. Panel A reports results for abnormal absolute returns. Columns (1) and (5) include no controls, columns (2) and (6) add firm controls, columns (3) and (7) incorporate event controls, and columns (4) and (8) further include firm and year fixed effects. Panel B presents the same results for abnormal turnover. All regressions cluster standard errors by firm and month-year, and continuous variables are winsorized at the 1st and 99th percentiles. Variable definitions are provided in Appendix A. ***, **, and * indicate two-tailed significance at 1%, 5%, and 10% levels, respectively.

Panel A: Intraday Returns

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Dependent Variable:</i>		<i>AbnAbsRet</i>	<i>Med</i>			<i>AbnAbsRet</i>	<i>Std</i>	
LnMVE		0.043*** (2.614)	0.050*** (3.475)	0.101*** (5.654)		0.111*** (3.300)	0.125*** (5.006)	0.177*** (4.900)
MTB		-0.007 (-0.636)	-0.008 (-0.768)	0.002 (0.521)		-0.004 (-0.186)	-0.008 (-0.375)	0.003 (0.280)
LnAnalyst		-0.007 (-0.465)	-0.010 (-0.763)	-0.006 (-0.749)		0.022 (0.452)	0.011 (0.321)	0.008 (0.313)
LnMedia		0.002 (0.258)	0.005 (0.587)	0.054*** (4.354)		-0.062*** (-2.687)	-0.054** (-2.002)	0.004 (0.140)
EA			0.054 (1.537)	0.072 (1.504)			0.469* (1.721)	0.478* (1.755)
SEC			0.150 (1.491)	0.095 (1.331)			0.568 (1.260)	0.425 (1.319)
Media			-0.036* (-1.672)	0.003 (0.138)			-0.052 (-0.620)	0.036 (0.595)
Constant	0.126*** (6.888)	0.126*** (7.636)	0.129*** (7.481)	0.119*** (19.515)	0.142*** (3.312)	0.142*** (3.789)	0.117*** (3.150)	0.096*** (4.399)
Observations	3,805,593	3,801,864	3,801,864	3,801,848	3,805,593	3,801,864	3,801,864	3,801,848
Adjusted R-squared	-0.000	0.004	0.008	0.074	0.000	0.004	0.010	0.033
Firm FE	NO	NO	NO	YES	NO	NO	NO	YES
Year FE	NO	NO	NO	YES	NO	NO	NO	YES
CLUSTER	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year

Table 3 (continued):*Panel B: Intraday Turnover*

	(1)	(2)	(3)	(4)
<i>Dependent Variable:</i>		<i>AbnTurn</i>	<i>Std</i>	
LnMVE		-0.011 (-0.310)	-0.038 (-1.169)	0.068 (1.438)
MTB		0.013 (0.474)	0.017 (0.926)	0.012 (1.177)
LnAnalyst		-0.023 (-1.219)	-0.026 (-1.590)	0.009 (0.684)
LnMedia		-0.042 (-1.501)	-0.044* (-1.803)	0.002 (0.053)
EA			2.012*** (7.850)	1.873*** (10.804)
SEC			0.069 (0.747)	0.050 (0.587)
Media			0.204*** (4.336)	0.201*** (6.257)
Constant	0.130*** (4.494)	0.130*** (4.784)	0.025 (0.815)	0.029 (1.623)
Observations	3,802,956	3,799,237	3,799,237	3,799,221
Adjusted R-squared	-0.000	0.001	0.036	0.057
Firm FE	NO	NO	NO	YES
Year FE	NO	NO	NO	YES
CLUSTER	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year

Table 4: Corporate Tweet Characteristics and Intraday Market Consequences

This table examines the relationship between corporate tweet characteristics and intraday market responses. Panel A reports results for abnormal absolute returns. Columns (1) and (4) omit event controls, columns (2) and (5) estimate the full model with event controls, and columns (3) and (6) incorporate firm and year fixed effects. Panel B presents results for abnormal turnover. *TweetLong*, *TweetLnNumbers*, *TweetLink*, *TweetVisual*, and *TweetTone* capture tweet length, numerical content, the presence of links, the presence of visual elements such as images, and tone, respectively. All regressions cluster standard errors by firm and month-year, and continuous variables are winsorized at the 1st and 99th percentiles. Variable definitions are provided in Appendix A. ***, **, and * indicate two-tailed significance at 1%, 5%, and 10% levels, respectively.

Panel A: Tweet Characteristics and Intraday Returns

Dependent Variable.	(1)	(2)	(3)	(4)	(5)	(6)
		<i>AbnAbsRet Med</i>			<i>AbnAbsRet Std</i>	
TweetLong	0.073*** (3.134)	0.070*** (3.113)	0.003 (0.234)	0.126*** (2.791)	0.117*** (2.917)	0.055** (2.062)
TweetLnNumbers	0.062 (1.646)	0.056* (1.801)	0.041** (2.256)	0.235* (1.658)	0.210* (1.927)	0.147* (1.838)
TweetLink	-0.025 (-1.241)	-0.028 (-1.608)	0.019 (1.216)	0.025 (0.374)	0.012 (0.224)	0.083 (1.310)
TweetVisual	0.043* (1.775)	0.046* (1.954)	-0.003 (-0.238)	0.062 (1.025)	0.075 (1.483)	-0.033 (-0.914)
TweetTone	0.030 (1.095)	0.026 (1.081)	0.019 (1.305)	0.109 (1.182)	0.098 (1.326)	0.076 (1.455)
LnMVE	0.029* (1.659)	0.035** (2.193)	0.101*** (5.981)	0.091*** (2.784)	0.101*** (3.814)	0.178*** (5.160)
MTB	-0.009 (-0.806)	-0.009 (-0.890)	0.002 (0.508)	-0.013 (-0.616)	-0.015 (-0.737)	0.003 (0.274)
LnAnalyst	-0.005 (-0.343)	-0.007 (-0.596)	-0.006 (-0.816)	0.025 (0.605)	0.016 (0.512)	0.007 (0.307)
LnMedia	0.009 (0.978)	0.011 (1.259)	0.055*** (4.182)	-0.048* (-1.719)	-0.041 (-1.413)	0.009 (0.258)
EA		0.058 (1.460)	0.076* (1.851)		0.480* (1.899)	0.498** (2.099)
SEC		0.136 (1.628)	0.084 (1.457)		0.515 (1.387)	0.381 (1.465)
Media		-0.031* (-1.704)	0.003 (0.186)		-0.035 (-0.494)	0.039 (0.702)
Constant	0.061** (2.438)	0.067*** (3.163)	0.089*** (4.809)	-0.063 (-0.737)	-0.072 (-1.184)	-0.035 (-0.448)
Observations	3,801,864	3,801,864	3,801,848	3,801,864	3,801,864	3,801,848
Adjusted R-squared	0.013	0.016	0.075	0.009	0.014	0.035
Firm FE	NO	NO	YES	NO	NO	YES
Year FE	NO	NO	YES	NO	NO	YES
CLUSTER	Firm & Month-Year	Firm & Month-Year	Firm & Month-Year	Firm & Month-Year	Firm & Month-Year	Firm & Month-Year

Table 4 (continued):*Panel B: Tweet Characteristics and Intraday Volume*

<i>Dependent Variable.</i>	(1)	(2)	(3)
		<i>AbnTurn_Std</i>	
TweetLong	-0.030 (-0.871)	-0.034 (-1.118)	0.016 (0.508)
TweetLnNumbers	0.002 (0.089)	-0.013 (-0.387)	-0.010 (-0.513)
TweetLink	0.025 (0.553)	0.012 (0.297)	-0.032 (-1.204)
TweetVisual	0.008 (0.143)	0.022 (0.450)	0.050 (1.318)
TweetTone	0.011 (0.268)	0.013 (0.363)	0.021 (0.888)
LnMVE	-0.007 (-0.207)	-0.035 (-1.168)	0.067 (1.482)
MTB	0.012 (0.424)	0.016 (0.889)	0.012 (1.183)
LnAnalyst	-0.023 (-1.308)	-0.025 (-1.645)	0.010 (0.772)
LnMedia	-0.044 (-1.545)	-0.047* (-1.849)	-0.000 (-0.007)
EA		2.007*** (7.874)	1.872*** (11.073)
SEC		0.076 (0.883)	0.055 (0.721)
Media		0.205*** (4.185)	0.200*** (6.399)
Constant	0.123** (2.257)	0.025 (0.452)	0.018 (0.376)
Observations	3,799,237	3,799,237	3,799,221
Adjusted R-squared	0.001	0.036	0.057
Firm FE	NO	NO	YES
Year FE	NO	NO	YES
CLUSTER	Firm & Month-Year	Firm & Month-Year	Firm & Month-Year

Table 5: Corporate Tweet Topics and Intraday Market Consequences

This table examines the relationship between tweet topics and intraday market responses. Topic indicators are added individually to the model from Table 3, along with *TweetLong* and its interaction with each topic. Panel A reports the results for abnormal absolute returns, while Panel B presents results for abnormal turnover. All regressions cluster standard errors by firm and month-year, and continuous variables are winsorized at the 1st and 99th percentiles. Variable definitions are provided in Appendix A. ***, **, and * indicate two-tailed significance at 1%, 5%, and 10% levels, respectively.

Panel A: Tweet Topics and Intraday Returns

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Topic Variable:</i>	Advertising	BusinessNews	DEI	FinancialNews	Environment	Health	HR	Industry	Safety	Technology
<i>Dependent Variable 1:</i>	<i>AbnAbsRet_Med</i>									
TweetLong	0.007*	0.009***	0.007**	0.007**	0.007**	0.006	0.007*	0.009**	0.008**	0.011**
	(1.871)	(2.685)	(2.525)	(2.129)	(2.157)	(1.572)	(1.859)	(2.314)	(2.368)	(2.511)
Topic	0.001	0.003	-0.011	0.007***	0.003	0.003	0.003*	0.003	-0.000	-0.005
	(0.500)	(0.875)	(-1.280)	(2.766)	(1.094)	(1.156)	(1.654)	(1.291)	(-0.124)	(-0.839)
Topic * Long	0.003	-0.027**	0.001	0.013	0.011	0.023	0.005	-0.012	-0.001	-0.018
	(0.322)	(-2.440)	(0.121)	(1.056)	(1.403)	(1.635)	(0.272)	(-0.855)	(-0.143)	(-1.431)
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
<i>Dependent Variable 2:</i>	<i>AbnAbsRet_Std</i>									
TweetLong	0.071**	0.074**	0.066*	0.066*	0.068*	0.072*	0.065*	0.076**	0.071*	0.070**
	(2.011)	(2.005)	(1.878)	(1.826)	(1.795)	(1.896)	(1.750)	(1.978)	(1.958)	(2.320)
Topic	0.012	0.027	-0.074	0.035**	0.025	0.041*	0.009	0.034**	0.019	-0.048
	(0.539)	(1.631)	(-1.014)	(2.082)	(1.465)	(1.752)	(0.634)	(2.233)	(0.925)	(-0.871)
Topic * Long	-0.002	-0.090**	0.043	0.060	0.033	-0.021	0.060	-0.094**	-0.065*	-0.011
	(-0.053)	(-2.507)	(0.630)	(0.737)	(0.493)	(-0.433)	(1.058)	(-2.177)	(-1.678)	(-0.206)
Observations	1,126,583	1,126,583	1,126,583	1,126,583	1,126,583	1,126,583	1,126,583	1,126,583	1,126,583	1,126,583
Adjusted R-squared (DV1)	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
Adjusted R-squared (DV2)	0.033	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.033	0.034
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Event Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
CLUSTER	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year

Table 5 (continued):*Panel B: Tweet Topics and Intraday Volume*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Topic Variable:</i>	Advertising	BusinessNews	DEI	FinancialNews	Environment	Health	HR	Industry	Safety	Technology
<i>Dependent Variable:</i>	<i>AbnTurn Std</i>									
TweetLong	0.072 (1.522)	0.054 (1.250)	0.061 (1.350)	0.066 (1.461)	0.063 (1.427)	0.062 (1.364)	0.050 (1.121)	0.055 (1.456)	0.061 (1.406)	0.054 (1.635)
Topic	0.019 (0.846)	0.025 (1.445)	-0.032 (-0.901)	0.010 (0.609)	0.027 (1.504)	0.018 (1.005)	0.015 (0.860)	0.014 (0.830)	0.037* (1.694)	-0.054 (-0.837)
Topic * Long	-0.042** (-2.025)	0.111 (0.819)	-0.020 (-0.418)	-0.089 (-1.190)	-0.057* (-1.767)	-0.024 (-0.718)	0.130 (1.303)	0.068 (0.748)	-0.070* (-1.740)	0.021 (0.390)
Observations	1,125,837	1,125,837	1,125,837	1,125,837	1,125,837	1,125,837	1,125,837	1,125,837	1,125,837	1,125,837
Adjusted R-squared	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.053
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Event Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
CLUSTER	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year

Table 6: Corporate Tweets and SEC Regulatory Guidance

This table examines whether market responses to corporate tweets change after firms designate or mention Twitter in a regulatory filing following the SEC's 2013 Reg-FD guidance. Panel A restricts the sample to one year before and after the guidance (2012–2014), while Panel B expands the window to three years before and after (2010–2016). Columns (1)–(3) analyze the full sample of tweets, while Columns (4)–(6) focus on tweets classified under the Financial News topic, as identified in Table 5. All regressions cluster standard errors by firm and month-year, and continuous variables are winsorized at the 1st and 99th percentiles. Variable definitions are provided in Appendix A. ***, **, and * indicate two-tailed significance at 1%, 5%, and 10% levels, respectively.

Panel A: Three-Year Window

<i>Dependent Variable:</i>	(1) <i>AbnAbsRet Med</i>	(2) <i>AbnAbsRet Std</i>	(3) <i>AbnTurn Std</i>	(4) <i>AbnAbsRet Med</i>	(5) <i>AbnAbsRet Std</i>	(6) <i>AbnTurn Std</i>
PostSEC	0.003 (0.815)	0.030 (0.584)	-0.024 (-0.676)	0.002 (0.348)	0.059 (1.359)	0.007 (0.154)
PostMention	-0.001 (-0.382)	-0.012 (-0.470)	-0.002 (-0.090)	0.001 (0.100)	0.030 (0.477)	-0.003 (-0.038)
PostSEC*PostMention	0.002 (0.884)	0.016 (0.951)	0.000 (0.030)	0.002 (0.425)	0.001 (0.035)	0.043 (0.709)
PostDesignate	0.002 (1.358)	0.030 (0.734)	0.001 (0.014)	0.008 (0.824)	-0.056 (-0.550)	0.217 (1.324)
Observations	934,630	934,630	933,563	19,240	19,240	19,227
Adjusted R-squared	0.020	0.029	0.028	0.019	0.022	0.028
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES
Event Controls	YES	YES	YES	YES	YES	YES
Sample	2012-2014	2012-2014	2012-2014	2012-2014 EA	2012-2014 EA	2012-2014 EA
CLUSTER	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year

Table 6 (continued):*Panel B: Six-Year Window*

<i>Dependent Variable:</i>	(1) <i>AbnAbsRet Med</i>	(2) <i>AbnAbsRet Std</i>	(3) <i>AbnTurn Std</i>	(4) <i>AbnAbsRet Med</i>	(5) <i>AbnAbsRet Std</i>	(6) <i>AbnTurn Std</i>
PostSEC	0.000 (0.072)	0.020 (0.395)	-0.032 (-0.925)	-0.001 (-0.193)	0.042 (0.938)	-0.012 (-0.303)
PostMention	-0.001 (-0.363)	-0.027 (-1.252)	-0.023 (-1.389)	0.002 (0.221)	-0.021 (-0.441)	-0.036 (-0.700)
PostSEC*PostMention	0.005 (1.634)	0.035* (1.890)	0.018 (1.523)	0.002 (0.325)	0.020 (0.541)	0.059 (1.267)
PostDesignate	-0.006* (-1.733)	-0.024 (-0.698)	0.016 (0.435)	-0.008 (-1.044)	-0.040 (-0.552)	0.046 (0.410)
Observations	1,802,879	1,802,879	1,801,081	36,445	36,445	36,413
Adjusted R-squared	0.016	0.025	0.028	0.019	0.022	0.027
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES
Event Controls	YES	YES	YES	YES	YES	YES
Sample	2010-2016	2010-2016	2010-2016	2010-2016 EA	2010-2016 EA	2010-2016 EA
CLUSTER	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year	Firm & Month- Year

Table 7: Corporate Tweet Characteristics and SEC Regulatory Guidance

This table examines whether firms change their corporate tweet characteristics after mentioning or designating Twitter as a disclosure channel. Columns (1), (3), and (5) use industry fixed effects, while Columns (2), (4), and (6) include firm fixed effects. All regressions cluster standard errors by firm and month-year, and continuous variables are winsorized at the 1st and 99th percentiles. Variable definitions are provided in Appendix A. ***, **, and * indicate two-tailed significance at 1%, 5%, and 10% levels, respectively.

<i>Dependent Variable:</i>	(1) <i>TweetLong</i>	(2)	(3) <i>TweetLnNumbers</i>	(4)	(5) <i>FinancialNews</i>	(6)
PostMention	-0.004 (-0.247)	0.012 (0.713)	-0.002 (-0.104)	0.012 (0.868)	0.007 (1.375)	-0.001 (-0.168)
PostDesignate	0.011 (0.357)	0.017 (0.605)	0.077 (1.260)	0.060 (1.226)	-0.024** (-2.171)	0.001 (0.280)
LnMVE	-0.043** (-2.179)	-0.015 (-0.398)	-0.039* (-1.824)	0.060 (1.479)	0.019*** (2.800)	0.007 (1.490)
MTB	0.014 (0.880)	-0.005 (-0.608)	0.024 (1.549)	-0.007 (-1.184)	-0.008 (-1.179)	0.001 (0.760)
LnAnalyst	0.010 (0.771)	0.007 (0.436)	0.024** (2.014)	-0.010 (-0.594)	-0.005** (-2.062)	0.001 (0.222)
LnMedia	-0.009 (-0.436)	-0.001 (-0.048)	-0.015 (-1.200)	-0.033* (-1.827)	-0.026** (-2.351)	-0.023 (-1.656)
EA	-0.048 (-0.874)	-0.065 (-1.441)	-0.060 (-0.578)	-0.060 (-0.491)	-0.004 (-0.420)	-0.010 (-1.066)
SEC	0.107 (1.378)	0.094 (1.287)	0.219 (1.299)	0.189 (1.089)	-0.008 (-0.952)	-0.002 (-0.391)
Media	0.011 (0.392)	0.012 (0.415)	-0.029 (-1.362)	-0.024 (-1.098)	0.013 (0.647)	0.016 (0.800)
Observations	3,217,224	3,217,213	3,217,224	3,217,213	943,627	943,613
Adjusted R-squared	0.273	0.344	0.096	0.189	0.076	0.127
Year FE	YES	YES	YES	YES	YES	YES
IND FE	YES	NO	YES	NO	YES	NO
Firm FE	NO	YES	NO	YES	NO	YES
Sample	Post SEC	Post SEC	Post SEC	Post SEC	Post SEC	Post SEC
CLUSTER	Firm & Month-Year	Firm & Month-Year	Firm & Month-Year	Firm & Month-Year	Firm & Month-Year	Firm & Month-Year