

Understanding social media activities of firms and CEOs

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Abstract: This study explores the factors and motivations driving Twitter usage by firms and their CEOs, offering insights into the strategic and personal dynamics of social media adoption. Using hand-collected data from CEO and firm Twitter accounts, the findings reveal that firms adopt Twitter at a significantly higher rate and two years earlier than CEOs. Both firm and CEO Twitter usage are positively associated with size and valuation. However, CEO age and tenure are associated only with CEO Twitter activity, suggesting that CEO Twitter usage is discretionary and influenced by personal factors. Firms in environments with greater information asymmetry are less likely to use Twitter, suggesting a desire to minimize scrutiny or misinterpretation. However, CEO Twitter activity is unaffected by the firm's information environment, emphasizing its personal nature. These findings highlight the distinct motivations for Twitter adoption by firms and CEOs, underscoring its role in modern corporate communication and leadership practices.

Keywords: Social media, Twitter, X, CEO.

1. Introduction

Twitter (now X), launched in July 2006, has grown to become an immensely popular platform, attracting more than 350 million monthly active users.¹ The platform's influence extends across various domains, with prominent individuals such as world leaders, government officials, celebrities, athletes, and journalists. Since the launch of Twitter, prominent individuals exert their cultural and political influences using the platform. The stock market participants also began to pay attention to tweets (postings on Twitter) made by these individuals. For example, stock price of Tesla plummeted more than 11 percent after the U.S. Securities and Exchange Commission (SEC) sued Elon Musk for fraudulent statements after he tweeted on August 7th, 2018, that he had “funding secured” to take the company private. The stock market also experienced severe volatility following President Donald Trump's tweets during his presidency. In response to the growing influence of Twitter, businesses have embraced Twitter as a means of engaging with their customers and stakeholders. As social media platforms emerge as a new influential communication tool for companies and their executives, understanding the circumstances and motivation behind social media usage by firms and Chief Executive Officers (CEOs) has become important in the modern corporate context.

In this study, using hand-collected tweets from CEOs' and firms' official Twitter accounts from 2011 to 2018, I examine how Twitter adoption differs for CEOs and firms. I first present that Twitter adoption rate by firms far exceeds Twitter adoption rate by CEOs. Also, I find that firms adopt Twitter two years earlier than their CEOs. The findings suggest that CEOs and firms perceive the costs and benefits of adopting Twitter differently, likely due to varying motivations and goals associated with its use.

Elon Musk, CEO of Tesla, renamed Twitter as X in July 2023 after acquiring the company.¹

This study investigates the factors and patterns influencing Twitter usage by firms and their CEOs, shedding light on the strategic and personal motivations driving social media activity. The findings indicate that both firms and CEOs are more likely to adopt Twitter when the firms are larger and have higher valuations. This supports the notion that firms use Twitter strategically to enhance their public image, engage with stakeholders, and manage their reputation. However, firms' Twitter usage is not influenced by CEO characteristics. While CEO Twitter activity is also positively associated with firm size and valuation, it appears to be discretionary and shaped by personal factors such as age and tenure. Further analysis shows that firms operating in environments with greater information asymmetry, measured by return volatility and analyst earnings forecast dispersion, are less likely to use Twitter. This indicates that such firms may avoid the platform to minimize scrutiny or misinterpretation. In contrast, CEO Twitter activity remains unaffected by the firm's information environment, underscoring that a CEO's use of Twitter is a personal choice rather than a component of the firm's strategic agenda. The study also identifies a distinction in Twitter adoption between firms and CEOs in the technology sector. While being in the technology sector increases the likelihood of a firm using Twitter, it does not impact CEO Twitter usage. This suggests that firm-level Twitter adoption is driven by industry norms and stakeholder expectations, whereas CEO Twitter activity is primarily governed by individual preferences.

In summary, this study highlights the differing motivations behind Twitter usage at the organizational and individual levels. While firms adopt Twitter as a strategic communication tool, CEOs' Twitter activity largely reflects personal discretion. These findings offer valuable insights into the role of social media in corporate communication and leadership practices.

2. Backgrounds

Despite the presence of other popular social media platforms—such as Facebook, Twitter are selected as the primary communication tool by individuals with celebrity status. What makes Twitter more attractive for corporations is that, unlike Facebook, for example, its contents are public by default with built-in features that allow users to freely access and re-post information, creating an incredible free flow of information. Firms have recognized Twitter's benefits and embraced it as their new disclosure medium. Jung, et al. [1] highlight this trend, showing that by early 2013, corporate Twitter adoption rates had already surpassed those of Facebook. This growing adoption has gained academic interest in how firms leverage Twitter and its broader implications. For instance, Jung, et al. [1] document that firms are less likely to share bad financial news on Twitter. Similarly, Crowley, et al. [2] provide evidence that companies strategically time financial disclosures on Twitter around earnings announcements, often incorporating multimedia elements like images, videos, or links into their tweets. Other studies have explored how corporate Twitter use impacts various market participants. Blankespoor, et al. [3] reveal that firms can use Twitter to reduce information asymmetry among investors. Lee, et al. [4] demonstrate that corporate social media activity helps mitigate negative market reactions to product recalls. Additionally, Rennekamp and Witz [5] find that investors are more responsive to highly engaging Twitter content when companies use informal language in their disclosures. Nekrasov, et al. [6] document that visuals in firms' Twitter earnings announcements are associated with greater attention.

On the other hand, CEO adoption of personal Twitter accounts has been steadily increasing. As of September 2022, 32% of Fortune 500 CEOs active on social media have personal Twitter accounts. Unlike corporate accounts, which are often managed by dedicated social media teams within marketing, communications, or customer service departments, CEOs' personal Twitter accounts typically reflect their own views and perspectives. While corporate accounts tend to focus on factual statements, company news, and promotional content, CEO accounts often feature more casual or personal commentary. Responding to the CEO adoption of personal Twitter trend, few recent studies explore top executives' tweets. For example, Chen, et al. [7] find that top executives' tweets contain novel and valuable information to investors. Elliott, et al. [8] provide experimental evidence that CEOs can

develop investor trust or social bonds using Twitter. Despite the growing prominence of CEO Twitter activity, research in this area remains limited largely due to the difficulty of identifying personal accounts.

3. Data and Descriptive Statistics

3.1. Data Collection Process And Descriptive Statistics

I first obtain the list of S&P 1500 firms from the Execucomp database for the period 2011–2018. For these firm-years, I identify firm Twitter accounts and CEO Twitter accounts associated with the CEOs listed in the Execucomp database. Since CEOs often use their preferred first names on Twitter, I also reference the preferred names listed on their companies' webpages. For instance, the Execucomp database lists Apple Inc.'s CEO in fiscal year 2018 as "Timothy D. Cook," while Apple's leadership webpage identifies him as "Tim Cook." In this case, I search for the Twitter account using both "Timothy Cook" and "Tim Cook" as search terms. When company webpages do not provide CEOs' preferred first names, I consult a list of English nicknames to expand the search criteria for CEOs with English names. To confirm the authenticity of each Twitter account, I cross-check the CEO's name, gender, photo, and company affiliation as described on the Twitter account.² After removing firm-year observations that are missing necessary financial variables used in this study, my final sample consists of 10,360 firm-year observations with 1,466 unique firms. In the sample, 7,775 firm-year observations maintain firm Twitter accounts, representing 75% of the total sample, and 937 firm-year observations maintain CEO Twitter accounts, representing about 9% of the total sample. I obtain and analyst forecast data from IBES, financial data from Compustat, and stock market data from CRSP.

Table 1 displays descriptive statistics of variables used in this study. The main dependent variable, *Firm_Twitter*, is an indicator variable that equals one if a firm has a Twitter account that tweets at least 10 times during the fiscal year, and zero otherwise. Another main variable, *CEO_Twitter*, is an indicator variable that equals one if a firm's CEO tweets at least 10 times during the fiscal year on his/her personal Twitter account, and zero otherwise. The mean value of *Firm_Twitter* is 0.75, suggesting that 75% of firm-year observations have firm Twitter accounts with at least 10 tweets in a given fiscal year. The mean value of *CEO_Twitter* is 0.04, suggesting that only 4% of firm-year observations have CEOs tweeting at least 10 times on personal Twitter accounts. Considering that 9% of firm-year observations have CEOs with Twitter accounts, not every CEOs are active (i.e. tweets at least 10 times) on Twitter. The distribution of financial variables and information asymmetry variables is largely consistent with those reported in prior studies. Regarding CEO characteristics, the average CEO age is about 56.7, the average tenure is about 6.5 years, and about 4% of CEOs are female in my sample. The detailed description of variables used in this study can be found in Appendix A. To mitigate the effects from outliers, all continuous variables used in this study are winsorized at 1st and 99th percentile.

I collected Twitter data as of December 2018. ²

Table 1.
Descriptive statistics

	N	Mean	Median	Std dev
<i>Firm_Twitter</i>	10,360	0.7505	1.0000	0.4328
<i>CEO_Twitter</i>	10,360	0.0401	0.0000	0.1961
<i>Size</i>	10,360	8.1717	8.0615	1.6420
<i>Leverage</i>	10,360	0.5686	0.5641	0.2296
<i>CashFlow</i>	10,360	0.0955	0.0880	0.0731
<i>ROA</i>	10,360	0.0501	0.0459	0.0733
<i>Growth</i>	10,360	1.1297	1.0754	0.2562
<i>Loss</i>	10,360	0.1203	0.0000	0.3253
<i>Tobin's Q</i>	10,360	2.0143	1.5980	1.2681
<i>Age</i>	10,356	4.0510	4.0604	0.1189
<i>Female</i>	10,360	0.0410	0.0000	0.1984
<i>RetVol</i>	2,699	0.1032	0.0960	0.0364
<i>AnalystDisp</i>	9,712	0.0708	0.0300	0.1941

Note: Table 1 presents the descriptive statistics of the variables used in the tests. All continuous variables are winsorized at the top and bottom 1% levels.

3.2. Social media adoption by firms and CEOs

Figure A presents the distribution of firms' social media adoption years. Of 1,466 unique firms in my sample, 1080 firms have created social media accounts as of 2018. Only few firms (25 firms) have adopted Twitter accounts in the first two years of service, and a major adoption took place between 2008 and 2011, where 2009 is the biggest year for firms' Twitter adoption. About 55% of S&P 1500 firms in my sample have adopted Twitter by 2011. (815 out of 1466 firms). I still could observe steady Twitter adoption from 2012 to 2018.

Figure B presents the yearly distribution of social media by CEOs. The figure shows that there are a total of 123 CEOs who have Twitter accounts as of 2018. Figure A and Figure B show that social media adoption is steadily increasing for both firms and CEOs. One main distinction is that firms adopted social media at a much more rapid pace than CEOs did. About 50% of total firm Twitter adoption was completed by 2009, whereas 22% of total CEO Twitter adoption was completed by 2009. Result indicates that CEO Twitter adoption is two years, on average, slower than firm Twitter adoption. The slower social media adoption by CEOs may be attributable to the time needed to assess the cost-benefit of Twitter usage. The difference in social media adoption infers that the motivation behind the social media usage is also different for firms and CEOs.

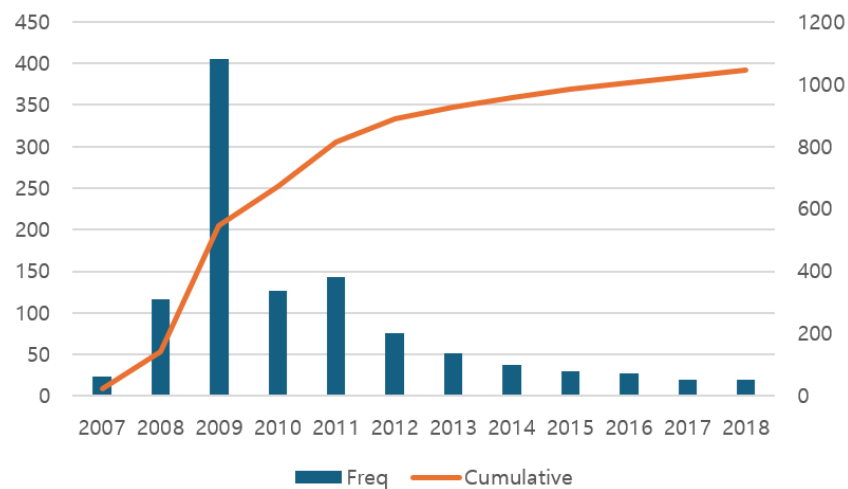


Figure 1.
Firm's Twitter adoption year.

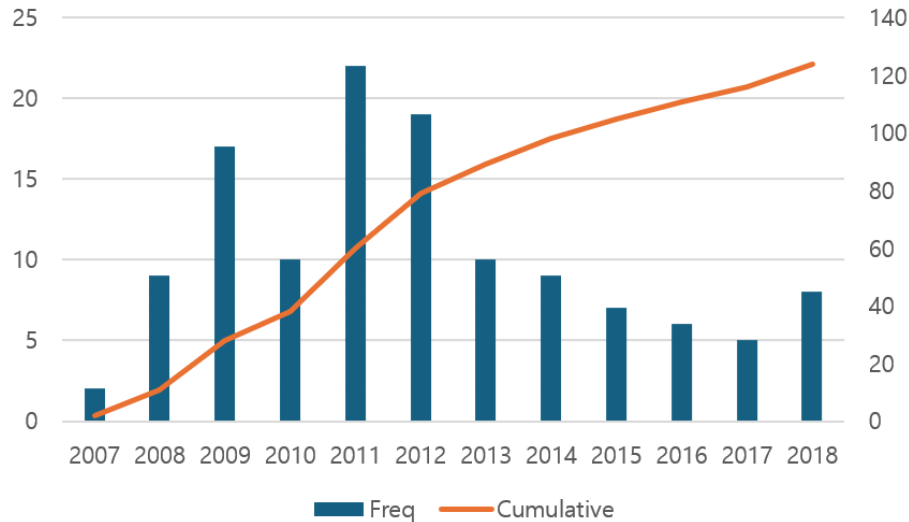


Figure 2.
CEO's Twitter adoption year distribution.

4. Main Results

4.1. Financial Characteristics and Twitter Activity

As the main analysis, I first examine how and whether firm characteristics are associated with the firms' social media activities and CEOs' social media activities. I use the following baseline regression model to examine the association between financial characteristics and CEOs' social media activities:

$$Firm_Twitter (CEO_Twitter)_{it} = \alpha + \beta_1 * Size_{it} + \beta_2 * Leverage_{it} + \beta_3 * CashFlow_{it} + \beta_4 * Growth_{it} + \beta_5 * Loss_{it} + \beta_6 * Tobin's Q_{it} + Industry\ fixed\ effects + Year\ fixed\ effects + e_{it}$$

where the dependent variable, *Firm_Twitter (CEO_Twitter)*, is an indicator that equals one if a firm (firm's CEO) uploads ten or more postings on the firm's (his/her) Twitter account in the fiscal year, and zero otherwise. I include various financial variables including firm size (*Size*), leverage ratio (*Leverage*), free cash flow (*CashFlow*), profitability (*ROA*), year-over-year revenue growth (*Growth*), loss indicator (*Loss*), and market to book value (*Tobin's Q*).

Column (1) of Table 2 presents the results of regressing *Firm_Twitter* on financial variables. The result shows that the coefficients on *Size* and *Tobin's Q* are positive and statistically significant and the coefficient on *Growth* is negative and statistically significant. There can be three potential reasons for the positive association between the firms' Twitter activities and firm size and firm valuation. First, bigger firms often focus heavily on managing their public image and brand reputation, and Twitter allows them to actively shape public perception. Second, firms with higher valuations and larger assets often have more investors to communicate with, and Twitter allows them to quickly share updates and key information. Third, larger firms have greater financial and human resources to dedicate to social media management.

Column (2) of Table 2 presents the results of regressing *CEO_Twitter* on financial variables, and the result is largely similar to the results in column (1); coefficients on *Size* and *Tobin's Q* are positive and statistically significant results while the coefficient on *ROA* is negative and statistically significant. CEOs of larger firms are often prominent figures whose actions and words are closely watched by investors, customers, and the media. A personal Twitter account allows them to build their personal brand, which can positively impact future stock-based compensation and future career opportunities.

Table 2.
Firm characteristics and Twitter activity.

	(1)	(2)
	Firm_Twitter	CEO_Twitter
Size	0.069*** (10.29)	0.009** (2.42)
Leverage	-0.078 (-1.58)	-0.001 (-0.03)
CashFlow	-0.219 (-1.54)	-0.053 (-0.83)
ROA	-0.078 (-0.56)	-0.145**
Growth	-0.071 (-1.08)	-0.001 (-0.07)
Loss	0.004 (0.17)	-0.007 (-0.66)
Tobin's Q	0.049*** (5.78)	0.016*** (3.31)
Constant	0.270*** (4.09)	-0.070** (-2.03)
Industry FE	Included	Included
Year FE	Included	Included
Adjusted R-squared	0.137	0.068
Observations	10,360	10,360

Note: Table 2 presents the regression results that examine the association between firm characteristics and Twitter activities of firms and CEOs. The dependent variables are firm's Twitter activity indicator, Firm_Twitter, and CEO's Twitter activity indicator, CEO_Twitter, in column (1) and (2), respectively. The numbers in parentheses represent t-statistics, adjusted for heteroscedasticity. Appendix A provides detailed definitions of variables used in the analysis. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively, in two-tailed tests.

4.2. CEO Characteristics and Twitter Activity

Next, I examine whether CEOs' individual traits are associated with firms' Twitter use and CEOs' Twitter use. I add three CEO characteristics variables—CEO's age (*Age*) and gender (*Female*)—to the baseline regression model. Table 3 presents the results. Column (1) shows that none of the CEO characteristics are associated with the firms' Twitter activity level, suggesting that firms' Twitter engagement is an organizational strategy that is unrelated to CEOs' personal characters. The results support the notion that firms typically manage their corporate Twitter accounts through dedicated social media teams or departments, such as marketing, communications, or customer service. As a result, the CEOs' personal preferences, traits, or behaviors may not impact the firms' Twitter strategy. On the other hand, column (2) shows that the coefficient on *Age* is negative and statistically significant and the coefficient on *Tenure* is positive and statistically significant. The result is in line with expectation that younger CEOs are more likely to use Twitter because it aligns with their familiarity with technology. The positive and statistically significant coefficient on *Tenure* suggests that CEOs with longer tenure are more likely to use Twitter because their experience, confidence, and established trust with stakeholders make them better positioned to navigate the platform. However, gender does not seem to affect the likelihood of Twitter usage.

Table 3.
CEO characteristics and Twitter activity.

	(1)	(2)
	Firm_Twitter	CEO_Twitter
Age	-0.002 (-1.03)	-0.003*** (-5.30)
Tenure	0.001 (0.05)	0.013** (2.27)
Female	0.020 (0.42)	0.039 (1.47)
Size	0.070*** (10.29)	0.010*** (2.71)
Leverage	-0.085* (-1.68)	0.003 (0.13)
CashFlow	-0.246* (-1.75)	-0.042 (-0.67)
ROA	-0.066 (-0.47)	-0.139** (-2.20)
Growth	-0.072 (-1.07)	-0.006 (-0.62)
Loss	0.000 (0.01)	-0.007 (-0.71)
Tobin's Q	0.047*** (5.46)	0.015*** (3.10)
Constant	0.363*** (3.57)	0.073* (1.80)
Industry FE	Included	Included
Year FE	Included	Included
Adjusted R-squared	0.136	0.081
Observations	10,166	10,166

Note: Table 3 presents the regression results that examine the association between CEO characteristics and Twitter activities of firms and CEOs. The dependent variables are firm's Twitter activity indicator, Firm_Twitter, and CEO's Twitter activity indicator, CEO_Twitter, in column (1) and (2), respectively. The numbers in parentheses represent t-statistics, adjusted for heteroscedasticity. Appendix A provides detailed definitions of variables used in the analysis. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively, in two-tailed tests.

4.3. Information Environment and Twitter Activity

I also examine whether a firm's information environment is associated with the firm's and CEOs' Twitter activities. I use return volatility (*RetVol*) and analyst earnings forecasts dispersion (*AnalystDisp*) as information environments following prior literature [9-11]. I use two specifications: one with financial and information environment variables, and the other with financial, CEO traits, and information environment variables. Table 4 presents the results. In column (1), the coefficient on *ReturnVol* and *AnalystDisp* are negative and statistically significant, suggesting that firms are less likely to use Twitter under poorer information asymmetry environment (i.e. higher return volatility and greater analyst forecast dispersion). In column (2), the results are largely consistent although the coefficient on *ReturnVol* is negative but statistically insignificant. Firms under greater information asymmetry may be less likely to use Twitter because firms in this position may avoid Twitter to reduce the likelihood of attracting regulatory scrutiny, media attention, or questioning from investors and analysts. On the other hand, column (3) and (4) show that CEO's Twitter activity is not impacted by the

firm's information environment, further supporting the idea that CEOs' Twitter activity is driven more by personal choice than by organizational strategy.

Table 4.
Information asymmetry and Twitter activity

	(1)	(2)	(3)	(4)
	Firm_Twitter	Firm_Twitter	CEO_Twitter	CEO_Twitter
<i>ReturnVol</i>	-0.948*	-0.873	0.322	0.300
	(-1.71)	(-1.55)	(1.27)	(1.16)
<i>AnalystDisp</i>	-0.110***	-0.110***	-0.015	-0.014
	(-3.27)	(-3.26)	(-1.14)	(-1.13)
<i>Size</i>	0.076***	0.076***	0.016**	0.017**
	(6.41)	(6.39)	(2.23)	(2.45)
<i>Leverage</i>	-0.051	-0.049	0.040	0.026
	(-0.59)	(-0.55)	(1.06)	(0.72)
<i>CashFlow</i>	-0.458	-0.436	0.003	-0.008
	(-1.62)	(-1.50)	(0.02)	(-0.05)
<i>ROA</i>	0.275	0.306	-0.196	-0.182
	(0.96)	(1.05)	(-1.07)	(-0.97)
<i>Growth</i>	-0.041	-0.044	-0.021	-0.027*
	(-0.89)	(-0.93)	(-1.38)	(-1.72)
<i>Loss</i>	0.108**	0.105**	-0.011	-0.007
	(2.43)	(2.29)	(-0.52)	(-0.34)
<i>Tobin's Q</i>	0.016	0.013	0.026*	0.027*
	(0.87)	(0.70)	(1.94)	(1.90)
<i>Age</i>		-0.001		-0.003***
		(-0.39)		(-3.22)
<i>Tenure</i>		-0.014		0.000
		(-0.64)		(0.01)
<i>Male</i>		-0.002		-0.022
		(-0.04)		(-0.82)
<i>Constant</i>	0.329**	0.402**	-0.168**	-0.005
	(2.17)	(1.99)	(-2.02)	(-0.06)
Industry FE	Included	Included	Included	Included
Year FE	Included	Included	Included	Included
Adjusted R-squared	0.157	0.159	0.075	0.086
Observations	10,166	10,166	10,166	10,166

Note: Table 4 presents the regression results that examine the association between the information environment and Twitter activities of firms and CEOs. The dependent variables are firm's Twitter activity indicator, Firm_Twitter, in column (1) and (2), and the dependent variable is CEO's Twitter activity indicator, CEO_Twitter, in column (3) and (4). The numbers in parentheses represent t-statistics, adjusted for heteroscedasticity. Appendix A provides detailed definitions of variables used in the analysis. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively, in two-tailed tests.

4.4. Technology sector and Twitter activity

I further examine whether a firm's presence in the technology sector influences Twitter usage decisions by the firm and its CEO. I estimate the regression model where I include technology sector indicator (*Tech*) on the baseline model. I remove industry-fixed effects to avoid multicollinearity. Table 5 presents the results of estimating the model. The result indicates that being in a technology sector positively affects a firm's Twitter usage while it has no effect on CEO's Twitter usage. While firm-level decisions to adopt Twitter are often driven by industry norms and stakeholder expectations, a CEO's personal use of Twitter is more discretionary and less likely to be influenced by external factors like industry sector.

Table 5.
Tech sector and Twitter activity.

	(1)	(2)
	Firm_Twitter	CEO_Twitter
Tech	0.164*** (5.15)	0.011 (0.74)
Size	0.060*** (8.82)	0.006* (1.65)
Leverage	-0.066 (-1.34)	0.020 (1.05)
CashFlow	-0.012 (-0.08)	0.052 (0.89)
ROA	-0.039 (-0.26)	-0.180*** (-2.84)
Growth	-0.091*** (-3.52)	-0.004 (-0.42)
Loss	0.002 (0.07)	-0.010 (-1.03)
Tobin's Q	0.060*** (7.29)	0.019*** (3.83)
Constant	0.305*** (4.54)	-0.068** (-2.05)
Year FE	Included	Included
Adjusted R-squared	0.066	0.022
Observations	10,360	10,360

Note: Table 5 presents the regression results that examine the association between technology sector indicator and Twitter activities of firms and CEOs. The dependent variables are firm's Twitter activity indicator, Firm_Twitter, and CEO's Twitter activity indicator, CEO_Twitter, in column (1) and (2), respectively. The numbers in parentheses represent t-statistics, adjusted for heteroscedasticity. Appendix A provides detailed definitions of variables used in the analysis. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively, in two-tailed tests.

4.5. Financial content in CEOs' tweets

To further confirm that CEOs' Twitter activity is driven by personal choice than by organizational strategy, I examine how often CEOs use financial words in their tweets. I rely on Loughran and McDonald [12] finance-oriented dictionary to identify financial words from CEOs' tweets. Result indicates that CEOs tweet 146 times in a fiscal year on average, and tweet 12 times with financial words in a fiscal year on average, which is approximately 8% of total tweets. The results indicate that CEOs rarely share company-related information on their personal Twitter accounts, further reinforcing the notion that their Twitter activity is driven by personal preference.

5. Conclusion

This study examines the determinants and patterns of Twitter usage by firms and their CEOs, offering insights into the strategic and personal motivations behind social media activity. I provide evidence that both firms and CEOs are more likely to adopt Twitter when firms are larger and have higher valuations. This supports the idea that firms use Twitter strategically to enhance public image, communicate with stakeholders, and manage their reputation. However, firms' Twitter activities appear not to be influenced by CEO characteristics. Although CEO Twitter activity is positively associated with firm size and valuation, it also appears to be discretionary and influenced by personal factors, such as age and tenure. Additional analysis finds that firms operating in environments with greater information asymmetry, as measured by return volatility and analyst earnings forecast dispersion, are less likely to use Twitter. This suggests that such firms may avoid the platform to reduce exposure to scrutiny or misinterpretation. However, CEO Twitter activity is not influenced by the firm's information environment, reinforcing the idea that CEOs' use of Twitter is a personal choice rather than

an extension of the firm's strategic objectives. I provide the distinction between firms and CEOs in the technology sector. While being in the technology sector positively impacts a firm's likelihood of using Twitter, it does not influence CEO Twitter usage. This finding suggests that firm-level decisions to adopt Twitter are shaped by industry norms and stakeholder expectations, while CEOs' Twitter activity remains largely independent and driven by individual preference.

Overall, this study highlights the distinct motivations behind Twitter usage at the firm and CEO levels. While firms adopt Twitter as part of a broader communication strategy, CEO Twitter activity is primarily a reflection of personal choice. This distinction has implications for understanding the role of social media in corporate communication and leadership behavior.

Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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References

- [1] M. J. Jung, J. P. Naughton, A. Tahoun, and C. Wang, "Do firms strategically disseminate? Evidence from corporate use of social media," *The Accounting Review*, vol. 93, no. 4, pp. 225-252, 2018. <https://doi.org/10.2308/accr-51906>
- [2] R. M. Crowley, W. Huang, and H. Lu, "Discretionary dissemination on Twitter," *Rotman School of Management Working Paper*, no. 3105847, pp. 2022-148, 2023.
- [3] E. Blankespoor, G. S. Miller, and H. D. White, "The role of dissemination in market liquidity: Evidence from firms' use of Twitter™," *The Accounting Review*, vol. 89, no. 1, pp. 79-112, 2014. <https://doi.org/10.2308/accr-50576>
- [4] L. F. Lee, A. P. Hutton, and S. Shu, "The role of social media in the capital market: Evidence from consumer product recalls," *Journal of Accounting Research*, vol. 53, no. 2, pp. 367-404, 2015. <https://doi.org/10.1111/1475-679x.12074>
- [5] K. M. Rennekamp and P. D. Witz, "Linguistic formality and audience engagement: Investors' reactions to characteristics of social media disclosures," *Contemporary Accounting Research*, vol. 38, no. 3, pp. 1748-1781, 2021. <https://doi.org/10.1111/1911-3846.12661>
- [6] A. Nekrasov, S. H. Teoh, and S. Wu, "Visuals and attention to earnings news on Twitter," *Review of Accounting Studies*, vol. 27, no. 4, pp. 1233-1275, 2022. <https://doi.org/10.1007/s11142-021-09630-8>
- [7] H. Chen, B. Hwang, and B. Liu, "The emergence of 'social executives' and its consequences for financial markets. Unpublished Paper," Retrieved: <https://ssrn.com/abstract=2318094>. [Accessed 2019].
- [8] W. B. Elliott, S. M. Grant, and F. D. Hodge, "Negative news and investor trust: The role of \$ firm and# CEO Twitter use," *Journal of Accounting Research*, vol. 56, no. 5, pp. 1483-1519, 2018. <https://doi.org/10.1111/1475-679x.12217>
- [9] K. B. Diether, C. J. Malloy, and A. Scherbina, "Differences of opinion and the cross section of stock returns," *The Journal of Finance*, vol. 57, no. 5, pp. 2113-2141, 2002. <https://doi.org/10.1111/0022-1082.00490>
- [10] T. C. Johnson, "Forecast dispersion and the cross section of expected returns," *The Journal of Finance*, vol. 59, no. 5, pp. 1957-1978, 2004. <https://doi.org/10.1111/j.1540-6261.2004.00688.x>
- [11] M. S. Officer, A. B. Poulsen, and M. Stegemoller, "Target-firm information asymmetry and acquirer returns," *Review of Finance*, vol. 13, no. 3, pp. 467-493, 2009. <https://doi.org/10.1093/rof/rfn017>
- [12] T. Loughran and B. McDonald, "When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks," *The Journal of finance*, vol. 66, no. 1, pp. 35-65, 2011. <https://doi.org/10.1111/j.1540-6261.2010.01625.x>

Appendix A.
Variable definition

Variable	Definition
Firm_Twitter	= Indicator variable that equals one if a firm tweets ten or more tweets on its official Twitter account in a given fiscal year.
CEO_Twitter	= Indicator variable that equals one if a firm's CEO tweets ten or more tweets on the person Twitter account in a given fiscal year.
Size	= Natural logarithm of total assets
Leverage	= Total liabilities scaled by total assets
CashFlow	= Cash flow (operating income before depreciation and amortization – interest – taxes – dividend) scaled by total assets
ROA	= Return on assets
Growth	= Changes in sales scaled by lagged sales.
LOSS	= Indicator variable that equals one if a firm experiences net losses in a given year, and zero otherwise.
Tobin's Q	= Equity value scaled by book value.
Age	= Natural log of one plus CEO's age
Tenure	= Natural log of one plus CEO's tenure
Female	= Indicator variable that equals one if a firm's CEO is female in a given fiscal year.
RetVol	= Return volatility measured over the fiscal year.
AnalystDisp	= Analyst earnings forecast dispersion
Tech	= Indicator variable that equals one if a firm belongs to the technology sector.