

The Impact of Public Relations Response Speed on Corporate Financing Costs Following Negative Public Opinion Events

Muqi Zhang

Temple University, Tokyo, Japan
tut70198@temple.edu

Abstract. This study examines how sudden negative public opinion events and the timing of corporate public relations (PR) responses affect firms' financing costs. Using a firm-year panel of 24 publicly listed automotive and related companies from 2015 to 2024, we conceptualize negative public opinion events as reputational shocks that increase information uncertainty and are priced by capital markets. Financing cost is measured at the firm level using the weighted average cost of capital (WACC), capturing the aggregate risk premium demanded by external capital providers. Employing panel regression models with firm-level controls, we find that sudden negative public opinion events significantly increase corporate financing costs. More importantly, we document a significant negative association between PR response speed and financing costs, indicating that slower, more deliberate responses are associated with more favorable financing conditions following a crisis. These findings challenge the conventional crisis-management view that faster responses are always optimal. Instead, the results suggest that in contexts characterized by high informational uncertainty, premature responses may amplify perceived risk, whereas cautious response timing can mitigate financing penalties. This study contributes to the corporate finance and crisis communication literature by providing empirical evidence on how communication strategy shapes debt market pricing and by highlighting the context-dependent role of response speed in managing reputational shocks.

Keywords: Negative public opinion events, Public relations response speed, Financing cost, Information uncertainty, Crisis communication

1. Introduction

In recent years, sudden negative public opinion events, ranging from corporate scandals to product safety failures, have become increasingly frequent and intense, materially impacting firms' external financing environments. Such events function not merely as public relations challenges but as potent informational and reputational shocks that alter a firm's information environment and are subsequently priced by capital markets [1-7]. While the literature establishes that adverse public sentiment can increase the cost of capital, particularly in debt markets sensitive to downside risk [1], the question of how firms should strategically respond remains theoretically ambiguous and presents a significant practical dilemma.

Conventional crisis management wisdom often advocates for swift public relations responses to signal transparency and control. However, prominent corporate crises challenge this prescription. For instance, in the aftermath of the Boeing 737 MAX crashes, the firm's rapid but premature statements, issued before internal investigations were complete, amplified market uncertainty as new information emerged, prolonging concerns over governance and risk management [8]. Similarly, Volkswagen's initial, incomplete disclosures during the "Dieselgate" scandal reinforced perceptions of poor information credibility, contributing to a sustained deterioration in its financing conditions [9]. These cases suggest that in complex crises characterised by high informational uncertainty, a rapid response may inadvertently exacerbate negative market reactions rather than mitigate them [10-12]. This tension highlights a critical gap in our understanding: does a faster public relations response function as a risk-mitigating signal, or does it amplify uncertainty and, consequently, increase a firm's financing costs?

This study addresses this question by examining the financial consequences of a firm's crisis communication timing. We conceptualise negative public opinion events as shocks that erode a firm's reputational capital, which is a key intangible asset that ordinarily mitigates information asymmetry and lowers transaction costs [13-15]. The erosion of this capital magnifies uncertainty among external capital providers. For creditors and bondholders, this heightened uncertainty signals an increase in the firm's perceived default risk, potential legal liabilities, and latent governance weaknesses. To compensate for this elevated risk, capital providers demand a higher risk premium, which manifests as an increase in the firm's financing costs, observable through wider credit spreads on bonds or higher interest rates on loans. This paper moves beyond the assumption that faster responses are universally optimal. We posit that the effect of response speed is context-dependent. Building on this, we investigate two questions. First, do sudden negative public opinion events lead to a significant increase in a firm's financing costs? Second, after the occurrence of a negative event, what is the effect of public relations response speed on these financing costs?

To test these hypotheses, we construct a dataset of publicly listed companies in the global automotive and related industries from 2015 to 2024. We employ the regression model to explore the impact of a sudden negative public opinion event and the public relations response speed (the time lag between the event and the firm's first official response). Our empirical results indicate that negative public opinion events do, in fact, significantly increase financing costs [16-20,7]. More importantly, we find a significant negative association between response speed and financing costs, suggesting that slower, more deliberate responses are linked to more favourable financing outcomes in the aftermath of a crisis. This study contributes to the corporate finance and crisis management literature by providing empirical evidence on the economic consequences of public relations response timing. By integrating public opinion shocks and corporate communication strategy, our findings challenge the conventional wisdom of speed at all costs and offer crucial insights for managers navigating the complex interplay between reputation, information, and capital markets.

The remainder of this paper is organized as follows. Section 2 reviews the relevant literature and develops our hypotheses. Section 3 details the research design, data, and methodology. Section 4 presents and discusses the empirical results. Finally, Section 5 concludes with a summary of our findings, their theoretical and practical implications, and directions for future research.

2. Literature review

This section reviews the literature at the intersection of crisis communication and corporate finance to explore a pivotal, yet underexamined, relationship: the impact of a firm's strategic public relations responses following sudden reputational shocks on its subsequent cost of capital. By

evaluating the extant research in fields ranging from strategic management to financial economics, we identify key theoretical tensions and empirical gaps.

2.1. Corporate financing costs and their determinants

A firm's financing costs are fundamentally determined by the compensation that capital providers demand for bearing risk and navigating information asymmetries [21,22]. In the debt market, this cost is empirically operationalized using proxies such as the yield spread on newly issued bonds or the credit spread on existing debt in the secondary market. The literature establishes that these spreads widen, thereby increasing financing costs when investors perceive greater uncertainty in a firm's future cash flows, a higher probability of default, or a less transparent information environment [3,23,24].

To isolate the drivers of these costs, prior research has largely followed two empirical strategies. The first is a cross-sectional approach, which compares differences in yield spreads across various firms at a single point in time [23]. The second, more relevant for analyzing the impact of specific shocks, is an event-study methodology using panel data. This approach examines within-firm changes in yield spreads around a defined event window, allowing researchers to disentangle the marginal impact of an informational or reputational shock from other confounding risk factors by controlling for firm characteristics, credit ratings, leverage, and macroeconomic conditions [3]. Building upon this methodological foundation, our study conceptualizes the change in financing costs as the outcome of the debt market's repricing of credit risk and information uncertainty, which arise from the dual stimuli of a sudden public opinion event and the firm's strategic response to it.

2.2. The impact of sudden events and corporate public relations

Sudden events, characterized by the concentrated and rapid dissemination of information, can trigger abrupt revisions in stakeholders' risk assessments of a firm [2]. A substantial body of research demonstrates that such adverse information shocks directly influence market perceptions and a firm's financial health. For example, studies utilizing large-scale news datasets reveal a systematic link between news sentiment and debt costs, where a more negative tone in media coverage corresponds to higher yield spreads on newly issued debt [3]. This effect is also evident in the context of non-financial disclosures. Research on ESG information shocks documents that a negative tone in ESG reports leads to a significant widening of bond yield spreads, reflecting investors' upward revision of future risk and uncertainty [23]. Collectively, this literature establishes that sudden, negative events can impair a firm's financing conditions by reshaping external perceptions of its risk profile and governance quality.

In response to such crises, firms deploy public relations (PR) and crisis communication strategies. A central question in this domain concerns the optimal timing of the response [25,26]. While conventional wisdom often advocates for immediate action to control the narrative, a growing body of literature contests the notion that faster responses are invariably superior. Emerging evidence suggests that in contexts marked by informational ambiguity, evolving public sentiment, or unclear responsibility, a delayed or silent response can be a strategic choice. For instance, quasi-experimental research on online public opinion events shows that, compared to immediate explanatory or empathetic statements, a strategy of silence can be more effective at attenuating negative sentiment and curbing its diffusion [27]. This aligns with the literature on strategic silence, which posits that silence is not mere inaction but a deliberate tactic to prevent premature responsibility attribution or the secondary amplification of a crisis that can result from hasty disclosures [26]. Further supporting this view, event studies on product-harm crises indicate that more passive response strategies can be more effective during the initial disclosure phase, implying that slower responses do not necessarily lead to worse market outcomes [28]. Therefore, the effectiveness of a PR response's speed is highly contextual. Firms face a strategic trade-off: a faster response may reduce uncertainty but intensify scrutiny, whereas a slower response may be viewed as procrastination but can facilitate a more calculated and effective long-term strategy.

2.3. Hypothesis development

Existing studies shown in Section 2.1 and 2.2 suggest that while negative public opinion shocks initially increase financing costs, the firm's strategic response timing can significantly moderate this effect.

First, we consider the direct impact of the event itself. As established in Section 2.2, sudden negative public opinion events function as adverse information shocks that heighten stakeholder uncertainty. According to the debt pricing framework (Section 2.1), an increase in perceived risk and information asymmetry leads rational investors, particularly bondholders, to demand a higher risk premium to compensate for potential losses. The empirical literature provides direct support for this channel: studies have consistently shown that negative sentiment in public information, such as news coverage and ESG reports, is systematically priced into debt, resulting in wider credit spreads and thus higher financing costs [3,23]. Therefore, the initial market reaction to a negative public opinion shock should be an upward adjustment in the firm's cost of debt. This leads to our first hypothesis:

Hypothesis 1: The occurrence of a sudden negative public opinion event is positively associated with a firm's financing costs.

The crisis communication literature reviewed in Section 2.2 challenges the conventional wisdom that faster responses are always optimal. A premature response, launched before information is fully verified, can inadvertently amplify the crisis. It may intensify public attention, lead to a premature and often harsher attribution of responsibility, and generate further negative discussion, all of which can sustain or even exacerbate investor uncertainty. Conversely, a more deliberate and delayed response strategy can be beneficial. This approach, described as "strategic silence," provides the firm with the necessary time to conduct internal investigations, verify facts, and align its messaging [26]. By doing so, the firm can prevent the secondary diffusion of the crisis and signal to the market that it is managing the situation prudently rather than reacting impulsively. As quasi-experimental evidence suggests, such a strategy can be more effective at attenuating negative sentiment and curbing its spread [27]. From a debt market perspective, a well-managed, albeit slower, response can reduce informational noise and lower the perceived risk profile of the firm compared to a hasty and potentially inconsistent reaction. This implies that a slower response may lead to a more favorable outcome for the firm's financing costs. This leads to our second hypothesis:

Hypothesis 2: Among firms experiencing a sudden negative public opinion event, a slower public relations response is associated with lower financing costs.

3. Methodology

This section details the empirical framework designed to test the hypotheses. First, we define the research scope, outlining the sample selection criteria and the procedures for data collection from multiple sources. Second, we provide the operational definitions and measurement of our key variables. Finally, we specify the econometric models that will be employed to analyze the data and formally test our hypotheses regarding the impact of public opinion events and subsequent response strategies on corporate financing costs.

3.1. Research scope and data collection

This study focuses on the global automotive industry. The sector is defined by the powerful influence of brand and reputation on consumer behavior and investor confidence. Concurrently, it is an industry where issues of product safety, compliance, and governance are particularly prone to escalating into sudden public opinion crises. These characteristics create a natural laboratory for examining how firms navigate such events and how their public relations responses subsequently affect their financing costs.

This research constructed a firm-year panel dataset, initially comprising 24 automotive and related companies observed annually from 2015 to 2024. The data were systematically collected from a variety of public and proprietary sources. Financial data, including variables for financing costs and firm-specific controls (e.g., ROA, revenue, market capitalization), were sourced from Yahoo Finance, Macrotrends, and corporate annual reports. To account for risk, systematic risk coefficients (Beta) were obtained from Macrotrends or calculated from historical stock returns, while credit ratings were gathered from S&P Global Ratings, Moody's, and Fitch. Finally, data required to identify sudden negative events and measure media sentiment were constructed using comprehensive news databases, including GDELT, Factiva, and LexisNexis, supplemented by firm-issued press releases and public disclosures.

To ensure the integrity of the analysis, a rigorous data-cleaning process was applied. Observations were excluded from the sample due to missing data for core variables, unverified event timelines, or incomplete information regarding a firm's public response. After this process, the final balanced panel forms the basis for our analysis.

3.2. Variable definitions and measurement

The dependent variable is Financing Cost (FC), which represents the firm-year cost of raising external capital. In this study, FC is intended to capture the firm's overall financing conditions, i.e., the aggregate risk premium demanded by both equity and debt investors under perceived risk and information uncertainty. Because sudden negative public opinion events can affect creditors' default risk assessments and equity investors' required returns through shifts in perceived governance quality, transparency, and uncertainty, a comprehensive measure is required rather than an instrument-specific borrowing rate. Accordingly, FC is operationalized as the weighted average cost of capital (WACC) at the annual frequency. WACC aggregates the firm's equity and debt financing costs into a single firm-year metric and is therefore suitable for capturing changes in overall external financing conditions.

To construct WACC, the cost of equity r_e is estimated using the Capital Asset Pricing Model (CAPM):

$$r_e = R_f + \beta(R_m - R_f) \tag{1}$$

where R_f is the risk-free rate, β is the firm's exposure to systematic market risk, and $R_m - R_f$ is the market risk premium. The cost of debt is denoted by r_d and is adjusted for the corporate income tax shield. FC is then computed as:

$$FC = WACC = r_e \times \frac{E}{V} + r_d \times (1 - T_e) \times \frac{D}{V} , \tag{2}$$

where E and D are the market values of equity and debt, $V = E + D$ is total firm value, and T_e is the effective corporate tax rate. Importantly, this WACC-based FC measure reflects firm-level financing conditions rather than realized security-specific yields or borrowing rates, and it is used consistently as the dependent variable throughout the empirical analysis.

The main explanatory variables are designed to capture the occurrence of a crisis and the firm's subsequent public relation response strategy. Sudden Negative Event (Event) is an indicator (dummy) variable that equals 1 if a firm experiences a major negative public opinion or reputational crisis in a given year, and 0 otherwise. These events encompass incidents such as product safety failures, governance scandals, or significant environmental and regulatory controversies that generate intense negative media attention. Public Response Timeliness (Public) measures the speed of a firm's public relations response following a negative event. It is operationalized as the number of days from the initial event date to the firm's first official public disclosure, such as a press release, corporate announcement, or official statement. A lower value indicates a more timely response.

To mitigate potential omitted variable bias and account for firm-level heterogeneity, the regression models incorporate a vector of control variables (Controls). These variables represent key firm characteristics known to influence financing costs, covering profitability, systematic risk, firm size and scale, and reputation or information environment characteristics.

The summary of all variables, including their definitions, abbreviations, and data sources, is presented in Table 1.

Table 1. Summary of variables

Variable	Abbr	Description	Data Source
Company name	CN	The full names of the 24 companies	Company official website
Company ID	ID	The code for each company, such as 1, 2, 3, 4	Yahoo Finance
Stock code	Com	A unique identifier assigned to each publicly listed company for trading and financial reporting purposes.	Yahoo Finance
Year	Year	The calendar year to which the observation or financial data corresponds.	Constructed directly from the dataset's time dimension.
Market capitalization	Value	The total market value of a company's outstanding shares, typically measured in billions of dollars.	Yahoo Finance, Macrotrends
Return on assets	ROA	A profitability metric indicating how efficiently a company uses its assets to generate net income.	Company annual reports, Yahoo Finance
Systemic risk coefficient	Beta	A measure of a company's exposure to systematic market risk, reflecting its sensitivity to overall market movements.	Macrotrends or calculated using historical price data
Financing cost	FC	The cost of raising external capital, often measured through bond yield spreads, loan spreads, or implied cost of equity.	Firm bond issuance data, Yahoo Finance, and calculated measures
Revenue	Revenue	The total operating income generated by a company during the reporting year.	Company annual reports, Yahoo Finance, Macrotrends
Major negative event dummy	Event	A binary variable indicating whether a major negative media or reputational event occurred for the company during the year.	GDELT, Factiva, LexisNexis, or company press releases
Media tone index	Media	A sentiment-based score derived from news or social media text, capturing the average positivity or negativity of media coverage.	Computed from GDELT, news text databases, sentiment dictionaries, or NLP-based analysis.
PR response speed	Public	The number of days a company takes to respond publicly to a major negative event or crisis.	Company press releases, official statements, verified news timelines.
Information transparency score	InfTra	A rating that measures the clarity, completeness, and accessibility of a firm's disclosed information.	Third-party transparency indices, ESG datasets, or coded via disclosure scoring frameworks.

Table 2 presents the descriptive statistics for the principal variables. The wide dispersion in FC indicates substantial cross-sectional heterogeneity in the financing risk premia across firms. The low mean of the Event variable is consistent with the rare but high-impact nature of major public opinion crises. Similarly, the public relations response speed (Public) exhibits considerable variation, reflecting diverse corporate crisis communication strategies and providing the necessary variance to identify the effects of response timeliness. Financial control variables such as ROA, Revenue, and Market Capitalization are right-skewed, which is typical for firm-level data and reflects the presence of a few much larger or more profitable firms. Overall, the variable distributions align with economic intuition, and the absence of extreme outliers confirms the dataset's suitability for panel regression analysis.

Table 2. Descriptive statistics of variables

Variable	Obs	Mean	Std. Dev.	Min	Max
FC	181	28.876	66.682	1.49	595.72
Media	181	-.038	.328	-.95	.55
Event	181	.812	.744	0	3
Public	181	1.481	12.666	-8	156
ROA	181	.043	.059	-.467	.191
Beta	181	1.108	.752	0	5.62
Revenue	181	90.903	80.041	3.1	351.31
Infra	181	83.497	6.288	49	93
Value	181	63.587	149.548	.11	1451.24

3.3. Models

To test our hypotheses regarding the impact of public opinion events and corporate response speed on financing costs, we employ a panel regression framework. Our baseline model is specified as follows:

$$FC_{it} = \beta_0 + \beta_1 Event_{it} + \beta_2 Public_{it} + \gamma Control_{it} + \varepsilon_{it} \quad (3)$$

where FC_{it} represents firm i 's financing cost in year t , and $Event_{it}$ is an indicator variable equal to one if firm i is subject to a major negative public opinion event in year t , $Public_{it}$ measures the speed of firm i 's public response to major negative events, $Control_{it}$ is a vector of control variables encompassing profitability, risk, firm size, reputation and information environment characteristics, firm type, and credit rating, and ε_{it} represents the stochastic disturbance term.

4. Result analysis

This section presents the empirical findings on the relationship between negative public opinion events, public relations response speed, and corporate financing costs. To account for the panel structure of our data and ensure the selection of an appropriate estimation strategy, we begin by comparing three specifications: a baseline Pooled OLS model, a Random-Effects (RE) model, and a Fixed-Effects (FE) model. The model selection process was guided by standard diagnostic tests. Specifically, the Breusch-Pagan Lagrange Multiplier (LM) test was conducted to assess the presence of significant panel effects. The test results were insignificant, indicating that unobserved firm-specific heterogeneity is not a statistically relevant factor in our model. Consequently, the Pooled OLS model is identified as the most efficient and appropriate specification, and the following analysis is based on its results.

Table 3 reports the OLS regression results. The coefficient for Event, our variable capturing the occurrence of a sudden negative public opinion shock, is positive and significant. This finding provides preliminary evidence that firms experiencing such events are associated with higher financing costs. This aligns with the established view that capital markets price in adverse information shocks, with creditors demanding higher risk premia to compensate for increased uncertainty and perceived reputational damage [1,3].

Table 3. OLS regression result

FC	Coef.	St.Err.	t-Value	p-Value	[95% Conf Interval]	Sig
Event	19.69	9.014	2.18	.03	1.898	37.481 **
Public	-.613	.287	-2.14	.034	-1.179	-.047 **
ROA	-12.086	58.4	-0.21	.836	-127.35	103.178
Beta	10.197	4.456	2.29	.023	1.403	18.992 **
Revenue	-.123	.053	-2.33	.021	-.228	-.019 **
Constant	246.584	72.297	3.41	.001	103.892	389.276 ***
Mean dependent var		28.876		SD dependent var	66.682	
R-squared		0.396		Number of obs	181	
F-test		2.020		Prob > F	0.065	
Akaike crit. (AIC)		1955.692		Bayesian crit. (BIC)	1978.081	

*** p<.01, ** p<.05, * p<.1

Conversely, the analysis of the public relations response (Public) variable yields a counter-intuitive finding. The estimated coefficient is negative and statistically significant, which would imply that a slower response to a crisis is correlated with more favorable financing terms. This result seemingly contradicts the hypothesis that rapid communication is beneficial. The most probable explanation for this anomaly lies in the limitations of the pooled OLS model, which is unable to disentangle the effect of response speed from pre-existing, unobserved differences across firms. For instance, large, well-established firms may have inherently lower financing costs due to their reputation and market standing, while also adopting more deliberate (and thus slower) communication protocols [21,22]. To address this potential bias and obtain a more reliable estimate, our study progresses to a fixed-effects estimation, which effectively holds constant all stable firm-specific characteristics.

This result rejects the simplistic assumption that faster responses necessarily mitigate increases in financing costs and is consistent with evidence that response speed does not monotonically improve stakeholder evaluations across crisis contexts [25]. One possible explanation is that, in the early stage of an event, when information is incomplete and responsibility attribution remains unclear, overly rapid public responses may intensify market

attention and reinforce negative narratives, thereby amplifying creditors' assessments of uncertainty [29]. By contrast, a more cautious or delayed response strategy may allow firms to verify information and formulate more consistent communication, aligning with the logic of strategic silence and evidence that silence can mitigate the diffusion of online firestorms under certain conditions [26,30]. It should be emphasized that this result does not imply that "delayed responses" are inherently beneficial; rather, it indicates that the economic consequences of public relations response speed are highly context-dependent, with their effects likely operating through changes in information uncertainty and risk perceptions. It should be emphasized that this result does not imply that "delayed responses" are inherently beneficial; rather, it indicates that the economic consequences of public relations response speed are highly context-dependent, with their effects likely operating through changes in information uncertainty and risk perceptions.

Overall, the findings of this study indicate that sudden negative public opinion events significantly increase corporate financing costs, while public relations response speed exerts a negative effect in this process. At the theoretical level, the results suggest that public opinion shocks not only affect investor sentiment but are also translated into changes in financing costs through risk-pricing mechanisms in debt markets. At the same time, public relations response speed is not merely a straightforward risk-mitigation tool; its impact depends on the degree of information uncertainty and the process of responsibility attribution. At the practical level, the findings suggest that firms should avoid mechanically pursuing "immediate responses" when confronting sudden public opinion events, and instead balance response timing with information completeness and potential risks. For creditors and regulators, it is also necessary to interpret firms' public relations actions more cautiously, rather than treating response speed alone as a direct signal of corporate governance quality.

5. Conclusion

This study investigates the impact of negative public opinion events and the speed of corporate public relations responses on financing costs, using firm-year panel data from the automotive and related industries (2015–2024) within a fixed-effects framework. Our analysis yields two primary findings. First, sudden negative public opinion events are significantly associated with an increase in corporate financing costs. Second, and more counter-intuitively, a slower public relations response to these events is correlated with lower financing costs after controlling for time-invariant firm characteristics.

The finding confirms that negative public opinion translates into tangible financial consequences. Creditors appear to interpret these events as a signal of heightened firm risk, demanding a higher risk premium, which manifests as increased financing costs. This aligns with existing literature demonstrating that debt markets price in information from media coverage and that a deteriorating information environment elevates the cost of debt [3].

The study's central and more novel finding challenges the conventional wisdom that faster crisis responses are always optimal. Our fixed-effects model reveals that slower responses are associated with more favorable financing terms. We posit that this phenomenon is driven by the dynamics of information uncertainty in the early stages of a crisis. When facts are unverified and responsibility is unclear, an overly rapid response may be perceived as ill-prepared or defensive, amplifying market uncertainty and negative speculation. In contrast, a more deliberate, delayed response allows a firm to gather facts and formulate a more coherent and consistent message, thereby reducing informational noise and stabilizing stakeholder expectations. This interpretation finds support in recent crisis communication research, which shows that response speed does not have a monotonic positive effect on stakeholder evaluations and that strategic silence can mitigate the spread of online "firestorms" under certain conditions [27].

This research offers several important contributions. Theoretically, it extends the literature by establishing an empirical link between public relations strategy and debt market pricing, moving beyond the typical focus on equity markets or corporate reputation. It demonstrates that the timing of communication is a nuanced factor in how creditors assess risk, challenging the simplistic "faster is better" assumption and deepening our understanding of the economic consequences of crisis management. Practically, our findings caution firms against a reflexive, immediate response to negative events. Instead, managers should prioritize a balance between timeliness and the need for informational accuracy and strategic consistency. For investors and creditors, this study suggests that PR response speed is a context-dependent signal that should not be mechanically interpreted as a proxy for governance quality or transparency.

This study is not without limitations, which in turn suggest avenues for future inquiry. First, our focus on the automotive industry limits the generalizability of our findings; future research should test these relationships in other sectors with different stakeholder dynamics and information environments. Second, our measure of response speed, based on public timelines, does not capture the qualitative dimensions of the communication. Incorporating textual analysis to examine the tone, content, and responsibility framing of a response would provide a more granular understanding. Finally, while fixed-effects models enhance causal inference, future studies could employ quasi-experimental designs or analyze exogenous shocks to further isolate the causal impact of specific public relations strategies on financing costs. Such extensions would build upon our work to create a more comprehensive model of how corporate communication shapes capital market outcomes.

References

- [1] Gao, H., Wang, J., Wang, Y., Wu, C., & Dpng, X. (2020). Media Coverage and the Cost of Debt. *Journal of Financial and Quantitative Analysis*, 55(2). <https://doi.org/10.1017/S0022109019000024>
- [2] Kothari, S. P., Li, X., & Short, J. E. (2009). The Effect of Disclosures by Management, Analysts, and Business Press on Cost of Capital, Return Volatility, and Analyst Forecasts: A Study Using Content Analysis. *The Accounting Review*. <https://doi.org/10.2308/accr-2009-84.5.1639>
- [3] Wang, Y., Xiao, J., Wang, L., & Wang, D. (2025). News sentiment and the cost of debt. *Pacific-Basin Finance Journal*, 91. <https://doi.org/10.1016/j.pacfin.2025.102721>
- [4] Fang, L. H., & Peress, J. (2007). Media Coverage and the Cross-Section of Stock Returns. *The Journal of Finance*, 64. <https://doi.org/10.1111/j.1540-6261.2009.01493.x>
- [5] LOUGHRAN, T., & MCDONALD, B. (2011). When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks. *The Journal of Finance*. <https://doi.org/10.1111/j.1540-6261.2010.01625.x>
- [6] Solomon, D. H. (2010). Selective Publicity and Stock Prices. *Journal of Finance*. <https://doi.org/10.2307/41419706>
- [7] TETLOCK, P. C. (2007). Giving Content to Investor Sentiment: The Role of Media in the Stock Market. *The Journal of Finance*. <https://doi.org/10.1111/j.1540-6261.2007.01232.x>
- [8] Guardian, T. (2019). Boeing suspends production of 737 Max model involved in fatal crashes. *The Guardian*. <https://www.theguardian.com/business/2019/dec/16/boeing-737-max-production-faa>
- [9] Reuters. (2016). Factbox: Timeline of VW auto emissions scandal. <https://jp.reuters.com/article/business/factbox-timeline-of-vw-auto-emissions-scandal-idUSKCN0W518W/>
- [10] Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31. [https://doi.org/10.1016/S0165-4101\(01\)00018-0](https://doi.org/10.1016/S0165-4101(01)00018-0)
- [11] Hutton, A. P., Miller, G. S., & Skinner, D. J. (2000). The Role of Supplementary Statements with Management Earnings Forecasts. *Journal of Accounting Research*. <https://doi.org/10.1046/j.1475-679X.2003.00126.x>
- [12] Verrecchia, R. E. (2001). Essays on disclosure. *Journal of Accounting and Economics*, 32(1-3), 97-180. [https://doi.org/10.1016/S0165-4101\(01\)00025-8](https://doi.org/10.1016/S0165-4101(01)00025-8)
- [13] Bae, K.-H., Ghoul, S. E., Guedhami, O., Kwok, C. C. Y., & Zheng, Y. C. (2017). Does Corporate Social Responsibility Reduce the Costs of High Leverage? Evidence from Capital Structure and Product Market Interactions. *Journal of Banking and Finance*. <https://dx.doi.org/10.2139/ssrn.2959444>
- [14] Karpoff, J. M., Lee, D. S., & Martin, G. S. (2005). The Cost to Firms of Cooking the Books. *Journal of Financial and Quantitative Analysis*. <https://doi.org/10.1017/S0022109000004221>

- [15] Roberts, P. W., & Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. *Strategic Management Journal*. <https://doi.org/10.1002/smj.274>
- [16] Coombs, W. T. (2007). Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory. *Corporate Reputation Review*. <https://doi.org/10.1057/palgrave.crr.1550049>
- [17] GURUN, U. G., & BUTLER, A. W. (2012). Don't Believe the Hype: Local Media Slant, Local Advertising, and Firm Value. *American Finance Association*. <https://doi.org/j.1540-6261.2012.01725.x>
- [18] Graham, J. R., Li, S., & Qiu, J. (2008). Corporate misreporting and bank loan contracting. *Journal of Financial Economics*, 89(1), 44–61. <https://doi.org/10.1016/j.jfineco.2007.08.005>
- [19] Lafond, R., Olsson, P. M., & Schipper, K. (2004). Cost of Equity and Earnings Attributes. <https://doi.org/10.2308/accr.2004.79.4.967>
- [20] Liu, B., McConnell, J. J., & Xu, W. (2014). The Power of the Pen Reconsidered: The Media, CEO Human Capital, and Corporate Governance. *Journal of Banking & Finance*. <https://doi.org/10.2139/ssrn.2404199>
- [21] Easley, D., & O'hara, M. (2005). Information and the Cost of Capital. *The Journal of Finance*. <https://doi.org/10.1111/j.1540-6261.2004.00672.x>
- [22] Lambert, R. A., Leuz, C., & Verrecchia, R. E. (2012). Information Asymmetry, Information Precision, and the Cost of Capital. *Review of Finance*, 16(1), 1-29. <https://doi.org/10.1093/rof/rfr014>
- [23] Zou, J., Gao, L., Yan, J., & Liu, Y. (2025). ESG report tone and bond spreads. *Energy Economics*, 152, 108955. <https://doi.org/10.1016/j.eneco.2025.108955>
- [24] Ashbaugh-Skaife, H., Collins, D. W., & LaFond, R. (2006). The effects of corporate governance on firms' credit ratings. *Journal of Accounting and Economics*, 42. <https://doi.org/10.1016/j.jacceco.2006.02.003>
- [25] Iveson, A., Hultman, M., Davvetas, V., & Oghazi, P. (2022). Less speed more haste: The effect of crisis response speed and information strategy on the consumer–brand relationship. *Psychology & Marketing*. <https://doi.org/10.1002/mar.21726>
- [26] Pang, A., Jin, Y., Seo, Y., Choi, S. I., Teo, H.-X., Le, P. D., & Reber, B. (2021). Breaking the Sound of Silence: Explication in the Use of Strategic Silence in Crisis Communication. *International Journal of Business Communication*, 59(2). <https://doi.org/10.1177/23294884211046357>
- [27] Jin, Y., Liu, B. F., & Austin, L. L. (2014). Examining the role of social media in effective crisis management: The effects of crisis origin, information form, and source on publics' crisis responses. *Communication Research*, 41(1), 74–94. <https://doi.org/10.1177/0093650211423918>
- [28] Zheng, S., Yang, G., & Chen, S. (2023). Stock market reaction to product-harm crisis response strategies. *PLOS ONE*, 18(11), e0290548. <https://doi.org/10.1371/journal.pone.0290548>
- [29] Barber, B. M., & Odean, T. (2008). All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors. *The Review of Financial Studies*, 21(2), 785-818. <https://doi.org/10.1093/rfs/hhm079>
- [30] Qu, J. G., Yi, J., Zhang, W. J., & Yang, C. Y. (2023). Silence is golden? Mitigating different types of online firestorms of Fortune 100 corporations on Twitter. *Public Relations Review*, 49(5). <https://doi.org/10.1016/j.pubrev.2023.102391>