

Information Disclosure Quality and Online News Media Coverage: Evidence from Chinese Listed Companies

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Abstract. Using 44,989 firm-year observations from Chinese A-share listed companies over the period 2009–2023, this paper examines how information disclosure quality affects online news media exposure from the perspectives of corporate disclosure and public opinion. We measure disclosure quality with the KV index proposed by Kim and Verrecchia, and capture media exposure through three metrics: headline mentions, body-text mentions, and the count of negative reports. Year, industry, and city fixed effects are included alongside a set of firm-level controls. The results show that firms with lower disclosure quality receive significantly greater headline and body-text coverage and attract more negative reports. These findings remain robust after using lagged explanatory variables and alternative measures of the dependent variable. Further analysis reveals that overall innovation quality significantly amplifies the media-exposure effect triggered by declining disclosure quality. Heterogeneity tests indicate that the effect is more pronounced among firms with rapid asset growth, those not audited by a Big Four firm, and those that are profitable. This study uncovers the social communication consequences of corporate disclosure and provides empirical evidence for risk-oriented disclosure regulation, corporate information-governance and reputation-management systems, and media-platform fact-checking and content governance.

Keywords: Information disclosure quality; KV index; Online news media exposure; Negative coverage; Media sentiment; Innovation quality.

1. Introduction

In modern capital markets, information disclosure quality serves as a fundamental institutional arrangement that shapes investor protection, pricing efficiency, and resource allocation. Adequate, timely, and verifiable disclosure reduces information asymmetry and lowers transaction friction and the cost of capital. Low-quality disclosure, by contrast, raises information-processing costs for outside investors and weakens their ability to assess a firm's true operating conditions and risk exposures [1-4]. Disclosure quality therefore matters not only for a firm's financing environment but also for the clarity and stability of the capital market's overall information environment.

At the same time, the corporate information landscape has shifted from the linear, traditional-media model to an instantaneous, platform-driven, multi-node model dominated by online platforms. Online news outlets help investors reduce search costs as information intermediaries as well as constrain management through continuous tracking, issue revelation, and public-opinion oversight[5-6]. Prior research has shown that media tone, coverage intensity, and news availability significantly influence investor sentiment and trading behavior, which in turn affect capital-market reactions[7-8].

Recent studies have begun to focus on the interplay among information transparency, media dissemination, and corporate behavior in the digital media environment. Wang and Wan[9] find that online news reporting can promote corporate technological innovation by improving information transparency. Zhu et al.[10] show that internal-control risk disclosure affects the link between media coverage and capital-market risk outcomes. Gao et al.[11] demonstrate that media coverage influences managerial learning and investment decisions through the channels of information asymmetry and corporate governance. Overall, the existing literature concentrates on how the media shapes corporate behavior and capital-market outcomes, while paying less attention to how a firm's existing disclosure quality affects its online news coverage. In particular, few studies distinguish among headline mentions, body-text mentions, and negative reports as separate forms of exposure.

This gap is likely to be especially important for innovative firms. Innovation activities are typically characterized by heavy upfront investment, long payoff horizons, and high uncertainty, making it difficult for outside investors to accurately assess their true value and thus creating greater information asymmetry[12]. Patent citations provide a useful proxy for the quality and knowledge impact of innovation output[13]. Recent work also shows that when information asymmetry rises, firms increase R&D-related disclosures to signal information proactively, and in turn attract further investor attention[14]. Accordingly, an innovative firm whose disclosure quality falls short is particularly likely to trigger sustained media tracking and opinion amplification because of the contrast between high attention and low transparency.

Building on these considerations, this paper uses Chinese A-share listed companies from 2009 to 2023 as the sample. We measure disclosure quality with the KV index and capture online news media exposure along three dimensions: headline mentions, body-text mentions, and the count of negative reports. We then test how disclosure quality affects the intensity of media attention and negative coverage, and further examine the moderating role of overall innovation quality. The main contributions of this paper are as follows. First, by incorporating online news media exposure into the research framework on the economic consequences of disclosure, we broaden the traditional set of outcome variables—which has centered on liquidity, cost of capital, and firm value. Second, we draw on the intersecting perspectives of information substitution, media governance, and attention competition to explain why lower disclosure quality is more likely to trigger media exposure. Third, we identify innovation quality as a key condition, providing new empirical evidence for understanding the disclosure-governance and reputation-risk challenges facing highly innovative firms.

2. Theoretical Analysis and Research Hypotheses

2.1. Information Disclosure Quality and Online News Media Exposure

Internal information held by management cannot be fully observed by outside investors, so firms inherently face information asymmetry. Prior studies have shown that higher-quality disclosure improves the information environment, reduces the cost of capital, and lowers market frictions, whereas lower-quality disclosure makes it harder for external parties to assess a firm's true value [1-4]. When a firm's voluntary disclosure fails to meet the market's information needs, investors, analysts, and the public rely more heavily on external information providers.

Commercial media play a dual role in this process. On one hand, the media acts as an information intermediary by collecting, screening, processing, and redistributing information, thereby lowering search costs for investors [5]. On the other hand, the media serves as an external monitor that exerts governance pressure on management through issue revelation, follow-up reporting, and public-opinion discipline [6]. In the online information environment, news platforms are characterized by high timeliness, low dissemination costs, and rapid syndication. Once a firm's disclosures appear vague, delayed, or inconsistent, it becomes a more likely target for sustained media tracking.

Moreover, in the competition for audience attention, the media tends to gravitate toward stories marked by greater uncertainty, controversy, and risk. Related research shows that news and attention significantly influence investor behavior and market trading [7-8]. Therefore, when a firm's disclosure quality declines, the media has both a stronger information-substitution motive and a stronger monitoring motive, leading to increased headline mentions and body-text coverage of that firm.

Accordingly, **this** paper proposes hypothesis H1:

H1: After controlling for other factors, lower information disclosure quality is associated with higher online news media exposure.

2.2. Information Disclosure Quality and Negative Coverage

The media does not report various types of information evenly. Prior research has shown that negative tone and pessimistic language tend to carry greater market-explanatory power and are more likely to influence investor sentiment, trading decisions, and price reactions[15]. In online news dissemination, compared with positive information, content involving risk, conflict, and doubt attracts attention more easily and is more likely to be shared further.

Disclosure quality itself also serves as an important external signal of a firm's governance capacity and compliance. When a firm's disclosures on key matters are insufficient, inconsistent, or hard to verify, external media are more inclined to interpret these shortcomings as potential risk signals and to frame their reports around themes such as "risk alerts," "governance deficiencies," or "problematic firms." Recent work also demonstrates a significant interaction between risk disclosure and media coverage, which in turn affects capital-market risk outcomes[10]. This suggests that, when information quality is poor, the media leans toward organizing and disseminating corporate information from a negative angle.

Consequently, firms with lower disclosure quality are not only more likely to attract greater media attention but are also more likely to face heavier negative-reporting pressure than their better-disclosing peers.

Based on this, hypothesis H2 is proposed:

H2: After controlling for other factors, lower information disclosure quality is associated with a higher count of negative news reports.

2.3. The Moderating Role of Overall Innovation Quality

The innovation activities are highly uncertain and specialized, with a long return cycle. Because the returns to innovation depend heavily on future market conversion and are difficult to capture fully in traditional financial statements, highly innovative firms typically face greater information asymmetry[12]. In measuring innovation quality, compared with simple patent counts, patent citations better reflect the knowledge value and technological influence of a firm's innovative output[13].

Firms with high innovation quality naturally enjoy greater capital-market attention and media newsworthiness. At the same time, the more attention an innovative firm receives, the more the market demands higher information transparency and better interpretability. Innovation activity is inherently caught in an information tension between high uncertainty and high attention. When information asymmetry increases, firms step up their R&D-related disclosures, and these disclosures in turn significantly boost investor attention^[14].

Accordingly, when a firm has high innovation quality but low disclosure quality, outside stakeholders are more likely to perceive a gap between high growth expectations and low transparency reality. Driven by both information-substitution and monitoring motives, the media is then more likely to intensify its news tracking and coverage of that firm. Innovation quality therefore amplifies the media-exposure effect of declining disclosure quality.

Based on the above analysis, the hypothesis H3 is proposed:

H3: Overall innovation quality positively moderates the relationship between information disclosure quality and online news media exposure.

3. Research Design

3.1. Sample Selection and Data Sources

The sample consists of A-share companies listed on the Shanghai and Shenzhen stock exchanges from 2009 to 2023. The starting year is set at 2009 to mitigate the abnormal impact of the 2008 global financial crisis. The sample is constructed as follows: (1) financial firms are excluded; (2) firms designated as ST/*ST or delisted during the sample period are removed; (3) observations with missing

key financial or governance data are dropped; and (4) all continuous variables are winsorized at the 1st and 99th percentiles to mitigate the influence of extreme values. The final sample comprises an unbalanced panel of 44,989 firm-year observations. Financial and governance data are drawn primarily from the CSMAR database. Online news media coverage data come from a financial news database, supplemented by data crawled from professional platforms. In processing the news data, we match reports by stock code and company abbreviation, and clean out duplicate reprints, name ambiguities, and irrelevant reports to improve the accuracy of the media-exposure measures.

3.2. Variable Definitions

Table 1 presents the definitions and symbols of all variables used in this study.

Table 1. Variable definitions and symbols.

Type	Variable	Symbol	Definition
Dependent	Headline mentions	lnTtlCnt_Tit	Natural log of (1 + count of news headlines mentioning the firm)
	Body-text mentions	lnTtlCnt_Bod	Natural log of (1 + count of news articles mentioning the firm in body text)
	Negative reports	lnNegCnt	Natural log of (1 + count of negative news reports about the firm)
Independent	Disclosure quality	KV	KV index, higher values indicate lower disclosure quality
Moderator	Innovation quality	lnCit	Natural log of (1 + annual patent citations received by the firm)
Controls	Firm size	size	Natural log of total assets
	Leverage	lev	Total liabilities / total assets
	Return on Equity	roe	Net income / average shareholders' equity
	Listing age	lnage	ln (current year – listing year + 1)
	State ownership	soe	1 if state-owned, 0 otherwise
	Cash-flow rights	ownership	Proportion of ownership held by the ultimate controller
	Top-10 shareholding	top10	Combined shareholding of the top 10 shareholders

3.3. Model Specification

To investigate the impact of information disclosure quality on online news media exposure, this paper constructs the following baseline regression model:

$$Media_{i,t} = \alpha + \beta KV_{i,t} + \gamma X_{i,t} + \mu_t + \lambda_j + \delta_c + \varepsilon_{i,t} \tag{1}$$

In the above equation, $Media_{i,t}$ denotes the online news media exposure of listed company i in year t , $KV_{i,t}$ represents the quality of corporate information disclosure, $X_{i,t}$ is a set of control variables, μ_t , λ_j , δ_c represent year fixed effects, industry fixed effects, and city fixed effects, respectively, and $\varepsilon_{i,t}$ is the random disturbance term.

To examine the significant role of corporate innovation capability in the impact of corporate information disclosure quality on online news media exposure, this paper constructs the following moderating effect model:

$$Media_{i,t} = \alpha + \beta_1 KV_{i,t} + \beta_2 lnCit_{i,t} + \beta_3 (KV_{i,t} \times lnCit_{i,t}) + \gamma X_{i,t} + \mu_t + \lambda_j + \delta_c + \varepsilon_{i,t} \tag{2}$$

4. Empirical Results and Analysis

4.1. Descriptive Statistics

Table 2 reports the descriptive statistics. Online news media exposure varies substantially across the sample. The mean (standard deviation) is 4.247 (1.089) for headline mentions (lnTtlCnt_Tit), 4.934 (0.989) for body-text mentions (lnTtlCnt_Bod), and 3.748 (1.053) for negative reports

(lnNegCnt). Back-transforming from the $\ln(1 + \text{count})$ specification, these means correspond to roughly 70 headline mentions, 138 body-text mentions, and 41 negative reports per firm-year. This pattern suggests that online news attention to firms is more commonly reflected in body-text mentions and diffuse coverage, while negative reports account for a non-trivial share of corporate information dissemination.

Regarding disclosure quality, the KV index has a mean of 0.496 and a standard deviation of 0.200, with a minimum of 0.028 and a maximum of 1.280, indicating considerable variation in information transparency across sample firms. Among firm-level characteristics, the mean of size is 22.17, lev averages 0.426, roe averages 0.053, and state-owned enterprises account for about 34.6% of the sample, reflecting substantial heterogeneity in scale, capital structure, and ownership among Chinese listed companies.

Table 2. Descriptive statistics for variables.

Variable	N	Mean	SD	Min	Max
lnNegCnt	44989	3.748	1.053	0.693	7.269
lnTtlCnt_Tit	44989	4.247	1.089	0	6.841
lnTtlCnt_Bod	44989	4.934	0.989	1.946	8.630
KV	44989	0.496	0.200	0.0280	1.280
size	44989	22.17	1.328	19.24	26.61
lev	44989	0.426	0.212	0.0260	0.938
roe	44989	0.0530	0.164	-1.272	0.451
lnage	44989	2.091	0.917	0	3.434
soe	44989	0.346	0.476	0	1
ownership	44989	0.351	0.168	0.0240	0.766
top10	44989	0.583	0.155	0.193	0.913

4.2. Baseline Regression Results

Table 3 presents the baseline regression results. After controlling for year, industry, and city fixed effects along with firm-level controls, the estimated coefficients on KV are 0.349, 0.409, and 0.381 for headline mentions, body-text mentions, and negative reports, respectively, all significant at the 1% level. These results indicate that firms with lower disclosure quality (i.e., higher KV values) receive more headline exposure, deeper body-text coverage, and more negative reports, thereby supporting Hypotheses H1 and H2. A one-standard-deviation increase in KV is associated with approximately 5 additional headline mentions, 11 additional body-text mentions, and 3 additional negative reports per year. The findings are consistent with the information-substitution and media-governance effects: when a firm's voluntary disclosure is insufficient, market participants turn to the media and other third-party channels for information, prompting greater reporting effort.

In the control variables, firm size is significantly positive in all three regression groups. Larger firms, which are more likely to attract investor attention and possess greater newsworthiness, tend to receive more media exposure. Leverage is also significantly positive, suggesting that highly leveraged firms are perceived as risk-sensitive targets and thus draw denser coverage. ROE is positively associated with headline and body-text mentions but negatively related to negative reports, implying that better-performing firms receive more overall attention yet face relatively lighter negative coverage. Listing age and state ownership are significantly negative, consistent with the notion that more mature and state-owned firms generate less media buzz, possibly because they exhibit smaller operating fluctuations, lower news novelty, and more institutionalized disclosure practices. Overall, the signs of the control-variable coefficients align well with established empirical patterns related to limited attention and risk narratives, reinforcing the interpretability of the baseline findings.

Table 3. Regression results.

VARIABLES	(1)	(2)	(3)
	lnTtlCnt Tit	lnTtlCnt Bod	lnNegCnt
KV	0.349*** (14.24)	0.409*** (20.78)	0.381*** (17.60)
size	0.255*** (51.17)	0.360*** (90.16)	0.300*** (68.18)
lev	0.208*** (7.34)	0.164*** (7.19)	0.256*** (10.23)
roe	0.288*** (9.58)	0.098*** (4.07)	-0.398*** (-15.00)
lnage	-0.142*** (-19.79)	-0.144*** (-25.02)	-0.115*** (-18.11)
soe	-0.231*** (-18.83)	-0.131*** (-13.28)	-0.162*** (-14.89)
ownership	-0.338*** (-9.33)	-0.356*** (-12.23)	-0.416*** (-12.98)
top10	-0.199*** (-4.62)	0.017 (0.49)	0.090** (2.36)
Constant	-1.069*** (-10.96)	-2.867*** (-36.64)	-2.789*** (-32.37)
Observations	44,989	44,989	44,989
Year FE	YES	YES	YES
Industry FE	YES	YES	YES
City FE	YES	YES	YES
Adj R-squared	0.295	0.451	0.412

t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1

4.3. Moderation Analysis: Overall Innovation Quality

Given data availability for the innovation-quality variable and the focus of the moderation analysis on overall exposure intensity, we test the moderating effect on headline mentions and body-text mentions. Table 4 reports the results. The coefficients on the interaction term LnCit×KV are 0.046 and 0.083 in the headline-mentions and body-text-mentions regressions, respectively, both significant at the 1% level. This indicates that when a firm’s innovation quality is higher, the marginal increase in media exposure associated with opaque disclosure is larger. In other words, highly innovative firms with poor disclosure quality are more likely to trigger heightened uncertainty perceptions and sustained media tracking. These results support Hypothesis H3.

The moderating effect can be explained by the information-uncertainty properties of innovation. Innovation investment typically involves heavy spending, long time horizons, and strong technical specialization, making it difficult for outside investors to evaluate its true worth accurately. As a result, information asymmetry tends to be more severe. When a firm’s innovation quality is high, its growth potential naturally attracts media and investor attention, but it also raises the market’s demands for information transparency and disclosure verifiability. A decline in disclosure quality at such a firm more readily arouses suspicion, and the media driven by both monitoring motives and traffic incentives tends to devote more reporting resources.

In addition, innovation-quality indicators such as patent citations are typically associated with a firm’s intangible-asset value, and the valuation of intangible assets depends more heavily on news disclosure and external interpretation. Therefore, disclosure shortcomings at a firm with high innovation quality are more likely to be read by the media as potential risk signals and then amplified. LnCit itself is significantly positive in both regressions, confirming that firms with higher innovation quality attract more media attention overall. The interaction term further reveals that innovation does not necessarily reduce reputation risk; instead, it can amplify information uncertainty when disclosure is inadequate.

Table 4. Moderation analysis results.

VARIABLES	(1)	(2)
	lnTtlCnt Tit	lnTtlCnt Bod
LnCit×KV	0.046*** (3.27)	0.083*** (7.23)
LnCit	0.039*** (4.48)	0.014** (2.01)
KV	0.199*** (4.09)	0.166*** (4.17)
size	0.223*** (33.63)	0.346*** (63.62)
lev	0.247*** (7.36)	0.180*** (6.56)
roe	0.196*** (5.74)	0.044 (1.56)
lnage	-0.205*** (-22.36)	-0.185*** (-24.63)
soe	-0.236*** (-16.46)	-0.139*** (-11.82)
ownership	-0.409*** (-9.57)	-0.422*** (-12.05)
top10	-0.160*** (-3.19)	0.122*** (2.97)
Constant	-0.274** (-2.10)	-2.496*** (-23.33)
Observations	31,398	31,398
Year FE	YES	YES
Industry FE	YES	YES
City FE	YES	YES
Adj R-squared	0.319	0.476

t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1

4.4. Robustness Tests

Table 5 presents the robustness checks. Columns 1 and 2 vary the fixed-effect structure by progressively adding industry, city, and year×city interaction fixed effects; Columns 3 and 4 substitute lagged dependent variables, and Columns 5 and 6 use lagged explanatory variables. KV remains significant at the 1% level in all cases, confirming the robustness of the results.

Table 5. Robustness test results.

VARIABLES	Firm FE	Year×City FE	Lagged lnTtlCnt_Tit (t-1)	Lagged lnTtlCnt_Tit (t-2)	Lagged KV (t-1)	Lagged KV (t-2)
	lnTtlCnt Tit	lnTtlCnt Tit	lnTtlCnt Tit 1	lnTtlCnt Tit 2	lnTtlCnt Tit	lnTtlCnt Tit
KV	0.130*** (6.09)	0.367*** (13.98)	0.371*** (14.22)	0.330*** (11.63)		
KV_1					0.349*** (13.52)	
KV_2						0.309*** (11.09)
size	0.158*** (18.51)	0.258*** (49.69)	0.230*** (43.10)	0.217*** (37.36)	0.251*** (48.08)	0.245*** (43.83)
lev	0.115*** (3.22)	0.216*** (7.23)	0.233*** (7.64)	0.246*** (7.42)	0.213*** (7.14)	0.224*** (6.95)
roe	0.199*** (7.44)	0.284*** (8.69)	0.305*** (8.99)	0.423*** (11.12)	0.266*** (8.57)	0.256*** (7.89)

lnage	-0.011 (-0.85)	-0.146*** (-19.43)	-0.144*** (-19.05)	-0.153*** (-18.28)	-0.209*** (-23.63)	-0.252*** (-23.30)
soe	-0.172*** (-7.20)	-0.234*** (-18.33)	-0.243*** (-18.51)	-0.247*** (-17.34)	-0.209*** (-16.13)	-0.195*** (-14.02)
ownership	-0.334*** (-6.25)	-0.323*** (-8.51)	-0.387*** (-10.03)	-0.354*** (-8.43)	-0.417*** (-10.72)	-0.441*** (-10.32)
top10	-0.113** (-2.05)	-0.228*** (-5.03)	0.028 (0.60)	0.055 (1.11)	-0.194*** (-4.29)	-0.184*** (-3.76)
Constant	0.877*** (4.90)	-1.127*** (-11.12)	-0.597*** (-5.72)	-0.276** (-2.44)	-0.784*** (-7.65)	-0.510*** (-4.64)
Observations	44,989	42,893	39,785	34,865	40,133	35,276
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES
City FE	YES	YES	YES	YES	YES	YES
Year×City FE	NO	YES	NO	NO	NO	NO
Adj R-squared	0.569	0.270	0.280	0.279	0.288	0.292

t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1

4.5. Heterogeneity Analysis

Table 6 reports the heterogeneity analysis results. Given that firm characteristics may influence the media's sensitivity to disclosure shortcomings, we conduct subsample tests along three dimensions: asset growth, audit quality, and profitability. As shown in Table 6, in the high-asset-growth subsample, the coefficient on KV is 0.118 and significant at the 1% level, whereas in the low-growth subsample it is only 0.057 and statistically insignificant, indicating that fast-growing firms with opaque disclosure are more likely to attract additional negative coverage. In the non-Big-Four subsample, the coefficient on KV is 0.118 and significant, while in the Big-Four subsample it is 0.108 and insignificant, suggesting that high-quality external auditing may partly serve an information-certification and reputation-endorsement role, thereby buffering the negative-coverage consequences of disclosure deficiencies. Among profitable firms, the coefficient on KV is 0.091 and significant, whereas among loss-making firms it is -0.081 and insignificant, indicating that profitable firms are more susceptible to increased negative reporting when their disclosure is inadequate.

These heterogeneity results illuminate the attention and risk mechanisms from different angles. Fast-growing firms typically carry higher valuation elasticity and attract greater investor attention; opaque disclosure amplifies outside doubts about their operational sustainability, and the media is more inclined to frame its coverage around risk and controversy. When external audit constraints are weak, audit quality cannot fully perform its information-certification function, and the media is more likely to step in as a substitute information intermediary and monitor, thereby magnifying negative coverage. For profitable firms, the market holds higher baseline expectations for operating stability and governance quality; any vagueness or delay in disclosure is more likely to be interpreted as a signal of latent negative information, triggering a sharper negative-reporting response.

Table 6. Heterogeneity analysis results.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	agrowth low	agrowth high	big four no	big four yes	loss no	loss yes
KV	0.057 (1.54)	0.118*** (4.23)	0.118*** (5.31)	0.108 (1.43)	0.091*** (4.10)	-0.081 (-0.89)
size	0.128*** (9.55)	0.180*** (13.85)	0.156*** (17.54)	0.320*** (5.70)	0.175*** (18.36)	0.122*** (4.32)
lev	-0.063 (-1.13)	0.176*** (3.23)	0.103*** (2.78)	0.029 (0.15)	0.043 (1.05)	-0.152 (-1.28)
roe	-0.007 (-0.18)	0.683*** (10.91)	0.194*** (7.08)	0.365** (2.57)	1.067*** (16.53)	-0.031 (-0.44)

lnage	-0.082*** (-2.72)	0.031* (1.82)	-0.001 (-0.06)	-0.094 (-1.58)	0.015 (1.06)	-0.159* (-1.69)
soe	-0.136*** (-3.94)	-0.133*** (-3.22)	-0.171*** (-6.95)	-0.362** (-2.48)	-0.126*** (-4.59)	-0.209*** (-3.03)
ownership	-0.389*** (-4.70)	-0.405*** (-5.08)	-0.338*** (-6.05)	-0.229 (-1.08)	-0.351*** (-6.11)	-0.197 (-1.00)
top10	-0.193** (-2.11)	-0.198** (-2.51)	-0.081 (-1.42)	-0.582** (-2.22)	-0.136** (-2.29)	-0.348* (-1.67)
Constant	1.764*** (6.15)	0.433 (1.57)	0.886*** (4.78)	-2.057 (-1.59)	0.435** (2.17)	2.236*** (3.51)
Observations	21,705	21,890	42,326	2,598	38,827	5,322
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES
City FE	YES	YES	YES	YES	YES	YES
Adj R-squared	0.552	0.607	0.549	0.771	0.590	0.551

t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1

5. Discussion

Taken together, the baseline regression, robustness tests, and extended analyses indicate that declining disclosure quality not only leads to greater online news media exposure but also significantly pushes up the intensity of negative coverage. This implies that the economic consequences of disclosure quality extend beyond liquidity, valuation, and financing-cost effects within the capital market, and they spill over into media-level attention competition and public-opinion pressure.

This finding complements recent studies that emphasize how media shapes corporate transparency, innovation, and governance. While the existing literature largely traces a unidirectional path from media to firms, our paper reveals the reverse channel: the lower a firm's disclosure quality, the more likely it is to become a target of media information substitution and monitoring, and thus to receive more headline exposure, body-text coverage, and negative reporting. In short, the media not only shapes how the market perceives a firm; the firm's own information-supply quality also shapes the media's reporting intensity and sentiment at the front end.

From a mechanistic standpoint, low disclosure quality creates an information vacuum and heightens the market's perception of uncertainty, requiring the media to assume larger roles in information production and risk identification. From a communication standpoint, negative information and risk narratives attract audience attention more easily and spread more widely. Disclosure shortcomings therefore do not remain confined to corporate filings, they are amplified through online news dissemination, evolving into more visible reputational risk.

Meanwhile, the moderating effect of innovation quality demonstrates that highly innovative firms do not inherently enjoy lower reputation risk. On the contrary, because such firms already operate in an environment marked by both high attention and high uncertainty, a decline in their disclosure quality is more likely to trigger sustained media tracking and amplification of related controversies. This means that innovation-driven enterprises must strengthen their information governance capabilities while increasing R&D investments, to avoid attracting more negative exposure due to high innovation coupled with low transparency.

6. Conclusions

6.1. Main Findings

Using 44,989 firm-year observations from Chinese A-share listed companies over 2009–2023, this paper constructs an empirical framework linking information disclosure quality to online news media exposure. The main findings are as follows.

First, firms with lower disclosure quality receive significantly greater online news media exposure, manifested in higher volumes of headline-mention and body-text-mention. This suggests that when a firm's voluntary information supply is insufficient, the media to some extent fills the gap by performing information-substitution and information-production functions.

Second, firms with lower disclosure quality receive significantly more negative reports. This indicates that when covering firms with opaque disclosure, the media tends to adopt reporting frames centered on risk, doubt, and negativity. The resulting negative public-opinion pressure constitutes an important external cost of disclosure deficiencies.

Third, overall innovation quality exerts a significant positive moderating effect. The higher a firm's innovation quality, the larger the marginal increase in media exposure triggered by declining disclosure quality. This implies that, in an environment of simultaneously high attention and high uncertainty, highly innovative firms need high-quality disclosure all the more to stabilize external expectations.

Fourth, heterogeneity analysis shows that the effect of disclosure quality on negative coverage is more pronounced among firms with rapid asset growth, those not audited by a Big Four firm, and profitable firms. This indicates that the media applies differentiated recognition and amplification mechanisms to disclosure shortcomings depending on firm type.

6.2. Theoretical Contributions and Practical Implications

This paper makes three theoretical contributions. First, it broadens the outcome variables in disclosure-consequence research beyond cost of capital, liquidity, and information asymmetry to include online news media exposure and negative coverage, revealing the media dissemination externalities of disclosure quality. Second, it identifies the dual mechanisms of information substitution and media governance through which disclosure deficiencies trigger heightened media attention. Third, by introducing innovation quality as a moderator, it shows that higher innovation quality amplifies the media-exposure effect of disclosure opacity, enriching the understanding of innovation uncertainty, R&D disclosure, and external attention.

Practically, the findings indicate that the costs of poor disclosure extend beyond regulatory penalties and higher capital costs to include intensified media exposure and negative public sentiment. Accordingly, regulators could incorporate online news sentiment into risk-oriented oversight, listed companies should integrate disclosure governance with reputation management, and media platforms should strengthen fact-checking mechanisms to curb emotionalized reporting that may cause unnecessary market disruptions.

6.3. Limitations and Future Research

Although we employ multi-dimensional fixed effects, lagged explanatory variables, and alternative variable definitions to improve identification credibility, several limitations remain. The KV index captures the information environment through the relationship between trading volume and price changes, and it may not fully cover dimensions of disclosure quality such as textual readability, timeliness, and verifiability. Negative-news identification is likewise subject to sentiment-classification error. Future research could cross-validate disclosure quality using exchange disclosure ratings, annual-report readability, tone, and verifiability measures, and could employ more refined sentiment dictionaries or machine-learning models to improve the accuracy of news-sentiment identification.

In addition, our media-exposure measure is based on an online-news database and does not yet incorporate user-interaction data from social-media platforms such as online forums and short-video apps. Given that opinion dissemination increasingly relies on social networks and algorithmic recommendation, future work could extend the analysis within a joint news–social-media framework, tracing the information pathway from corporate disclosure to news coverage to social-media interaction, and testing the dynamic effects of opinion feedback on corporate financing, innovation, and governance decisions.

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