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Corporate Social Responsibility or Strategic Opportunism? Evidence From High and New Technology Firms

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ABSTRACT

Corporate Social Responsibility (CSR) presents a dual nature in practice. Beyond its explicit ethical imperatives, it can be strategically instrumentalized to manage external pressures, shape public impression, and even divert attention from corporate misconduct. Acknowledging this complexity, this study investigates the conditions under which CSR is leveraged as a strategic tool and how this distinction relates to earnings management (EM). Drawing on agency theory and instrumental stakeholder theory, this study examines 2973 Chinese High and New Technology Firms (HNTFs) from 2017 to 2021 and clarifies the boundary conditions under which a positive CSR–EM association is more plausible, namely, when CSR is predominantly symbolic/instrumental rather than substantive/genuine. This study also tests whether media attention moderates this linkage. It finds a positive association between CSR and EM concentrated in the social and governance pillars, consistent with the use of CSR as reputational insurance and impression management; the environmental pillar shows no meaningful association. Greater media attention strengthens the CSR–EM association, suggesting firms increase visible CSR to meet external expectations while simultaneously managing reported performance. Importantly, this evidence does not dispute substantive/genuine CSR; rather, it highlights conditions under which CSR may be instrumentalized, underscoring the need to differentiate substantive from symbolic engagement.

1 | Introduction

In the context of increasing public scrutiny and growing societal expectations, the ethical responsibilities of corporations have become central to how firms define their long-term legitimacy. Among the many mechanisms adopted to promote ethical conduct and stakeholder trust, Corporate Social Responsibility (CSR) has emerged as one of the most prominent. Initially conceptualized in the mid-20th century (Carroll 1999), CSR has evolved into a crucial dimension of corporate governance, particularly in light of globalization's expanding influence on corporate behavior (Carroll 2015; Orazalin et al. 2024). CSR is fundamentally concerned with firms' policies, reputational standing, and their enduring role in society. It is widely recognized as a cornerstone of business ethics and societal accountability, reflecting how organizations internalize responsibility for their social and environmental impact (Freeman 1984; Jamali 2008; Brahem et al. 2022). Companies increasingly align social and environmental goals with business objectives to build lasting relationships with customers, suppliers, and employees.

The ethical function of CSR has a foundational role in shaping corporate integrity. By improving transparency through the timely disclosure of financial, social, and environmental performance, CSR helps firms establish trust and promote cooperation with stakeholders (Ehsan et al. 2022). It also serves to reduce information asymmetry, thereby reinforcing accountability and enhancing the quality of firm–stakeholder relationships (Jizi et al. 2014), if the CSR is substantive/genuine. From this vantage point, a positive association between CSR and earnings management (EM) is theoretically incongruent. However, this perspective is based on the view that CSR is always substantive and genuine (Alhouti et al. 2016). This study introduces a more nuanced theoretical perspective by recognizing that CSR can function not only as a substantive/genuine commitment but also as a symbolic/instrumental practice (Westphal 2023; Seele and Lock 2015; García Lara et al. 2025). The distinction between substantive/genuine and symbolic/instrumental CSR practices emerges through their different characteristics: substantive/genuine CSR exists within organizational systems and demonstrates external proof through tangible actions while lasting throughout time (Wickert et al. 2016; García Lara et al. 2025). A key conceptual difference lies in substantive/genuine CSR and symbolic/instrumental CSR in that the latter is often communication intensive and easily detached from core operations, often scaling back when external scrutiny decreases. When CSR is deployed symbolically as a tool for impression management (Hamza and Jarboui 2022), it can serve to obfuscate underlying corporate behaviors such as EM. Therefore, while a positive CSR-EM link is difficult to reconcile with substantive/genuine CSR, it becomes a plausible outcome when CSR is leveraged instrumentally. This study does not directly measure the intent behind CSR but theorizes and tests the conditions under which its instrumental use, and thus a positive association with EM, becomes more feasible and tempting for firms (e.g., under high visibility and short-term pressures). In parallel with the rise of CSR, Environmental, Social, and Governance (ESG) factors have become a broader, more data-driven framework for assessing firms' ethical and environmental performance (Nagy et al. 2022; Gaio et al. 2022). ESG frameworks extend beyond traditional CSR evaluations by institutionalizing sustainability assessments through quantifiable metrics (Berg et al. 2022). This structure not only measures corporate performance but also signals exposure to external pressures, which are manifested through capital market disincentives (e.g., higher financing costs for ESG violators) (Dhaliwal et al. 2011; Chava 2014) and regulatory compliance risks (e.g., elevated penalties for poor ESG performers) (Cheng et al. 2014), compelling enhanced ethical accountability in response to market and regulatory sanctions (Pedersen et al. 2021). In this high-stakes context, ESG performance can incentivize not only substantive/genuine reform but also symbolic maneuvering. Firms may engage in highly visible CSR activities as a form of reputational shielding, using ethical appearances to deflect attention from underlying EM practices (Ehsan et al. 2020) that undermine transparency (Martínez-Ferrero et al. 2016; Jung et al. 2018). Thus, rather than reflecting true intent, strong ESG visibility can make symbolic/instrumental CSR a strategic complement to EM (Borralho et al. 2022), especially where external pressures are high. EM refers to the intentional adjustment of financial statements to meet earnings targets or to influence investor perceptions, often without breaching formal accounting rules (García-Sánchez et al. 2020). It involves the deliberate distortion of financial statements through fabricated transactions, inflated revenues, or understated expenses, with the intent to deceive stakeholders (Healy and Wahlen 1999; Dechow et al. 2010). Such practices can erode the integrity of financial reporting and weaken corporate governance (Ehsan et al. 2022). These practices, including asset disposals or opportunistic acquisitions, are often framed as legitimate strategies but can conceal fraudulent intent.

Further, this study examines how CSR impacts EM and the moderating role of media attention. By reducing information asymmetry between firms and stakeholders, media attention fosters operational transparency that incentivizes ethical conduct and alters corporate decision-making patterns (Michelon et al. 2015). On the other hand, high media attention has also undermined a company's reputation (Wu et al. 2016) and led firms to use EM as a reaction to protect their public image, consistent with the instrumental stakeholder theory (Jones 1995). Firms increase CSR efforts when they perceive that they need to do so to meet external expectations, and there exists a trade-off between CSR, EM, and media attention. This study introduces media attention into the CSR-EM context, whereas existing literature tends to treat it as static and fails to recognize its impact as a moderating factor. The study adds new depth to existing studies by moderating the CSR-EM link with media attention. It provides fresh insight into how and why CSR strategies may be influenced by media attention.

This study situates its inquiry within the distinctive institutional environment of China's HNTFs, a setting characterized by substantial policy subsidies, elevated financing needs, and heightened external visibility. These firms operate under exceptional conditions where innovation-driven industrial policies, intense media attention, and strong stakeholder expectations, create a context ripe for the strategic alignment of CSR with managerial opportunism. This study employs data on 2973 HNTFs that are publicly traded in the A-share market over the period from 2017 to 2021. Rather than presuming that CSR engagements are inherently substantive (genuine) or symbolic (instrumental), this research investigates whether CSR may be instrumentally deployed under specific situational pressures. It examines the emergence of a particular behavioral pattern, the co-occurrence of high CSR visibility and EM, by exploiting the unique institutional configuration of HNTFs, where high demand for innovation, high media attention, and information asymmetries incentivize the use of CSR as a legitimizing tool.

Moreover, this study reveals a significant finding: under conditions of heightened external scrutiny, such as intense media attention, HNTFs exhibit a positive correlation between CSR and EM. This pattern suggests that in specific institutional environments characterized by high visibility and substantial performance pressures, firms may strategically employ CSR as an instrumental tool to obscure contemporaneous EM practices. The study avoids determining CSR engagement motivations and refrains from assuming CSR activities fall under either substantive/genuine or symbolic/instrumental categories. The research shows how HNTFs create a specific environment that leads organizations to increase their visible CSR activities and financial reporting flexibility at the same time. The observed pattern between CSR initiatives and financial reporting discretion indicates strategic organizational actions instead of proving CSR activities have ethical value.

This study provides several distinct contributions to the existing literature. First, this research moves beyond treating CSR as a monolithic construct by employing a three-dimensional ESG framework, which reveals heterogeneous relationships across ESG domains (Luo, Yan, and Yan 2023; Luo, Tian, et al. 2024; Zhang et al. 2023). Second, this work expands the CSR-EM model to include media attention, allowing for a holistic understanding of CSR ethics and the signs of CSR that affect the link between CSR and economic interests. Third, it introduces a behavioral perspective that focuses on observable corporate conduct patterns under specific boundary conditions, offering a more nuanced understanding of how CSR and EM may be strategically aligned in high-pressure institutional environments. These insights challenge simplified interpretations of CSR as either universally ethical or inherently symbolic, instead positioning CSR engagements as strategically adaptable practices whose relationship with financial reporting integrity depends critically on the institutional context and external monitoring environment. The research clarifies the distinctions and challenges of these practices, providing insights for regulators and investors alike. Practically, Chinese HNTFs should leverage CSR strategic complementarities to increase engagement, reduce opportunism, and enhance market reputation and transparency by using a strong CSR message.

The next sections of this study are structured as follows: Section 2 presents theories; the study methodology is described in Section 3. Section 4 highlights the correlation between CSR and EM in practice, with media attention serving as a moderator. Section 5 contains the discussion and implications, and Section 6 concludes.

2 | Literature Review and Development of Hypotheses

Traditionally, agency theory has been employed to explain the potential for interests to diverge between shareholders and managers, as executives may pursue self-interests over those of stakeholders (Jensen and Meckling 1976). This misalignment leads to agency problems, as managers take advantage of information asymmetry to act opportunistically (Abner and Ferrer 2019), such as EM. In this study, agency theory is applied to suggest that corporate management may divert attention through more self-serving behaviors (i.e., EM practices) and align managerial and shareholder interests or distort firm financial performance through CSR initiatives. CSR can represent a powerful tool for building relationships with stakeholders and creating competitive advantages.

The instrumental stakeholder theory focuses on how firms can achieve their strategic objectives and economic interests through engagement with stakeholders (Jones 1995; Patro et al. 2018; Valentinov and Hajdu 2021). Firms can secure resources, mitigate risks, enhance reputation, and ultimately, as EM, as managers take advantage of information asymmetry to act opportunistically (Abner and Ferrer 2019), maximize economic benefits by identifying, analyzing, and managing stakeholder relationships. Drawing on instrumental stakeholder theory, the study explores the moderating role of media attention as a strategic motivation for firms to publicize their CSR actions. Media coverage may compel firms to strive to balance their public image and financial performance, and EM may be employed to manage the pressure brought by media attacks. This research contributes to the existing literature on the ethical outcomes of CSR and its impacts in the context of CSR-EM associations. It investigates the firm's use of CSR to divert attention from its financial malfeasance and aims to mobilize stakeholders. This study finds that media attention moderates this relationship, ensuring media coverage of CSR reports the ethical behaviors of firms and, consequently, CSR can function as a veil for EM activities.

2.1 | CSR, ESG and an Integrated Framework

A firm uses CSR to demonstrate its commitment to balancing economic objectives with its legal duties, ethical standards, and social responsibilities (Carroll 1999). The commitment to CSR creates substantial effects on its corporate image, market position, and financial sustainability through how stakeholders view the organization (Chollet and Sandwidi 2018). Meanwhile, the development of ESG metrics establishes a measurable system to evaluate corporate sustainability alongside ethical conduct (Nagy et al. 2022; Gaio et al. 2022). The scores serve dual purposes by helping organizations monitor their CSR activities while providing outside investors with transparent information to build trust (Deng et al. 2024).

The literature conceptually distinguishes between two distinct modes of CSR engagement, rooted in differing organizational motives and implementation depths (García Lara et al. 2025). Substantive (or genuine) CSR refers to the authentic integration of social and environmental concerns into a firm's core operations, demonstrated through verifiable actions, long-term investments, and measurable impacts that are costly to imitate (Wickert et al. 2016; García Lara et al. 2025). Symbolic (or instrumental) CSR exists mainly as a communicative practice that separates stated policies from actual business activities. The approach focuses on making public statements and choosing specific information to share for corporate image improvement instead of creating real operational transformations (Seele and Lock 2015; Westphal 2023). This form prioritizes promotional visibility and is frequently deployed as a strategic tool for impression management, enabling the firm to project an image of social responsibility without implementing corresponding substantive/genuine internal changes. The potential for such decoupling (Velte 2025) is a critical theoretical mechanism that allows firms to leverage CSR symbolically, particularly under conditions of high external scrutiny.

This study, while acknowledging this conceptual duality, does not directly measure the two forms of CSR separately. The findings do not negate the existence or value of substantive/genuine CSR. This study demonstrates that a positive CSR–EM association emerges under specific boundary conditions—such as heightened reputational pressure, significant information asymmetry, and short-term incentive structures—which render the firm's CSR engagement more susceptible to symbolic or instrumental use. In such contexts, characterized by high visibility and media attention, CSR is more likely to be deployed as a strategic tool. Conversely, this positive CSR–EM relationship is expected to be decreased, or even reversed, in settings where CSR is externally assured, persistent over time, and aligned with verifiable operational investments.

Crucially, a high ESG score signifies strong performance on measurable outcomes but does not inherently certify the underlying genuineness of a firm's CSR motives. It is this very visibility and external validation that can incentivize the strategic, or symbolic, use of CSR. Consequently, this study utilizes ESG scores as a proxy for the visibility of a firm's CSR performance, not its intent. Furthermore, the distinct E, S, and G pillars provide a valuable framework for testing heterogeneity, allowing this study to examine whether the relationship between CSR visibility and corporate behaviors like EM varies across these different dimensions.

2.2 | EM and Ethical Issues for Financial Reporting

EM encompasses managerial interventions in the financial reporting process to alter financial statements, thereby shaping stakeholders' perceptions of firm performance (Healy and Wahlen 1999; Belgasem-Hussain and Hussaien 2023). From an ethical baseline, such interventions—even when operating within the flexibility of accounting standards—can bias stakeholder inference by obfuscating the firm's underlying economic reality (Dechow et al. 1995; Elias 2002). These actions not only breach accounting principles and entail a risk of legal consequences, but they also break the trust of stakeholders, where the fundamental ethical corporate principles of transparency, honesty, and fairness are undermined (Fowler 2023).

This study examines EM actions under environments of high external pressure and significant visibility, where managerial incentives to influence stakeholder perceptions are most acute. The ethical breach inherent in EM lies precisely in its capacity to bias stakeholder inference by distorting the informational foundation upon which assessments of firm performance and managerial integrity are made. It is within these high-stakes contexts that this study theorizes EM is unlikely to manifest in isolation. Instead, this study hypothesizes a strategic co-movement between EM and other symbolic activities, such as symbolic/instrumental CSR initiatives. Firms, in a multifaceted effort to construct and maintain a favorable public image, may engage in these practices concurrently, using the symbolic/instrumental CSR to counterbalance or obscure the informational distortions created by EM, thereby presenting a unified but potentially misleading front to the external world.

2.3 | Relationship Between CSR and EM

Previous research studies about CSR and EM show conflicting results and maintain theoretical disagreements between these concepts. These contradictions can be reconciled by distinguishing between two fundamental forms of CSR, each underpinned by a distinct behavioral logic.

The observed negative relationship between CSR and EM (Hong and Andersen 2011; Kim et al. 2012; Gaio et al. 2022; Velte 2024) supports the moral track hypothesis of substantive (or genuine) CSR (Velte 2024). The moral track hypothesis supports genuine CSR because it shows how organizations merge social and environmental goals into their fundamental business operations and management systems (Brahem et al. 2022). A firm with ethical values creates open communication with stakeholders (Sial et al. 2018) while building sustainable stakeholder relationships through its corporate culture which naturally rejects short-term opportunistic actions like EM (Hong and Andersen 2011; Kim et al. 2012).

Conversely, a positive CSR-EM association (Setiawan et al. 2019; Buertey et al. 2020; Zhang et al. 2021; Jian et al. 2023; Deng et al. 2024; Khanchel and Lassoued 2024; Alsaadi 2025; Alharasis 2025) is explained by the lens of symbolic (or instrumental) CSR, which is consistent with the moral licensing hypothesis (Velte 2024) of symbolic/instrumental CSR (Seele and Lock 2015; García Lara et al. 2025). Here, CSR engagements are decoupled from actual practices and used as a strategic tool for impression management. These kinds of CSR actions are performed for certain targets, such as enhancing legitimacy and reputation, not completely out of substantive/genuine intentions (Seele and Lock 2015; Westphal 2023). This strategic behavior manifests most prominently during periods of financial distress or external pressure (Gonçalves et al. 2021), where managers exploit CSR's inherent subjectivity and low verifiability (Faisal et al. 2018) to construct impression management through symbolic decoupling (the differences between symbolic commitment and substantive action) (Mahoney et al. 2013; Alharasis 2025; Velte 2025). This symbolic front generates a moral covering effect, systematically lowering the perceived risk of detection and allowing managers to engage in opportunistic EM to secure private benefits—such as enhanced compensation or job security—at the expense of long-term value creation (Tan 2014; Santos-Jaén et al. 2021). This positive CSR-EM association arises precisely because CSR engagements, under conditions of high external pressure and information asymmetry, function as a strategic resource rather than an ethical commitment. The very attributes that make CSR valuable for legitimacy—its narrative flexibility, low verifiability, and high visibility—also render it an effective mechanism for diverting stakeholder attention from contemporaneous EM (Callery 2024), thereby creating a strategic alignment between symbolic social performance and discretionary financial reporting.

Mahrani and Soewarno (2018) argue that CSR can increase operating costs, leading to a decline in profits, which may ultimately result in EM. Similarly, some firms use CSR to enhance EM practices, reduce profits, and avoid taxes (Javed and Ahmad 2020). CEOs may employ CSR as a cover to protect their positions, diverting stakeholders' attention away from unethical actions (Pasko et al. 2021), such as EM (Zhang et al. 2021). When examining the CSR-EM relationship in China, this research assumes a positive CSR-EM association. HNTFs often face greater financing requirements than ordinary A-share listed firms. These firms are typically in their growth phase, requiring significant funding for R&D investments and rapid expansion. To attract investors and secure favorable financing, they attempt to maintain a good image, with social responsibility as a key strategy to showcase profitability and growth potential. However, management may use CSR to mask EM practices, presenting a more favorable financial performance (Prior et al. 2008). Agency theory provides further insight into this behavior, suggesting that management may prioritize personal goals such as higher compensation and job security, leading EM to enhance financial statements (Abner and Ferrer 2019). In this case, CSR activities can serve as a smokescreen, diverting attention from actual financial performance by promoting socially responsible practices, thus concealing EM (Abner and Ferrer 2019).

The inherent technological innovation and market volatility characterizing HNTFs subject them to elevated performance expectations and heightened external scrutiny (Sarfraz et al. 2022). Under such conditions of reputational pressure and significant media attention, managers face intensified incentives to engage in EM to signal financial stability and sustained growth. It is within this specific contextual boundary that CSR is prone to instrumental use. Rather than reflecting deep ethical integration, CSR engagements can be strategically deployed (Seele and Lock 2015; Westphal 2023; Alharasis 2025; García Lara et al. 2025) as a legitimizing façade to divert stakeholder attention from underlying accounting manipulations. This symbolic/instrumental CSR–EM nexus is institutionally enabled by the opacity of CSR metrics (Faisal et al. 2018), which facilitates a decoupling of communicative commitments from operational practices, thereby creating reputational shielding (Mahoney et al. 2013) and systematically lowering EM detection risk (Zhang et al. 2021). Consequently, this study predicts a positive CSR–EM correlation specifically in HNTFs, where such symbolic maneuvering is both feasible and incentivized.

As the ESG framework provides a more objective indicator of CSR engagement (Deng et al. 2024), this study utilizes the three ESG dimensions to explore deeper into the CSR-EM relationship. The ESG dimensions collectively support EM through distinct institutional mechanisms: environmental disclosure selectivity (e.g., strategic carbon reporting omissions) exploits information asymmetries (Marquis et al. 2016) to reduce stakeholder oversight intensity, thereby expanding EM operational space; social initiative instrumentality (e.g., targeted community patronage) exchanges localized legitimacy for stakeholder tolerance (Hawn and Ioannou 2016; Di Vaio et al. 2022), lowering EM detection risks; while governance metric fixation (e.g., quarterly EPS-linked bonuses) induces threshold-driven accrual manipulation by prioritizing short-term agent incentives (Jensen and Meckling 1976) over reporting integrity (Di Vaio et al. 2024). This tripartite mechanism arises from systemic exploitation of stakeholder informational gaps, social reciprocity expectations, and temporal agency conflicts. Therefore, the positive CSR-EM association can be explained by examining the ethical and stakeholder implications within firms. Managers may strategically use CSR (Seele and Lock 2015; Westphal 2023; García Lara et al. 2025) to enhance their personal image and career stability, aligning more with their own interests than those of shareholders. This symbolic/instrumental use of CSR can distract stakeholders from financial manipulation practices, including EM.

The three dimensions of ESG are considered the same as CSR and have a positive correlation with EM. This leads to the Hypotheses H1, H2a, H2b and H2c:

H1. *CSR is positively associated with EM.*

H2a. *E is positively associated with EM.*

H2b. *S is positively associated with EM.*

H2c. *G is positively associated with EM.*

2.4 | The Impact of Media Attention on CSR and EM Activities

The role of the media is vital in disciplining the behavior of a company and influencing public perception, representing an important external factor that compels companies to behave ethically and comply with rules (Miller 2006; Guo et al. 2018). Media attention can play a dual role in shaping corporate conduct, since firms may use media as a channel to convey their financial performance and CSR commitment (Lewin and Warren 2025). On one hand, media scrutinizes corporate performance (Zhang et al. 2024), which may encourage firms to enhance CSR engagement to meet public expectations and maintain legitimacy (Prior et al. 2008; Tata and Prasad 2015), and also, enhance corporate accountability (Zhang et al. 2024; Di Vaio et al. 2025). On the other hand, heightened scrutiny can increase EM by elevating reputational pressure and regulatory risks (Wu et al. 2016; Liu and Xu 2025). Under greater information asymmetry, media attention will increase the extent to which firms perform greenwashing (Ren et al. 2024). By directing stakeholder attention toward CSR achievements, media coverage creates a shield that inadvertently distracts from EM practices. This diversionary effect enables firms to engage in EM while maintaining organizational legitimacy. Concurrently, the reputational pressures amplified by media exposure intensify managerial incentives to meet financial expectations through EM, particularly when CSR commitments elevate operational costs (Kang et al. 2020).

Previous studies suggest that media attention may exert a moderating or mediating effect between CSR and other variables, such as firm value (Li et al. 2017; Chen et al. 2024; Zhang et al. 2024). Media attention can compensate for the reduction of scrutiny by financial analysts and institutional shareholders (Chen et al. 2024). According to Chen et al. (2024), the media can lower the level of unethical actions such as EM by decreasing the information asymmetry among individuals (Guldiken et al. 2017; Li et al. 2017). Such media news on corporate ethical activities, such as charitable donations, can increase a sense of social responsibility among their management (Jung et al. 2018), motivating management to care more about their public image than they would during a culture of corruption, thus potentially decreasing unethical behavior. On the contrary, as a response to the pressures brought by media attention, firms may utilize their CSR activities to signal a socially responsible image (Borghesi et al. 2014; Wang and Marquis 2025) that helps them build trust and mitigate the risks associated with media attention, making EM easier (Prior et al. 2008). Firms are often pressed to improve their CSR reputation due to media attention (Tata and Prasad 2015). Sometimes, companies strategically participate in CSR activities to divert attention externally, softening the media impact, but this practice may also cover EM behaviors (Abner and Ferrer 2019). This leads to firms engaging more in EM for better financial performance and to mitigate the risks of media coverage (Wu et al. 2016).

According to instrumental stakeholder theory, strategic actions toward outside stakeholders, including the media, are taken at the intersection of firm goals with economic performance (Jones et al. 2018). Given the media attention and the risks of reputation and social pressure (Wu et al. 2016), firms must allocate resources to address the ramifications of negative news. Also, when media coverage highlights the excellent job of the firm, it will set higher expectations among stakeholders, which leads companies toward more CSR actions instrumentally to meet higher standards and promote the image of being socially responsible. This strategy encourages firms to hide their EM practices, as stakeholders are likely to emphasize CSR activities and pay less attention to the financial statements (Tata and Prasad 2015).

HNTFs, given their growth-phase financing needs and innovation-centric visibility, operate under intensified reputational pressure and media attention (Han and Gu 2021). These conditions create a context in which CSR is prone to instrumental use—not as an expression of ethical commitment, but as a strategic resource for impression management. When faced with high external expectations and financing demands, managers in HNTFs are incentivized to engage in EM to project financial stability and performance consistency (Wu et al. 2016). In such settings, media attention functions as a double-edged catalyst: it amplifies the visibility of CSR activities while simultaneously diverting stakeholder attention from underlying financial conduct. This creates a strategic opening for firms to deploy CSR symbolically (Seele and Lock 2015; Westphal 2023; García Lara et al. 2025)—building a façade of social responsibility that helps mask contemporaneous EM. Instrumental stakeholder theory supports this view, suggesting that firms may adopt CSR instrumentally to shape perceptions and secure support, particularly when visibility is high and monitoring capacity is strained (Jones et al. 2018). Thus, in HNTFs—where media exposure is elevated and reputational risks are acute—CSR can be tactically decoupled from operations and leveraged as a reputational shield, thereby strengthening the positive CSR–EM link. The ESG framework, with its multi-dimensional structure (Di Vaio et al. 2022), offers a useful lens to further examine how such instrumental behavior varies across ESG domains. Hypotheses H3, H4, H5 and H6 are proposed:

H3. *Media attention serves as a significant moderating factor in the CSR-EM association.*

H4. *Media attention serves as a significant moderating factor in the E-EM association.*

H5. *Media attention serves as a significant moderating factor in the S-EM association.*

H6. *Media attention serves as a significant moderating factor in the G-EM association.*

Figure 1 presents the conceptual framework of this study.

3 | Methodology

3.1 | Data Source and Sample Selection

Considering that most of the special policies for HNTFs, such as additional deductions and government subsidies, began to be implemented in January 2017, this study focuses on HNTFs

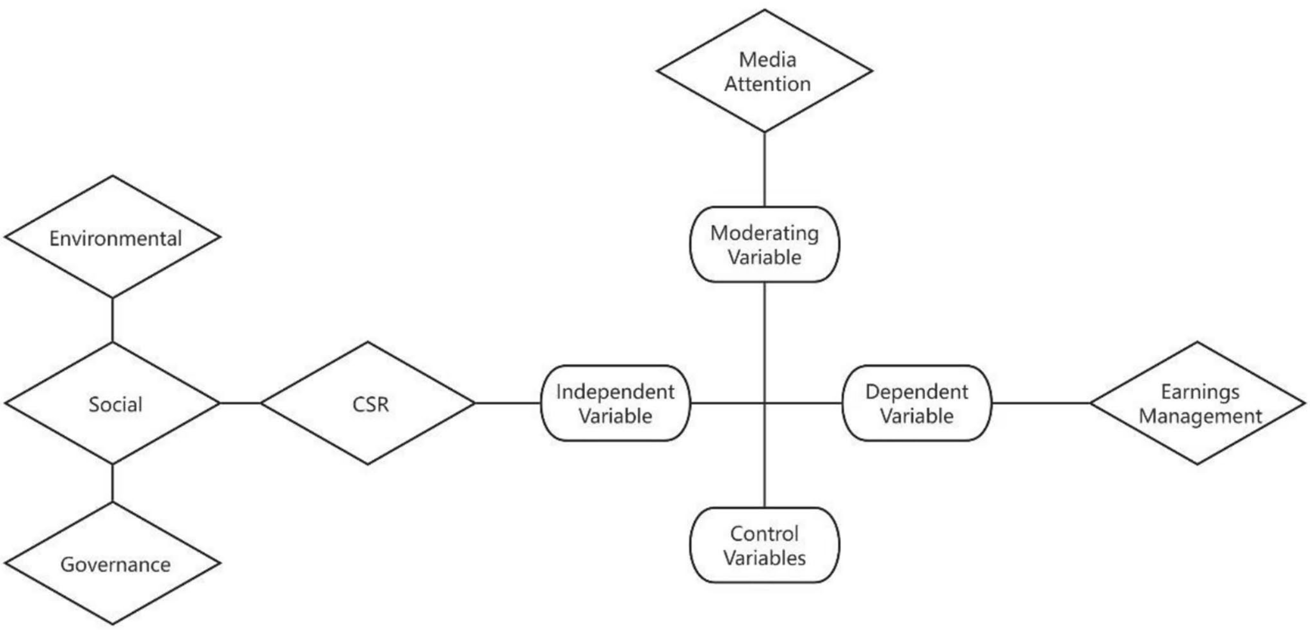

FIGURE 1 | Conceptual framework. *Source:* Authors' own creation.

publicly traded on the A-share market between 2017 and 2021. The selected time frame was deliberately chosen to capture the influence of these policies on the financial outcomes and CSR practices of HNTFs in the years following their implementation. However, the Ministry of Science and Technology and the Ministry of Finance jointly promulgated the "Action Plan for Enhancing Enterprise Technological Innovation Capacity (2022–2023)," introducing a series of inclusive policies aimed at encouraging corporate innovation. These include tax incentives for HNTFs and initiatives to support HNTFs in making donations to promote basic frontier research and development projects. The implementation of these policies and their potential to influence corporate behavior has yet to become fully apparent, and the relevant data are currently being assembled and organized. At the same time, these new regulations may have a limited influence on firms' CSR and EM actions, which will require some time to observe their lasting impact. Therefore, to ensure the accuracy and reliability of this study's findings, information from 2022 and 2023 has been excluded from this investigation.

The empirical context based on HNTFs provides an optimal environment to study CSR usage between symbolic and instrumental purposes. The combination of substantial policy benefits (e.g., R&D subsidies, tax deductions), and investor and regulatory oversight of HNTFs leads to high levels of organizational visibility. The existing conditions at HNTFs force organizations to preserve their reputation for competence and legitimacy. The combination of strong reputational stress with innovation activities' unclear nature drives companies to use symbolic/instrumental CSR practices for instrumental purposes (Seele and Lock 2015; Westphal 2023; García Lara et al. 2025). HNTFs use social responsibility displays to enhance their public standing which they can use strategically to hide their EM practices that fulfill performance requirements. This study sample comprises 2973 HNTFs. Financial data are obtained from the China Stock Market and CSMAR (Duan et al. 2022). CSR is evaluated based on ESG scores sourced from the Sino-Securities ESG Rating database (Luo, Yan, and Yan 2023; Luo, Tian, et al. 2024; Li, Wu, and Huang 2023; Li, Liu, and Liu 2023). Additionally, information on media attention is derived from the Chinese Research Data Services Platform (CNRDS) (Wang et al. 2021; Li, Wu, and Huang 2023; Li, Liu, and Liu 2023). The initial dataset comprises 10,269 observations. The data selection process begins by excluding firms under specific conditions: (i) firms listed on the Beijing Stock Exchange, established in 2021; (ii) firms designated as ST due to particular operational issues; and (iii) entities either newly established or suspended during the selected financial years (Pasko et al. 2021). Following this, missing and redundant entries are removed. At the 1% and 99% levels of continuous variables, a winsorization approach is applied to reduce the impact of outliers (Saunders et al. 2019). After this modification, 10,000 firm-year data constitute the final sample.

3.2 | Measurements of CSR

The ESG rating employed in this study is a composite measure encompassing ESG performance indicators. Given the right-skewed distribution of ESG scores, this study uses a logarithmic transformation to normalize the data and reduce the impact of outliers. Given the rapid growth and increasing importance of ESG considerations, various research firms now provide comprehensive ESG scores based on diverse metrics. These scores are derived from the Sino-Securities ESG Rating database (Luo, Yan, and Yan 2023; Luo, Tian, et al. 2024; Li, Wu, and Huang 2023; Li, Liu, and Liu 2023), which is the most comprehensive and frequently updated ESG rating system in China (Wang et al. 2022). This database is tailored to the evolving landscape of A-share listed firms and reflects the country's developmental trajectory. The Sino-Securities Index Information (SSII) applies an updated weighting method to the respective diversity of industrial sectors that stakeholder firms belong to; this is to quantitatively examine and outline the real-world outcomes in the context of ESG metrics (Sino-Securities Index Information Service Company 2022). The ESG Index constructs an industry differentiation index system by integrating regulatory disclosure, government data, and public opinion information in the dimensions of environment (E), society (S), and governance (G). The original ESG overall score is standardized by the Z-score method, and the weights are dynamically allocated according to the national policy orientation (E: 40%–45%, S: 30%–35%, G: 20%–25%), and the comprehensive score is generated by superimposing the deduction mechanism of major ESG disputes. The ESG assessment framework comprises a multi-tiered architecture of 14 thematic modules, 22 operational units, and more than 100 detailed metrics (Sino-Securities Index Information Service Company 2022). Environmentally, it quantifies corporate operational footprints and their ecological externalities, while diagnosing sector-specific environmental risk exposures and transition opportunities. Socially, it evaluates stakeholder capital management efficacy and responsibility fulfillment, identifying latent social license vulnerabilities. Corporately, it assesses governance strength and structural risk factors.

3.3 | Measurements of EM

EM is measured via discretionary accruals (DA) using the modified Jones model (Sial et al. 2018; Jian et al. 2023), which better reflects management's intention and extent of EM information in financial reports (Dechow et al. 1995; Diem and Hiep 2023). Total accruals (TA) represent the difference between accounting earnings and cash flows, indicating overall accrual activity. Non-discretionary accruals (NDA) are estimated based on firm-specific factors and represent expected accruals, while DA, calculated as TA minus NDA, capture the portion subject to managerial discretion. The calculation equation is provided below.

$$\frac{TA_{i,t}}{A_{i,t-1}} = \beta_0\left(\frac{1}{A_{i,t-1}}\right) + \beta_1\left(\frac{\Delta REV_{i,t}}{A_{i,t-1}}\right) + \beta_2\left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + \varepsilon_{i,t} \tag{1}$$

$$\frac{NDA_{i,t}}{A_{i,t-1}} = \hat{\beta}_0\left(\frac{1}{A_{i,t-1}}\right) + \hat{\beta}_1\left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}}\right) + \hat{\beta}_2\left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) \tag{2}$$

$$DA_{i,t} = \frac{TA_{i,t}}{A_{i,t-1}} - NDA_{i,t} \tag{3}$$

where $TA_{i,t}$ = total accruals; $NDA_{i,t}$ = non-discretionary accruals in year t; $DA_{i,t}$ = discretionary accruals; $\Delta REV_{i,t}$ = revenues in year t—revenues in year t–1 scaled by A_{t-1}; $\Delta REC_{i,t}$ = the net receivables in year t—net receivables in year t–1 scaled by A_{t-1}; $A_{i,t-1}$ = total assets in year t–1; $PPE_{i,t}$ = gross property plant and equipment in year t scaled by total assets at t–1; $\varepsilon_{i,t}$ = residual term; and β_0, β_1, β_2 = regression coefficients.

3.4 | Measurements of Media Attention

Media attention is operationalized through annual press coverage volume, quantified as the Napierian logarithm of firm-specific mentions in nationally circulated newspapers aggregated for each fiscal year (Wang et al. 2021). This metric proxies institutional monitoring intensity, using newspapers' superior reliability in informational transfer compared to alternative channels due to editorial rigor and fact-checking protocols (Zhang and Chen 2019). Primary data, retrieved from the China Research Data Service (CNRDS) platform (Wang et al. 2021; Li, Wu, and Huang 2023; Li, Liu, and Liu 2023), encompasses multi-domain reports spanning economic, financial, cultural, environmental, and policy discourse. The "media attention" index provided by the CNRDS database usually includes related data cleaning and processing (such as filtering announcements, analyst reports, etc.) The logarithmic transformation mitigates right-skewness while preserving the construct's core interpretation as a stakeholder attention indicator, where heightened values signify amplified public visibility and scrutiny exposure for HNTFs.

3.5 | Measurements of Control Variables

Six variables may influence the CSR-EM correlation used as control variables, including growth rate (growth), leverage (lev), return on assets (ROA), the size of the firm (size), the type of audit firm (Big4), and the COVID years. GROWTH is the growth rate of the firm. LEVERAGE is the firm's leverage ratio. A firm with a higher leverage ratio sometimes tends to perform more EM actions (Le Breton-Miller et al. 2024). ROA is determined as the division of net operating income by total assets. If a firm shows a substantial ROA, there is a likelihood of it engaging in EM, as the entity may seek to avert financial losses (Lee 2017). SIZE refers to the firm size; as when a firm seeks to expand in size, it will receive financial and public pressure simultaneously, which may motivate the firm to engage in EM actions (Lee 2017).

The Big4 audit firm (PwC, EY, KPMG, and Deloitte) represents the quality of auditing, which may influence the degree of EM (Xu and Qi 2020). Finally, the COVID years (2020 and 2021) are employed, as firms tend to perform more EM actions under pressure during the pandemic (Khanchel and Lassoued 2024) while increasing sustainability reporting. The assessment of control variables is listed below in Table 1.

TABLE 1 | Operational definition of variables.

Variables	Symbol	Measurement
Dependent variables		
Earnings management	EM	Discretionary accruals
Independent variables		
Corporate social responsibility	CSR	The natural logarithm of ESG score
Environmental	E	The natural logarithm of E score
Social	S	The natural logarithm of S score
Governance	G	The natural logarithm of G score
Moderating variables		
Media attention	Media	The natural logarithm of the amount that media reported
Control variables		
Growth	Growth	(Total sales of year t divided by total sales of year$_{t-1}$)−1
Leverage	Lev	Year-end total liabilities/ Year-end total assets
ROA	ROA	Net operating income over total assets
Size	Size	Market value of equity
Big4 audit company	Big4	0 for non-Big4 audit firm and 1 for Big4 audit firm
COVID year	COOVID	0 for none-COVID-19 period and 1 for the COVID-19 period (2020–2021)

Source: Authors' own creation from Stata.

3.6 | Models of the Analysis

Several analytical methods have been utilized to ensure the reliability of results. The testing and results include descriptive statistics, correlation analysis, multicollinearity analysis, serial correlation analysis, heteroscedasticity test, fixed effects model, and robustness test. It is essential to conduct multicollinearity analysis to identify any high intercorrelations among independent variables (Kim 2019). A serial correlation analysis is applied to test the autocorrelation of the residuals in the model (Wooldridge 2002). This helps to adjust the estimation of the standard errors of the regression coefficients. Tests of heteroscedasticity (the White test) are performed to assess the homogeneity of the variance of the error terms across observations. Regarding tests for model suitability, both the Lagrange Multiplier—Breusch-Pagan test and the Hausman test are conducted. In the fixed effects approach, the key statistical assumptions include the OLS assumption (i.e., the relationship between the independent variables and the error term is random). Meanwhile, the Lagrange Multiplier—Breusch-Pagan test and the Hausman test (as we will see later) can be used to determine whether the fixed effects or random effects model is more appropriate. The fixed effects model is preferred over other

TABLE 2 | Descriptive analysis.

Variable	N	Mean	p50	SD	Min	Max
EM	10,000	0.00500	0.00700	0.0800	−0.261	0.248
CSR	10,000	4.289	4.298	0.0830	4.029	4.446
E	10,000	4.109	4.115	0.136	3.815	4.435
S	10,000	4.323	4.335	0.133	3.868	4.571
G	10,000	4.342	4.372	0.112	3.894	4.504
Media	10,000	3.938	3.258	2.475	0	10.35
Growth	10,000	0.106	0.0730	0.436	−0.772	2.509
Lev	10,000	0.422	0.420	0.188	0.0700	0.871
ROA	10,000	0.0330	0.0370	0.0750	−0.341	0.201
Size	10,000	22.67	22.47	1.005	21.13	25.81
Big4	10,000	0.0490	0	0.216	0	1
COVID	10,000	0.458	0	0.498	0	1

Source: Authors' own creation from Stata.

models, based on the decision criteria provided by the Hausman test. The following regression models are developed:

Model 1:

$$EM = \beta_0 + \beta_1 CSR + \Sigma\beta_i CONTROLS + \Sigma FIRM + \Sigma YD + \varepsilon$$

Model 2:

$$EM = \beta_0 + \beta_1 E + \beta_2 S + \beta_3 G + \Sigma\beta_i CONTROLS + \Sigma FIRM + \Sigma YD + \varepsilon$$

Model 3:

$$EM = \beta_0 + \beta_1 CSR + \beta_2 Media + \beta_3 CSR^* Media + \Sigma\beta_i CONTROLS + \Sigma FIRM + \Sigma YD + \varepsilon$$

Model 4:

$$EM = \beta_0 + \beta_1 E + \beta_2 S + \beta_3 G + \beta_4 Media + \beta_5 E * Media + \Sigma\beta_i CONTROLS + \Sigma FIRM + \Sigma YD + \varepsilon$$

Model 5:

$$EM = \beta_0 + \beta_1 E + \beta_2 S + \beta_3 G + \beta_4 Media + \beta_5 S * Media + \Sigma\beta_i CONTROLS + \Sigma FIRM + \Sigma YD + \varepsilon$$

Model 6:

$$EM = \beta_0 + \beta_1 E + \beta_2 S + \beta_3 G + \beta_4 Media + \beta_5 G * Media + \Sigma\beta_i CONTROLS + \Sigma FIRM + \Sigma YD + \varepsilon$$

where EM = discretionary accruals; CSR = the natural logarithm of ESG score; E = the natural logarithm of E score; S = the natural logarithm of the S score; G = the natural logarithm of G score; $Media$ = media attention as determined by the number of news reports about the HNTFs; $CONTROLS$ = control variables, including growth, leverage, ROA, firm size, Big4 audit firm dummy, COVID year dummy; $FIRM$ = firm dummy; YD = year dummy.

4 | Findings

4.1 | Descriptive Statistics

The descriptive analysis results are presented in Table 2. The mean of AEM is close to zero, indicating generally low levels of EM, but with considerable variability. CSR scores range from 4.029 to 4.446, with a similar mean and median, showing a relatively high and consistent distribution. Among CSR dimensions, governance (G) scores are especially high, particularly the median (4.372). Media attention shows a lower mean (3.938) and median (3.258), reflecting a right-skewed distribution with notable variability (standard deviation of 2.475).

4.2 | Correlation Analysis

The Pearson coefficients are presented in Table 3, which can be used to assess the relationship among the variables. All VIFs are below 10, and the highest VIF is 1.47, indicating that no multicollinearity issue exists (Kim 2019). Based on the results of correlation analysis, EM has a positive correlation with CSR (0.141***), suggesting a CSR-EM association. The correlation between CSR and Media (0.093***) shows that corporations with higher CSR involvement tend to receive more media coverage. EM is positively related to S and G at a significant level of 1%, while EM and E do not significantly relate, given the outcomes of the Pearson correlation. Regarding control variables, both EM and CSR are significantly related to growth, leverage, ROA, and size.

4.3 | Regression

The model results are shown in Table 4. The first and second models are the basic regression models that describe the CSR-EM relationship, while models that include media attention are in the third, fourth, fifth, and sixth models. The

TABLE 3 | Correlation analysis.

	EM	CSR	E	S	G	Media	Growth	Lev	ROA	Size	Big4	COVID
EM	1											
CSR	0.141***	1										
E	0.004	0.571***	1									
S	0.078***	0.690***	0.364***	1								
G	0.156***	0.729***	0.107***	0.126***	1							
Media	0.075***	0.093***	0.091***	0.060***	0.054***	1						
Growth	0.080***	0.019**	−0.060***	0.025**	0.044***	0.046***	1					
Lev	−0.131***	−0.061***	0.142***	0.047***	−0.207***	0.156***	−0.004	1				
ROA	0.555***	0.258***	0.027***	0.124***	0.294***	0.058***	0.089***	−0.323***	1			
Size	0.147***	0.238***	0.139***	0.137***	0.191***	0.385***	0.066***	0.114***	0.290***	1		
Big4	−0.002	0.121***	0.088***	0.050***	0.103***	0.152***	−0.015**	0.097***	0.052***	0.292***	1	
COVID	−0.050***	−0.006	0.036***	0.016**	−0.038***	0.423***	−0.231***	0.047***	0.006	0.124***	0.025**	1

Note: Lower-triangular cells report Pearson's correlation coefficients. ***$p<0.01$, **$p<0.05$, *$p<0.1$.
Source: Authors' own creation from Stata.

independent variable is CSR (or E, S, and G), and the dependent variable is EM.

4.3.1 | The CSR-EM Relation

The findings are shown in Table 4, Column 1. The outcomes illustrate a positive CSR-EM relationship, indicating that a rise in CSR initiatives is likely to result in a rise in EM activities from firms. The outcomes are similar to some earlier studies (Setiawan et al. 2019; Buertey et al. 2020; Zhang et al. 2021; Jian et al. 2023; Khanchel and Lassoued 2024; Alsaadi 2025), which suggest that CSR is a strategy that can be employed to project a favorable impression of the firm. Therefore, management tends to use more ethical behaviors, like CSR, to cover up their EM actions (Zhang et al. 2021) and avoid unwanted consequences. Hypothesis H1 is accepted. This study posits that a positive CSR–EM association emerges specifically when symbolic/instrumental CSR is both feasible and incentivized—conditions prominently embodied by the high-visibility, high-pressure environment of HNTFs. Within this context, characterized by significant financing needs, and substantial information asymmetry (Jensen and Meckling 1976), firms are motivated to strategically elevate visible CSR engagements as a symbolic façade (Mahoney et al. 2013; Westphal 2023; Alharasis 2025; García Lara et al. 2025). The findings do not imply that substantive/genuine CSR induces EM, but rather that under external pressure and visibility, firms may co-elevate visible CSR initiatives and reporting discretion, resulting in an observable positive association reflective of strategic alignment, not ethical causation. The consequent reputational shielding effect (Scholtens and Kang 2013) obscures EM by diverting stakeholder scrutiny (Zhang et al. 2021), while agency-driven prioritization of short-term private gains over sustainable value creation (Tan 2014) systematically reinforces CSR's instrumentalization cycle.

Further, in Column 2, the correlation between E, S, G, and EM is identified, respectively. The findings indicate that S, G and EM have a positive association. Conversely, there exists a negligible negative correlation between E and EM. Hypothesis H2a is rejected, while Hypotheses H2b and H2c are accepted. The outcome is partially incompatible with the results of Kolsi et al. (2022) and Borralho et al. (2022), as they identify no discernible correlation among environmental ESG and EM, while there is a negative association among social and governance-related ESG and EM. This study indicates that the difference might result from the distinct nature of the sample firms and different national systems, as the samples of Kolsi et al. (2022) are the US banks, while the samples of Borralho et al. (2022) are listed firms in France and Spain. Unlike the banking industry, the results show that the selected sample, HNTFs, tend to use social and management-related CSR to mask the firm's EM behavior, rather than maintaining good relations with stakeholders to reduce EM behavior. Regarding the conclusions drawn about the correlation between environmental CSR and EM, the findings indicate that HNTFs' performance aligns with the banking sector's, which may be because their operating models cause minimal environmental impact (Kolsi et al. 2022).

The observed variation in the correlation between different CSR dimensions and EM may be attributed to their distinct

TABLE 4 | The regression results.

Models	(1)	(2)	(3)	(4)	(5)	(6)
	Basic regression		The moderating effect of Media attention			
Independent	CSR	E+S+G	CSR	E	S	G
Dependent	EM	EM	EM	EM	EM	EM
CSR	0.0320**		0.0331**			
	(0.0144)		(0.0144)			
E		−0.0156		−0.0158	−0.0156	−0.0157
		(0.0106)		(0.0106)	(0.0106)	(0.0106)
S		0.0205**		0.0203**	0.0213**	0.0200**
		(0.00919)		(0.00919)	(0.00916)	(0.00919)
G		0.0150*		0.0153*	0.0150*	0.0161*
		(0.00908)		(0.00906)	(0.00908)	(0.00909)
Growth	−0.00407*	−0.00414*	−0.00407*	−0.00413*	−0.00412*	−0.00413*
	(0.00232)	(0.00231)	(0.00231)	(0.00231)	(0.00231)	(0.00231)
Lev	0.0314**	0.0310**	0.0314**	0.0306**	0.0309**	0.0310**
	(0.0145)	(0.0146)	(0.0145)	(0.0145)	(0.0146)	(0.0145)
ROA	0.688***	0.687***	0.688***	0.687***	0.687***	0.687***
	(0.0158)	(0.0157)	(0.0158)	(0.0157)	(0.0157)	(0.0158)
Size	0.00369	0.00354	0.00319	0.00330	0.00307	0.00312
	(0.00245)	(0.00245)	(0.00243)	(0.00243)	(0.00243)	(0.00243)
Big4	−0.00895	−0.00888	−0.00905	−0.00902	−0.00907	−0.00893
	(0.0111)	(0.0111)	(0.0112)	(0.0111)	(0.0111)	(0.0111)
COVID	−0.0272***	−0.0266***	−0.0307***	−0.0301***	−0.0300***	−0.0304***
	(0.00244)	(0.00248)	(0.00520)	(0.00521)	(0.00522)	(0.00522)
Media			0.000811	0.000814	0.000800	0.000848
			(0.00104)	(0.00104)	(0.00104)	(0.00104)
CSR_Media			0.00726**			
			(0.00352)			
E_Media				−0.00173		
				(0.00217)		
S_Media					0.00449*	
					(0.00229)	
G_Media						0.00518**
						(0.00241)
Constant	−0.218***	−0.167**	−0.214***	−0.164**	−0.163**	−0.163**
	(0.0776)	(0.0808)	(0.0775)	(0.0807)	(0.0808)	(0.0807)
N	10,000	10,000	10,000	10,000	10,000	10,000
R-squared	0.375	0.376	0.376	0.376	0.376	0.376
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Note: Cluster-robust standard errors in parentheses, with ***, **, and * suggesting statistical significance at the 1%, 5%, and 10% levels, respectively.
Source: Authors' own creation from Stata.

stakeholder structures and verification characteristics. The different stakeholder structures and verification characteristics of CSR dimensions create the observed variations in their relationship with EM. The CSR activities related to social and governance aspects focus on addressing the needs of employees investors, and management personnel who directly affect business operations. The two dimensions provide managers with more freedom to manipulate their reports because their results exist as intangible data which makes them easier to present in a misleading way. The environmental CSR dimension affects multiple stakeholders across a wide range and faces growing requirements for standardized measurement and external validation. The environmental dimension shows no significant relationship with EM because it faces higher accountability standards and produces effects that are less direct to financial performance. Yet the social and governance dimensions maintain stronger connections because they operate within core operations and lack strong verification systems.

4.3.2 | The Moderating Impact of Media Attention

Table 4, Columns 3–6 display the regression results of the moderators, media attention. In Column 3, it presents the results of the media acting as a moderating factor in the CSR-EM relationship. Hypothesis H3 is accepted. These results demonstrate that media attention considerably amplifies the positive CSR-EM relationship. These findings indicate that under heightened public attention, firms—particularly HNTFs that face higher media attention and reputation risks in high-visibility contexts (Wu et al. 2016; Liu and Xu 2025)—tend to increase their engagement in CSR as a strategic response to obfuscate concurrent EM activities. This pattern is consistent with the view that media attention, while serving a supervisory role over corporate conduct (Zhang and Chen 2019), also generates reputational and performance pressures that incentivize firms to instrumentally deploy CSR as a legitimizing tool (Seele and Lock 2015; Westphal 2023; García Lara et al. 2025). Rather than presuming the nature of CSR intent, this study focuses on the observable behavioral outcome: under systemic pressures like media, firms strategically align visible CSR initiatives with discretionary financial reporting, using CSR as a shield to mitigate stakeholder skepticism toward EM.

The outcomes of E (S and G) and EM, separately, are shown in columns 4–6. The findings emphasize that the positive connection between S, G and EM is significantly enhanced by media attention. Conversely, the E-EM connection is not significantly strengthened by media attention. Hypothesis H4 is rejected, while Hypotheses H5 and H6 are accepted. The results indicate that under media attention, sample firms will use more social and governance-related CSR to mask EM; however, the correlation between EM and CSR related to the environment will not be influenced by media attention. Media attention serves as both an extralegal monitoring mechanism and a source of significant external pressure for firms (Zhang and Chen 2019; Wang et al. 2021). The intense public examination creates strong pressure for management to use symbolic/instrumental CSR practices for impression management purposes (Quan et al. 2015). This strategic response is particularly evident in the Social (S) and Governance (G) dimensions, where greater managerial discretion, narrative flexibility, and proximity to key stakeholders facilitate their instrumental deployment. The combination of high visibility and financing requirements and information gaps in HNTFs leads companies to use S/G-related CSR activities as protective measures for their EM reputation. This observed pattern aligns with the boundary-conditioned theoretical framework: the positive CSR–EM association emerges specifically where symbolic/instrumental CSR is both feasible and incentivized, and is amplified by media attention in those more malleable S/G domains. It should be emphasized that these findings do not imply substantive/genuine CSR leads to EM, but rather reveal how firms under external pressure may jointly elevate visible CSR initiatives and reporting discretion in a strategically coordinated manner.

4.4 | Robustness Check

To obtain reliable findings, this study performs a robustness check by adding a control variable (Luo, Yan, and Yan 2023; Luo, Tian, et al. 2024), the market-to-book ratio (MTB). The variable MTB is also thought to influence the CSR-EM connection (Khanchel and Lassoued 2024). Better future returns for a firm with a greater market-to-book ratio mean that more money will be available for the firm to undertake CSR (Liu et al. 2017). The outcomes of the models' robustness check are presented in Table 5.

Table 5 shows that, following the addition of the control variable, MTB, S, and G are positively and significantly correlated with EM, and that CSR is positively linked to EM. E, in contrast, remains negatively related to EM, but is not significant. Therefore, the regression results for CSR (also E, S, and G) and EM are considered robust. Further, Columns 3–6 display the robustness check results for models using media attention as a moderating variable. The outcomes suggest that media attention enhances the positive CSR-EM association. Additionally, media attention exerts a positive moderating effect on the CSR-EM link concerning social and governance issues. Regarding the E-EM relationship, the moderating impact of media attention is not significant. The results are deemed robust.

To address potential endogeneity bias arising from simultaneity or omitted confounders, this study employs a two-stage least squares (2SLS) framework, using one-period-lagged independent variables (CSR, E, S, and G) as instrumental variables (IVs). Using lagged values exploits temporal asymmetry: they are predetermined relative to the current period and thus satisfy the exclusion restriction, while maintaining explanatory power for the current endogenous regressors (satisfying the relevance condition). The lagged CSR (t–1) instrument meets the relevance condition due to high persistence in CSR engagement, reflecting sunk costs in sustainability initiatives (e.g., green supply chain contracts). Its exogeneity arises from temporal precedence: predetermined before contemporaneous EM shocks, with the exclusion restriction supported by an insignificant correlation with second-stage residuals after accounting for prior performance.

Table 6 reports 2SLS estimates addressing endogeneity concerns. The results confirm a significant positive relationship between CSR and EM, with similar positive relationships observed for

TABLE 5 | The results of robustness check (add MTB as a control variable).

	(1)	(2)	(3)	(4)	(5)	(6)
Models	**Basic regression**		**The moderating effect of Media attention**			
Independent	**CSR**	**E + S + G**	**CSR**	**E**	**S**	**G**
Dependent	**EM**	**EM**	**EM**	**EM**	**EM**	**EM**
CSR	0.0327**		0.0341**			
	(0.0144)		(0.0144)			
E		−0.0156		−0.0158	−0.0156	−0.0157
		(0.0106)		(0.0106)	(0.0106)	(0.0106)
S		0.0208**		0.0206**	0.0217**	0.0205**
		(0.00922)		(0.00922)	(0.00918)	(0.00921)
G		0.0154*		0.0156*	0.0154*	0.0166*
		(0.00909)		(0.00908)	(0.00910)	(0.00911)
Growth	−0.00403*	−0.00409*	−0.00400*	−0.00408*	−0.00406*	−0.00406*
	(0.00231)	(0.00231)	(0.00231)	(0.00231)	(0.00231)	(0.00231)
Lev	0.0294*	0.0287*	0.0286*	0.0286*	0.0282*	0.0279*
	(0.0162)	(0.0163)	(0.0162)	(0.0162)	(0.0163)	(0.0162)
ROA	0.689***	0.688***	0.689***	0.688***	0.688***	0.688***
	(0.0159)	(0.0159)	(0.0159)	(0.0159)	(0.0159)	(0.0159)
Size	0.00322	0.00298	0.00250	0.00281	0.00241	0.00236
	(0.00293)	(0.00293)	(0.00293)	(0.00293)	(0.00292)	(0.00292)
Big4	−0.00888	−0.00880	−0.00896	−0.00895	−0.00898	−0.00883
	(0.0111)	(0.0111)	(0.0112)	(0.0111)	(0.0111)	(0.0111)
COVID	−0.0271***	−0.0266***	−0.0306***	−0.0300***	−0.0299***	−0.0302***
	(0.00244)	(0.00249)	(0.00520)	(0.00521)	(0.00522)	(0.00521)
MTB	0.000213	0.000253	0.000314	0.000223	0.000298	0.000344
	(0.000707)	(0.000707)	(0.000709)	(0.000706)	(0.000706)	(0.000709)
Media			0.000800	0.000807	0.000789	0.000836
			(0.00104)	(0.00104)	(0.00104)	(0.00104)
CSR_Media			0.00744**			
			(0.00354)			
E_Media				−0.00169		
				(0.00217)		
S_Media					0.00454**	
					(0.00229)	
G_Media						0.00532**
						(0.00242)
Constant	−0.211**	−0.158*	−0.203**	−0.156*	−0.152*	−0.150*
	(0.0832)	(0.0868)	(0.0831)	(0.0868)	(0.0868)	(0.0869)
N	10,000	10,000	10,000	10,000	10,000	10,000

(Continues)

TABLE 5 | (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)
Models	**Basic regression**		**The moderating effect of Media attention**			
Independent	**CSR**	**E + S + G**	**CSR**	**E**	**S**	**G**
Dependent	**EM**	**EM**	**EM**	**EM**	**EM**	**EM**
R-squared	0.375	0.376	0.376	0.376	0.376	0.376
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Note: Cluster-robust standard errors in parentheses, with ***, **, and * suggesting statistical significance at the 1%, 5%, and 10% levels, respectively.
Source: Authors' own creation from Stata.

the social (S) and governance (G) dimensions. Subsequent moderation tests indicate media attention significantly strengthens the CSR-EM linkage, with amplification effects differing across dimensions, significant for the S and G components. The 2SLS methodology, employing lagged instruments to reduce endogenous selection bias, provides evidence supporting a causal interpretation of the identified CSR-EM relationship against omitted variable threats.

5 | Discussion

Despite abundant literature examining the CSR-EM connection, findings remain inconsistent. Studies that divide CSR into multiple aspects are especially limited. This research focuses on Chinese HNTFs from 2017 to 2021 to explore the CSR-EM relationship, incorporating media attention as a moderating factor. The findings demonstrate a positive CSR–EM association specifically within the Social (S) and Governance (G) dimensions of ESG, while no significant relationship is observed in the Environmental (E) pillar—a pattern consistent with a conditional framework in which CSR is leveraged instrumentally rather than substantively (Seele and Lock 2015; Westphal 2023; Alharasis 2025; García Lara et al. 2025). This divergence underscores the contextual boundaries; the high-visibility, policy-driven setting of HNTFs fosters conditions where symbolic/instrumental CSR in less verifiable domains (S and G) can be strategically deployed to obscure EM. The environmental dimension usually has stricter monitoring and quantification standards, with stronger verifiability, so it is not easily used as a tool.

First, the findings of positive CSR-EM correlation align with some previous studies (Setiawan et al. 2019; Buertey et al. 2020; Zhang et al. 2021; Jian et al. 2023; Khanchel and Lassoued 2024; Alsaadi 2025), but diverge from the negative correlation often reported in Western or banking contexts (e.g., Brahem et al. 2022; Velte 2024). The fundamental institutional structure between China's state-controlled innovation system and Western market-based economies leads to this divergence. The Chinese HNTFs function inside a policy-based system which receives major state backing and extensive media coverage. These conditions—where stakeholder expectations are shaped by national innovation agendas to some extent and CSR oversight remains nascent—collectively reduce the costs of symbolic/instrumental CSR implementation while amplifying incentives for its instrumental use. Consequently, Chinese HNTFs face stronger motivations and fewer constraints for employing CSR as a strategic facade compared to Western firms operating within more established regulatory frameworks with greater verification intensity and different stakeholder composition.

Agency theory supports these outcomes, indicating that firms perform CSR to act in their self-interest, covering up EM (Buertey et al. 2020). The findings reveal a positive CSR–EM association in HNTFs, diverging from the typical negative relationship documented in prior literature (Velte 2024). One possible explanation is that CSR initiatives, especially when measured via ESG ratings, may include symbolic actions to shape stakeholder perceptions (Velte 2023, 2025). Alternatively, it is conceivable that firms engaging in EM could increase CSR façade initiatives to offset reputational risks. For example, this allows firms to present a favorable image, especially during financial distress or external pressure (Prior et al. 2008; Choi et al. 2018; Gonçalves et al. 2021). Such behavior, driven by short-term interests, exemplifies the principal-agent problem, where executives prioritize their compensation or job security over the firm's long-term value (Tan 2014).

To sum up, under the framework of agency theory and information asymmetry (Jensen and Meckling 1976), CSR acts as a reputation insurance mechanism (Scholtens and Kang 2013), which reduces the risk of opportunistic behaviors being identified by shifting the focus of stakeholders' supervision on financial irregularities. At the same time, the subjective measurement attribute and low verifiability of CSR performance (Faisal et al. 2018) create a moral covering effect, masking EM (Zhang et al. 2021) implemented by managers. In this process, the managers convert moral capital accumulated by CSR into a behavioral license for implementing EM. Finally, a "positive CSR-EM correlation" is formed; that is, firms obtain moral credit through seemingly compliant CSR behavior and then provide operational space for opportunistic financial behavior.

From the ethical perspective, EM undermines the integrity of the financial disclosures, erodes stakeholder confidence, and incurs widespread legal and reputational costs for the firm. EM is viewed as a perverse prioritization of short-term managerial or organizational benefits in the face of ethical accountabilities and the creation of longer-term value. This analysis foregrounds a critical ethical risk, the instrumental use of CSR (Seele and Lock 2015; Westphal 2023; Alharasis 2025; García

TABLE 6 | The results of the endogeneity test (2sls).

	(1)	(2)	(3)	(4)	(5)	(6)
Models	**Basic regression**		**The moderating effect of Media attention**			
Independent	**CSR**	**E + S + G**	**CSR**	**E**	**S**	**G**
Dependent	**EM**	**EM**	**EM**	**EM**	**EM**	**EM**
CSR	0.042**		0.042**			
	(0.017)		(0.017)			
E		−0.023		−0.023	−0.022	−0.023
		(0.014)		(0.014)	(0.014)	(0.014)
S		0.029***		0.029***	0.029***	0.029***
		(0.011)		(0.011)	(0.011)	(0.011)
G		0.019*		0.020*	0.019*	0.020*
		(0.011)		(0.011)	(0.011)	(0.011)
Growth	−0.010***	−0.010***	−0.010***	−0.010***	−0.010***	−0.010***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Lev	0.049***	0.049***	0.049***	0.048***	0.049***	0.048***
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
ROA	0.688***	0.687***	0.688***	0.687***	0.688***	0.687***
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
Size	0.008***	0.007***	0.007***	0.007***	0.007**	0.007**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Big4	0.010	0.010	0.010	0.009	0.010	0.010
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
COVID	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Media			0.001	0.001	0.001	0.001
			(0.001)	(0.001)	(0.001)	(0.001)
CSR_Media			0.006*			
			(0.004)			
E_Media				−0.001		
				(0.002)		
S_Media					0.006**	
					(0.002)	
G_Media						0.002*
						(0.003)
Observations	6981	6981	6981	6981	6981	6981
R-squared	0.344	0.345	0.345	0.345	0.346	0.345
Code FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Note: Cluster-robust standard errors in parentheses, with ***, **, and * suggesting statistical significance at the 1%, 5%, and 10% levels, respectively.
Source: Authors' own creation from Stata.

Lara et al. 2025) as a moral cover for financial misconduct. CSR activities may be designed to obtain a good public image for the managers or the organization and gain the support of stakeholders to minimize external regulation or criticism. CSR is not used as a reflection of genuine corporate values, but rather as a mechanism of the ethical mask.

To address this, effective remedies should be institutionalized. These include mandatory independent assurance of CSR and sustainability reports to verify public claims. Also, develop a process-based key performance indicator (KPIs) that tracks the implementation integrity of CSR commitments rather than just outcomes, and the redesign of governance incentives to reward long-term, substantive/genuine CSR integration rather than its symbolic visibility. The research results confirm that substantive/genuine CSR maintains its value and existence, but they show that positive CSR–EM relationships occur under particular circumstances, such as high performance, reputational demands, information gaps and short-term performance targets that encourage symbolic or instrumental CSR practices. Conversely, when CSR is externally assured, persistent over time, and aligned with verifiable operational investments, this association is expected to attenuate or even turn negative.

This study further examines the ESG dimensions of CSR. It finds an insignificant relationship between environmental CSR and EM, but a positive association between social and governance-related CSR and EM, which contradicts the findings of Kolsi et al. (2022) and Borralho et al. (2022), based on differences between industry specificities and national systems. The study suggests that HNTFs focus on social and governance-related CSR to overshadow EM, which may relate to the principal-agent problem, as these dimensions could directly influence compensation and firm reputation. In contrast, environmental CSR, which has more indirect and broader impacts, receives less public attention and is less likely to be a focus of EM strategies. The insignificance of the environmental (E) dimension is consistent with the idea that domains with greater verifiability and third-party scrutiny may be less amenable to instrumental use. By contrast, the social (S) and governance (G) dimensions—often characterized by higher managerial discretion and narrative elasticity—appear more susceptible to strategic deployment when firms face external pressure. This pattern supports the interpretation that heterogeneity in measurability and verification conditions shapes the observed CSR–EM relationship.

Thirdly, media attention poses a positive impact on the CSR-EM relationship, consistent with instrumental stakeholder theory (Jones et al. 2018; Patro et al. 2018). It is suggested that firms engage in CSR to obtain economic benefits (Tata and Prasad 2015). The results indicate that media attention incites HNTFs to engage in CSR as a cover for EM (Zhang and Chen 2019). Although media attention prompts attention, it acts as stress, making firms utilize CSR efforts to fulfill stakeholder expectations and disguise unethical financial practices (Quan et al. 2015; Wu et al. 2016). Explaining the protection shield, media attention acts as a conduit for corporate information, which improves public trust and impacts a firm's profile, hence diverting focus from EM (Abner and Ferrer 2019). Under circumstances of rising external pressure (such as media attention), HNTFs with excessive growth expectations are more willing to use symbolic/instrumental CSR to cover up EM to relieve the pressure of high growth expectations and achieve pre-established financial goals. Decomposing CSR into ESG dimensions further shows that media coverage moderates the relationship between social and governance CSR and EM, but not between environmental CSR and EM. It further indicates that HNTFs under media attention emphasize social and governance CSR for disguising EM. The findings highlight the 'double-edged sword' effect of the media. Although it encourages ethical corporate behavior, this can also be used by firms to conceal improper actions such as EM by shifting attention to CSR initiatives (Wu et al. 2016). It suggests an ethical dilemma: firms can exploit CSR issuances strategically to advance their interests, hiding in the process unethical practices such as EM, which compromise CSR's true intent.

The findings of this study demonstrate that the relationship between CSR and EM is fundamentally conditional. The positive relationship between CSR and EM exists only when organizations can perform symbolic/instrumental CSR activities and receive corresponding incentives which Chinese HNTFs under high-pressure conditions can achieve. The firms face dual challenges of meeting growth targets and innovation demands while receiving policy support. Media attention in this environment boosts reputational stress which pushes firms toward adopting symbolic/instrumental CSR practices to create a legitimizing appearance (Seele and Lock 2015; Westphal 2023; García Lara et al. 2025). This strategic posture, in turn, creates a perceived "moral cover" under which EM becomes a more likely managerial recourse to meet market expectations and sustain external financing access.

5.1 | A Comparative Analysis With Previous Studies

Hence, this comparative review of prior studies on CSR and EM reveals that the CSR-EM relationship is complex and context-dependent. It is governed by various internal and external factors, such as the legal and institutional environment (Anderson et al. 2024; De Pilla et al. 2025). These contextual factors determine whether CSR is employed as a genuine expression of corporate ethics or as a strategic façade to conceal manipulative practices. On one hand, the positive CSR-EM association highlights the possibility for executives to use CSR actions opportunistically to hide earnings EM practices and thereby increase reputation or achieve short-term economic goals (Khanchel and Lassoued 2024). For instance, managers are likely to increase CSR spending to improve the firm's public image, casting a more favorable image from the perspective of financial reporting that can be influenced by CEO characteristics (age, religion, knowledge, and gender) (Chu et al. 2024; Le Breton-Miller et al. 2024; Lee et al. 2024; Lu et al. 2025). Conversely, a negative CSR-EM connection also exists, especially among firms that adopt CSR as an ethical commitment toward stakeholder engagement and transparency (Chih et al. 2008). Furthermore, CSR actions are associated with lower EM, suggesting an ethical viewpoint whereby establishing trust with stakeholders makes financial fraud less appealing. It shows that by doing good, one can achieve success for the company and the team (Kluijtmans et al. 2024; Tyan et al. 2025).

This study extends previous research by examining CSR, EM, and external scrutiny, especially media attention, in assembled HNTFs. Due to the unique characteristics of HNTFs, the results indicate that such a relationship is moderated by media attention, as firms experiencing more scrutiny may seek to improve their ethical image through CSR and engage in EM to achieve financial performance. Because the media often disseminates contradictory information, stakeholders perceive firms as hypocritical (Lewin and Warren 2025). This phenomenon is both a strategic response to, and an ethically compromised reaction to, stakeholder pressure (Long et al. 2025).

This study investigates EM, which refers to using accepted accounting measures to manipulate reported earnings, by analyzing the correlation in the context of HNTFs. Under intense attention and pressure, firms may engage in more EM actions that present unclear financial performance to mislead stakeholders. Such manipulation severely undermines principles of accountability and transparency and ultimately erodes stakeholder trust. The findings highlight a complex balance among corporate behavior, stakeholder expectations, and financial strategies, raising ethical concerns.

5.2 | Theoretical, Methodological, and Practical Implications

5.2.1 | Theoretical Implications

This study makes several distinct theoretical contributions. By integrating agency theory with instrumental stakeholder theory, this study provides a theoretical framework explaining why and under what conditions CSR becomes positively associated with EM—specifically answering the concern that the nature of the CSR-EM relationship in HNTFs. The theoretical synthesis reveals how external pressures may cause CSR to become a symbolic/instrumental tool for legitimizing financial reporting discretion (Seele and Lock 2015; Westphal 2023; García Lara et al. 2025), apart from a potential substantive/genuine purpose. Using agency and instrumental stakeholder theories, this study frames the ethical issues of the CSR-EM relationship. CSR will not fix EM; instead, it will be used to obscure it, violating principles of transparency that undermine the trust supporting the corporate-social contract. From both an ethical/stakeholder and an economic/managerial standpoint, this study highlights the importance of governance and ethical CSR practices, emphasizing the connection between CSR and economic self-interest (Greenwood and Islam 2025). Further, this study advances instrumental stakeholder theory by demonstrating how media attention—theorized as a moderating variable—paradoxically amplifies rather than constrains the symbolic/instrumental use of CSR. This challenges conventional views of media as a purely disciplinary force and establishes its dual role as both monitor and motivator of strategic impression management.

5.2.2 | Methodological Implications

The research design offers significant methodological advancements for studying the complex CSR-EM relationship. By focusing on HNTFs, a policy-sensitive, innovation-driven sector previously overlooked in CSR-EM literature, this study establishes an empirical context that magnifies the visibility of strategic corporate behaviors. This sampling approach enables clearer observation of how institutional pressures influence the CSR-EM relationship. Also, this study introduces a multidimensional ESG framework, providing theoretical precision by revealing that the CSR-EM relationship manifests primarily in the Social and Governance dimensions. This theoretical refinement moves beyond treating CSR as a monolithic construct and specifies the boundary conditions under which instrumentalization occurs.

5.2.3 | Practical Implications

By analyzing the connection between the ESG aspects of CSR and EM in HNTFs, this study emphasizes the necessity to integrate ESG oversight into financial control systems. This study reveals a serious risk.

To achieve short-term financial profits without a commitment to ethical or sustainable development, firms may exploit CSR measures to conceal opportunistic actions, such as EM, when public scrutiny increases. The misuse of CSR breaches its core ethical principles of transparency, accountability, and stakeholder engagement, which can undermine stakeholder trust and firm value.

Therefore, for HNTF executives, this study highlights the need to integrate ESG oversight into financial control systems. To promote substantive/genuine CSR and reduce ethical risks, managers should establish specialized CSR training programs for employees. These programs clarify the firm's ethical objectives and sustainability commitments, helping to prevent opportunistic conduct and encourage a culture of ethical responsibility. Consistent and credible CSR disclosures improve organizational transparency and stakeholder trust. Formal reporting procedures enhance ethical accountability, reduce information asymmetries, and limit unnoticed EM. Active stakeholder dialogue helps develop focused CSR strategies that meet actual social expectations. Ethical CSR engagement is more probable when stakeholder concerns are meaningfully incorporated into decision-making, rather than treated superficially for image purposes. Dedicated CSR disclosure units can systematically and ethically manage sustainable communication, aligning CSR narratives with real performance and reducing the risk of CSR being used as a pretense. This study highlights the importance of ethical media management, which ensures media coverage incentivizes substantive/genuine CSR rather than permitting image-driven manipulation. Firms should adopt ethical media strategies that emphasize substance over appearance. Investors should critically evaluate CSR claims and avoid the 'herding effect' from media narratives, making ethical investment choices that reward authentic CSR (Jiang and Kim 2015).

Also, corporate governance faces dual effects from media attention because it functions as both an outside regulatory force and a tool for managers to achieve strategic goals. The increased transparency requirements from media scrutiny help prevent obvious misconduct but companies in visible sectors such as technology might use this to present fake compliance efforts. For practitioners and investors, this study suggests that practical red flags of symbolic/instrumental CSR include: (i) CSR surges around periods of earnings pressure/media attention; (ii) disclosure emphasis not matched by operational KPIs; (iii) KPI designs with high discretion/low auditability. Conversely, assured, persistent, and capex-anchored CSR is more likely to be genuine.

For scholars, when interpreting CSR–EM links, distinguish substantive/genuine vs. symbolic/instrumental CSR using observable proxies: (i) multi-year persistence of CSR investments; (ii) external assurance of ESG disclosures; (iii) alignment between narrative claims and hard operational metrics/capex; (iv) absence of severe controversies. Additionally, scholars are encouraged to explore under-examined moderators—such as board characteristics, regional institutional differences, and executive compensation structures—and to conduct cross-country comparative analyzes to further clarify the boundary conditions of this relationship.

The implications enable better clarification of CSR's dual role as a mechanism for sustainable value creation and, if misused, a potential cover for unethical financial practices. Therefore, ethical integrity must be central to CSR strategy formulation, especially in high-visibility contexts. By implementing the recommended managerial practices, firms can strengthen the alignment between ethical conduct, financial reporting, and sustained stakeholder benefits.

5.3 | Limitations of the Study

This study is not without its limitations.

First, there are limitations of variable measurement. The only way EM is assessed in this study is through DA. Real EM can be applied in future studies to quantify EM and examine the connections between accrual-based, real EM, and CSR, to expand the body of existing literature. This study acknowledges the conceptual and empirical boundaries of using ESG scores as a proxy for CSR engagement. The research recognizes that ESG scores function as a limited tool for measuring CSR engagement because they represent only external reporting and visibility of corporate social performance. The metrics successfully measure CSR disclosure but they fail to identify between substantive/genuine commitment and symbolic portrayal. The study demonstrates that researchers need to develop specific definitions and measurement approaches for substantive (genuine) and symbolic (instrumental) CSR in their future investigations. A particularly promising direction lies in disentangling two distinct manifestations of CSR decoupling: greenwashing, which involves overstating environmental stewardship, and brownwashing, which refers to obscuring social or ethical failures (Velte 2025). Although both phenomena originate from a symbolic-substantive decoupling logic (Mahoney et al. 2013), their distinct motivational antecedents, stakeholder targeting mechanisms, and potential differential effects on corporate behaviors such as EM remain empirically unexamined in our framework and represent a critical avenue for subsequent inquiry.

Second, during the 2022–2023 period, the Chinese government enacted a suite of supportive policies aimed at HNTFs. However, the full extent of the effectiveness and long-term influence of these strategies on corporate behavior remains to be determined, as the pertinent data is still in the process of compilation. It is expected that these measures will have a measurable impact on the areas of CSR and EM. Further temporal observation is required to assess these developments comprehensively. Consequently, this study elects to exclude data from the 2022–2023 period from its analytical scope. This choice is motivated by the need to ensure the accuracy and reliability of the study's outcomes. Subsequent research could extend the data analysis beyond 2022 to evaluate the continuous effects of these policies.

Third, this investigation focuses on Chinese HNTFs as a case study to explore the CSR-EM link. Future studies can investigate the differences between HNTFs and other listed firms or examine the differences in CSR-EM between HNTFs within both emerging and advanced economies. In this study, HNTFs are regarded as a homogeneous category, and their industry attributes have not been distinguished yet, such as the possible heterogeneity between biotechnology firms and software firms in CSR selection and EM mode, which can be further analyzed in future research.

Fourth, the empirical design deliberately limits the analysis to the unidirectional effect of CSR on EM practices. This directional focus stems from both theoretical precedence and methodological prioritization. Contemporary scholarship predominantly conceptualizes CSR as a strategic antecedent influencing managerial financial reporting decisions (e.g., Buertey et al. 2020; Khanchel and Lassoued 2024; Alsaadi 2025), while our IVs approach specifically addresses endogeneity in this causal pathway. Consequently, the potential reverse causality, whereby EM behaviors subsequently shape CSR initiatives, remains outside the scope of the current investigation. Future research would benefit significantly from exploring the reverse relationship between EM and CSR.

Finally, the present investigation is confined to examining CSR-EM, with media attention incorporated solely as a moderating factor. While this study focuses on media attention, future research could include governance-related moderators to capture internal dynamics. Although prior research has examined the influence of CEO traits on corporate social behavior (Lee 2017; Chu et al. 2024; Le Breton-Miller et al. 2024; Lee et al. 2024; Lu et al. 2025), a comparative analysis between external factors (e.g., media attention) and internal governance mechanisms remains underexplored. Future research could substantially extend the theoretical framework by comparatively examining moderators such as ownership concentration (e.g., state vs. private holdings), CEO characteristics (e.g., overconfidence, tenure), or governance quality (e.g., board independence, audit committee effectiveness).

The research investigates CSR's instrumental application through theoretical frameworks to determine when firms would find it more attractive to link their CSR activities with EM under specific conditions (e.g., high visibility and short-term pressures). Future work could operationalize "substantive/genuine CSR" via assurance indicators, controversy indices, and multi-year persistence, and jointly test accrual-based and real EM to sharpen causal interpretation.

6 | Conclusion

This study examines the instrumental use of CSR in specific institutional contexts by analyzing the relationship between CSR and EM among HNTFs. Rather than presuming the inherent nature of CSR engagements, it investigates whether observable behavioral patterns emerge under distinct institutional pressures—including heightened financing needs, intense media scrutiny, and significant policy visibility. The empirical analysis reveals a robust positive association between CSR (proxied by ESG scores) and EM within this setting. This relationship is theoretically consistent with the "moral covering" hypothesis, wherein CSR serves as a reputational shield. The observed heterogeneity across ESG dimensions further reinforces this interpretation: the significant positive correlation in the more subjective and less verifiable Social (S) and Governance (G) domains—coupled with the null result in the typically more quantifiable Environmental (E) dimension—supports the view that firms strategically leverage discretionary CSR domains.

The findings are interpreted through the lens of agency theory, which posits that managers may prioritize short-term personal or organizational gains at the expense of long-term shareholder interests (Abner and Ferrer 2019). In the high-pressure context of HNTFs, CSR is frequently instrumentalized as a strategic tool (Seele and Lock 2015; Westphal 2023; García Lara et al. 2025) to enhance public image and divert stakeholder attention from financial reporting quality (Setiawan et al. 2019; Buertey et al. 2020; Zhang et al. 2021). Given their acute financing constraints, HNTFs exhibit heightened incentives to deploy highly visible CSR as a means of securing reputational capital, which can subsequently be used to mask EM activities (Prior et al. 2008; Abner and Ferrer 2019) aimed at meeting performance expectations (Tan 2014; Santos-Jaén et al. 2021; Zhang et al. 2021). The results delineate a bounded contingency: the CSR-EM relationship is not universally positive but emerges distinctly in institutional environments where external pressure exists. Taken together, the results should be read as context-contingent: while substantive/genuine CSR can deter opportunism, CSR may also be symbolic/instrumental repurposed under pressure (Seele and Lock 2015; Westphal 2023; García Lara et al. 2025), reinforcing the importance of verification, persistence, and alignment with real performance.

Instrumental stakeholder theory (Jones et al. 2018) further elucidates how media attention amplifies this relationship. While media attention can elevate reputational risks and performance pressures (Wu et al. 2016; Liu and Xu 2025)—prompting firms to engage in EM for impression management (Lewin and Warren 2025)—it also incentivizes symbolic CSR as a mechanism to maintain stakeholder support and legitimacy. This is particularly salient in HNTFs, where high visibility and innovation-driven risks intensify the temptation to adopt decoupled CSR as a strategic façade. This study demonstrates the necessarily complex relationship between CSR and economic interests.

The research shows that CSR functions as an impression management tool and financial concealment method when organizations use it strategically (Seele and Lock 2015; Westphal 2023; García Lara et al. 2025) under particular institutional frameworks, especially under high media attention. From an ethical viewpoint, it relates to dilemmas where CSR acts as a shield rather than a direct commitment, leading to harm to stakeholders and further trust violations. This highlights the need to examine CSR for both performance impact and ethical consequences. The research results demand increased focus from both academics and practitioners to monitor CSR practice verification and operational consistency, and long-term sustainability as CSR should maintain its ethical value instead of becoming a deceptive facade.

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References

Abner, R. A., and R. C. Ferrer. 2019. "The Role of Corporate Social Responsibility on the Link of Real Earnings Management With Financial Performance and Firm Value of Publicly Listed Companies in The Philippines." *Asia-Pacific Social Science Review* 19, no. 2: 15–29.

Alharasis, E. E. 2025. "Earnings Management and the Driving Force Behind Sustainability Reporting Disclosure in the Jordanian Banking Industry." *International Journal of Law and Management*. https://doi.org/10.1108/IJLMA-04-2025-0150.

Alhouti, S., C. M. Johnson, and B. B. Holloway. 2016. "Corporate Social Responsibility Authenticity: Investigating Its Antecedents and Outcomes." *Journal of Business Research* 69, no. 3: 1242–1249. https://doi.org/10.1016/j.jbusres.2015.09.007.

Alsaadi, A. 2025. "Corporate Social Responsibility, Financial Leverage, and Earnings Management: Evidence From an Emerging Market." *Borsa Istanbul Review* 25: S2214845025000870. https://doi.org/10.1016/j.bir.2025.06.005.

Anderson, M., S. Hyun, and H. Warsame. 2024. "Corporate Social Responsibility, Earnings Management and Firm Performance: Evidence From Panel VAR Estimation." *Review of Quantitative Finance and Accounting* 62, no. 1: 341–364. https://doi.org/10.1007/s11156-023-01203-x.

Belgasem-Hussain, A. A., and Y. I. Hussaien. 2023. "Earnings Management as an Ethical Issue in View of Kohlberg's Theory of Moral Reasoning." *Journal of Financial Crime* 30, no. 2: 522–535. https://doi.org/10.1108/JFC-11-2019-0138.

Berg, F., J. F. Kölbel, and R. Rigobon. 2022. "Aggregate Confusion: The Divergence of ESG Ratings." *Review of Finance* 26, no. 6: 1315–1344. https://doi.org/10.1093/rof/rfac033.

Borghesi, R., J. F. Houston, and A. Naranjo. 2014. "Corporate Socially Responsible Investments: CEO Altruism, Reputation, and Shareholder Interests." *Journal of Corporate Finance* 26: 164–181. https://doi.org/10.1016/j.jcorpfin.2014.03.008.

Borralho, J. M., R. Hernández-Linares, D. Gallardo-Vázquez, and I. Choban De Sousa Paiva. 2022. "Environmental, Social and Governance Disclosure's Impacts on Earnings Management: Family Versus Non-Family Firms." *Journal of Cleaner Production* 379: 134603. https://doi.org/10.1016/j.jclepro.2022.134603.

Brahem, E., F. Depoers, and F. Lakhal. 2022. "Corporate Social Responsibility and Earnings Quality in Family Firms." *Journal of Applied Accounting Research* 23, no. 5: 1114–1134. https://doi.org/10.1108/JAAR-05-2021-0139.

Buertey, S., E.-J. Sun, J. S. Lee, and J. Hwang. 2020. "Corporate Social Responsibility and Earnings Management: The Moderating Effect of Corporate Governance Mechanisms." *Corporate Social Responsibility and Environmental Management* 27, no. 1: 256–271. https://doi.org/10.1002/csr.1803.

Callery, P. J. 2024. "Strategic Motivations for Corporate Social Responsibility: Profitability or Legitimacy?" *Journal of Business Economics* 94, no. 6: 947–974. https://doi.org/10.1007/s11573-024-01193-9.

Carroll, A. B. 1999. "Corporate Social Responsibility: Evolution of a Definitional Construct." *Business and Society* 38, no. 3: 268–295. https://doi.org/10.1177/000765039903800303.

Carroll, A. B. 2015. "Corporate Social Responsibility." *Organizational Dynamics* 44, no. 2: 87–96. https://doi.org/10.1016/j.orgdyn.2015.02.002.

Chava, S. 2014. "Environmental Externalities and Cost of Capital." *Management Science* 60, no. 9: 2223–2247. https://doi.org/10.1287/mnsc.2013.1863.

Chen, M.-S., J.-H. Chou, and Y.-J. Chen. 2024. "Media Attention, ESG Performance and Firm Value: Evidence From Taiwan." *International Review of Accounting, Banking and Finance* 16, no. 4: 1–19.

Cheng, B., I. Ioannou, and G. Serafeim. 2014. "Corporate Social Responsibility and Access to Finance." *Strategic Management Journal* 35, no. 1: 1–23. https://doi.org/10.1002/smj.2131.

Chih, H.-L., C.-H. Shen, and F.-C. Kang. 2008. "Corporate Social Responsibility, Investor Protection, and Earnings Management: Some International Evidence." *Journal of Business Ethics* 79, no. 1–2: 179–198. https://doi.org/10.1007/s10551-007-9383-7.

Choi, H., B. Choi, and J. Byun. 2018. "The Relationship Between Corporate Social Responsibility and Earnings Management: Accounting for Endogeneity." *Investment Management and Financial Innovations* 15, no. 4: 69–84. https://doi.org/10.21511/imfi.15(4).2018.06.

Chollet, P., and B. W. Sandwidi. 2018. "CSR Engagement and Financial Risk: A Virtuous Circle? International Evidence." *Global Finance Journal* 38: 65–81. https://doi.org/10.1016/j.gfj.2018.03.004.

Chu, X., Y. Bai, and C. Li. 2024. "The Dark Side of Firms' Green Technology Innovation on Corporate Social Responsibility: Evidence From China." *Journal of Business Ethics* 195, no. 1: 47–66. https://doi.org/10.1007/s10551-023-05556-0.

De Pilla, L. H. L., A. Peci, and R. D. O. Leite. 2025. "Is the State a Socially Responsible Shareholder? State-Owned Enterprises, Political Ideology, and Corporate Social Performance." *Journal of Business Ethics* 197, no. 2: 289–309. https://doi.org/10.1007/s10551-024-05751-7.

Dechow, P., W. Ge, and C. Schrand. 2010. "Understanding Earnings Quality: A Review of the Proxies, Their Determinants and Their Consequences." *Journal of Accounting and Economics* 50, no. 2–3: 344–401. https://doi.org/10.1016/j.jacceco.2010.09.001.

Dechow, P. M., R. G. Sloan, and A. P. Sweeney. 1995. "Detecting Earnings Management." *Accounting Review* 70, no. 2: 193–225.

Deng, Y., T. S. Ong, and R. Senik. 2024. "Trick or Treat? A Bibliometric Literature Review of Corporate Social Responsibility and Earnings Management." *Corporate Social Responsibility and Environmental Management* 31, no. 5: 4361–4383. https://doi.org/10.1002/csr.2806.

Dhaliwal, D. S., O. Z. Li, A. Tsang, and Y. G. Yang. 2011. "Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting." *Accounting Review* 86, no. 1: 59–100. https://doi.org/10.2308/accr.00000005.

Di Vaio, A., M. Chhabra, A. Zaffar, and D. Balsalobre-Lorente. 2025. "Accounting and Accountability in the Transition to Zero-Carbon Energy for Climate Change: A Systematic Literature Review." *Business Strategy and the Environment* 34, no. 5: 5925–5946. https://doi.org/10.1002/bse.4282.

Di Vaio, A., R. Hassan, M. Chhabra, E. Arrigo, and R. Palladino. 2022. "Sustainable Entrepreneurship Impact and Entrepreneurial Venture Life Cycle: A Systematic Literature Review." *Journal of Cleaner Production* 378: 134469. https://doi.org/10.1016/j.jclepro.2022.134469.

Di Vaio, A., A. Zaffar, M. Chhabra, and D. Balsalobre-Lorente. 2024. "Carbon Accounting and Integrated Reporting for Net-Zero Business Models Towards Sustainable Development: A Systematic Literature Review." *Business Strategy and the Environment* 33, no. 7: 7216–7240. https://doi.org/10.1002/bse.3863.

Diem, N. P. N., and L. T. Hiep. 2023. "The Impact of Corporate Social Responsibilities on Earnings Management: Evidence From Vietnam." *International Journal of Professional Business Review* 8, no. 2: e01065. https://doi.org/10.26668/businessreview/2023.v8i2.1065.

Duan, W., A. Khurshid, A. Rauf, and A. C. Calin. 2022. "Government Subsidies' Influence on Corporate Social Responsibility of Private Firms in a Competitive Environment." *Journal of Innovation and Knowledge* 7, no. 2: 100189. https://doi.org/10.1016/j.jik.2022.100189.

Ehsan, S., M. Nurunnabi, S. Tahir, and M. H. Hashmi. 2020. "Earnings Management: A New Paradigm of Corporate Social Responsibility." *Business and Society Review* 125, no. 3: 349–369. https://doi.org/10.1111/basr.12198.

Ehsan, S., A. Tariq, M. S. Nazir, et al. 2022. "Nexus Between Corporate Social Responsibility and Earnings Management: Sustainable or Opportunistic." *Managerial and Decision Economics* 43, no. 2: 478–495. https://doi.org/10.1002/mde.3396.

Elias, R. Z. 2002. "Determinants of Earnings Management Ethics Among Accountants." *Journal of Business Ethics* 40: 33–45.

Faisal, F., A. R. Prasetya, A. Chariri, and H. Haryanto. 2018. "The Relationship Between Corporate Social Responsibility Disclosure and Earnings Management: Is It a Complement Mechanism or a Substitute Mechanism?" *International Journal of Business Governance and Ethics* 13, no. 1: 1–14. https://doi.org/10.1504/IJBGE.2018.095411.

Fowler, D. 2023. "Ethical Implications of Deceptive Earnings Management Practices." *Business Ethics and Leadership* 7, no. 3: 84–96. https://doi.org/10.61093/bel.7(3).84-96.2023.

Freeman, R. E. 1984. *Strategic Management: A Stakeholder Approach*. Pitman.

Gaio, C., T. Gonçalves, and M. V. Sousa. 2022. "Does Corporate Social Responsibility Mitigate Earnings Management?" *Management Decision* 60, no. 11: 2972–2989. https://doi.org/10.1108/MD-05-2021-0719.

García Lara, J. M., B. García Osma, I. Gazizova, and A. Khalilov. 2025. "Demand-Driven Corporate Social Responsibility: Symbolic Versus Substantive Change After Environmental Disasters." *Journal of Corporate Finance* 94: 102816. https://doi.org/10.1016/j.jcorpfin.2025.102816.

García-Sánchez, I., N. Hussain, S. A. Khan, and J. Martínez-Ferrero. 2020. "Managerial Entrenchment, Corporate Social Responsibility, and Earnings Management." *Corporate Social Responsibility and Environmental Management* 27, no. 4: 1818–1833. https://doi.org/10.1002/csr.1928.

Gonçalves, T., C. Gaio, and A. Ferro. 2021. "Corporate Social Responsibility and Earnings Management: Moderating Impact of Economic Cycles and Financial Performance." *Sustainability* 13, no. 17: 9969. https://doi.org/10.3390/su13179969.

Greenwood, M., and G. Islam. 2025. "Contributing to Business Ethics Though Thick Conceptualization." *Journal of Business Ethics* 196, no. 3: 495–498. https://doi.org/10.1007/s10551-024-05896-5.

Guldiken, O., C. Tupper, A. Nair, and H. Yu. 2017. "The Impact of Media Coverage on IPO Stock Performance." *Journal of Business Research* 72: 24–32. https://doi.org/10.1016/j.jbusres.2016.11.007.

Guo, Z., K. C. Chan, and J. Huang. 2018. "Can Media Coverage Restrain Executive Empire Building and Pursuit of a Quiet Life? Evidence From China." *International Review of Economics and Finance* 56: 547–563. https://doi.org/10.1016/j.iref.2017.12.009.

Hamza, S., and A. Jarboui. 2022. "CSR or Social Impression Management? Tone Management in CSR Reports." *Journal of Financial Reporting and Accounting* 20, no. 3/4: 599–617. https://doi.org/10.1108/JFRA-04-2020-0115.

Han, H., and X. Gu. 2021. "Linkage Between Inclusive Digital Finance and High-Tech Enterprise Innovation Performance: Role of Debt and Equity Financing." *Frontiers in Psychology* 12: 814408. https://doi.org/10.3389/fpsyg.2021.814408.

Hawn, O., and I. Ioannou. 2016. "Mind the Gap: The Interplay Between External and Internal Actions in the Case of Corporate Social Responsibility." *Strategic Management Journal* 37, no. 13: 2569–2588. https://doi.org/10.1002/smj.2464.

Healy, P. M., and J. M. Wahlen. 1999. "A Review of the Earnings Management Literature and Its Implications for Standard Setting." *Accounting Horizons* 13, no. 4: 365–383. https://doi.org/10.2308/acch.1999.13.4.365.

Hong, Y., and M. L. Andersen. 2011. "The Relationship Between Corporate Social Responsibility and Earnings Management: An Exploratory Study." *Journal of Business Ethics* 104, no. 4: 461–471. https://doi.org/10.1007/s10551-011-0921-y.

Jamali, D. 2008. "A Stakeholder Approach to Corporate Social Responsibility: A Fresh Perspective Into Theory and Practice." *Journal of Business Ethics* 82, no. 1: 213–231. https://doi.org/10.1007/s10551-007-9572-4.

Javed, A., and H. Ahmad. 2020. "Moderating Effect of Earnings Management on Relationship Between Corporate Social Responsibility and Financial Performance." *International Journal of Advanced Science and Technology* 29, no. 8: 474–486.

Jensen, C., and H. Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics* 3: 305–360.

Jian, J., K. He, Y. Liu, and Y. Sun. 2023. "Corporate Social Responsibility: Opportunistic Behavior Under Earnings Management?" *Asia-Pacific Journal of Accounting and Economics* 31: 247–268. https://doi.org/10.1080/16081625.2023.2170891.

Jiang, F., and K. A. Kim. 2015. "Corporate Governance in China: A Modern Perspective." *Journal of Corporate Finance* 32: 190–216. https://doi.org/10.1016/j.jcorpfin.2014.10.010.

Jizi, M. I., A. Salama, R. Dixon, and R. Stratling. 2014. "Corporate Governance and Corporate Social Responsibility Disclosure: Evidence From the US Banking Sector." *Journal of Business Ethics* 125, no. 4: 601–615. https://doi.org/10.1007/s10551-013-1929-2.

Jones, T. M. 1995. "Instrumental Stakeholder Theory: A Synthesis of Ethics and Economics." *Academy of Management Review* 20, no. 2: 404. https://doi.org/10.2307/258852.

Jones, T. M., J. S. Harrison, and W. Felps. 2018. "How Applying Instrumental Stakeholder Theory Can Provide Sustainable Competitive Advantage." *Academy of Management Review* 43, no. 3: 371–391. https://doi.org/10.5465/amr.2016.0111.

Jung, M. J., J. P. Naughton, A. Tahoun, and C. Wang. 2018. "Do Firms Strategically Disseminate? Evidence From Corporate Use of Social Media." *Accounting Review* 93, no. 4: 225–252. https://doi.org/10.2308/accr-51906.

Kang, K., X. Luan, W. Shen, Y. Ma, and X. Wei. 2020. "The Strategies of the Poverty-Alleviation Supply Chain With Government Subsidies and Cost Sharing: Government-Led or Market-Oriented?" *Sustainability* 12, no. 10: 4050. https://doi.org/10.3390/su12104050.

Khanchel, I., and N. Lassoued. 2024. "Is It Hard to Be Different During the COVID-19 Crisis? Investigating the Relationship Between Corporate Social Responsibility and Earnings Management." *International Journal of Ethics and Systems* 40, no. 1: 17–44. https://doi.org/10.1108/IJOES-05-2022-0102.

Kim, J. H. 2019. "Multicollinearity and Misleading Statistical Results." *Korean Journal of Anesthesiology* 72, no. 6: 558–569. https://doi.org/10.4097/kja.19087.

Kim, Y., M. S. Park, and B. Wier. 2012. "Is Earnings Quality Associated With Corporate Social Responsibility?" *Accounting Review* 87, no. 3: 761–796. https://doi.org/10.2308/accr-10209.

Kluijtmans, T., K. Meyfroodt, and S. Crucke. 2024. "Doing Good and Doing Well? CSR Climate as a Driver of Team Empowerment and Team Performance." *Journal of Business Ethics* 195, no. 3: 599–614. https://doi.org/10.1007/s10551-024-05678-z.

Kolsi, M. C., A. Al-Hiyari, and K. Hussainey. 2022. "Does Environmental, Social, and Governance Performance Mitigate Earnings Management Practices? Evidence From US Commercial Banks." *Environmental Science and Pollution Research* 30, no. 8: 20386–20401. https://doi.org/10.1007/s11356-022-23616-2.

Le Breton-Miller, I., D. Miller, Z. Tang, and X. Xu. 2024. "CEO Religion and Corporate Social Responsibility: A Socio-Behavioral Model." *Journal of Business Ethics* 195, no. 1: 167–189. https://doi.org/10.1007/s10551-024-05650-x.

Lee, D. 2017. "Corporate Social Responsibility and Management Forecast Accuracy." *Journal of Business Ethics* 140, no. 2: 353–367. https://doi.org/10.1007/s10551-015-2713-2.

Lee, H.-H., W. Liang, Q.-N. Tran, and Q.-T. Truong. 2024. "Do Old Board Directors Promote Corporate Social Responsibility?" *Journal of Business Ethics* 195, no. 1: 67–93. https://doi.org/10.1007/s10551-024-05681-4.

Lewin, L. D., and D. E. Warren. 2025. "Hypocrites! Social Media Reactions and Stakeholder Backlash to Conflicting CSR Information." *Journal of Business Ethics* 196, no. 2: 419–437. https://doi.org/10.1007/s10551-024-05700-4.

Li, C., M. Wu, and W. Huang. 2023. "Environmental, Social, and Governance Performance and Enterprise Dynamic Financial Behavior: Evidence From Panel Vector Autoregression." *Emerging Markets Finance and Trade* 59, no. 2: 281–295. https://doi.org/10.1080/1540496X.2022.2096435.

Li, D., L. Xin, X. Chen, and S. Ren. 2017. "Corporate Social Responsibility, Media Attention and Firm Value: Empirical Research on Chinese Manufacturing Firms." *Quality and Quantity* 51, no. 4: 1563–1577. https://doi.org/10.1007/s11135-016-0352-z.

Li, Z., B. Liu, and Y. Liu. 2023. "Does the Presentation Reform of R&D Expenses in China Ease Financial Constraints in Corporate Innovation?" *Journal of International Financial Management and Accounting* 34: 12169. https://doi.org/10.1111/jifm.12169.

Liu, M., Y. Shi, C. Wilson, and Z. Wu. 2017. "Does Family Involvement Explain Why Corporate Social Responsibility Affects Earnings Management?" *Journal of Business Research* 75: 8–16. https://doi.org/10.1016/j.jbusres.2017.02.001.

Liu, X., and H. Xu. 2025. "Going Green With Digital Media Attention: Evidence From Chinese A-Share Listed Companies' Environmental Performance." *Research in International Business and Finance* 73: 102617. https://doi.org/10.1016/j.ribaf.2024.102617.

Long, L., C. Wang, and M. Zhang. 2025. "Does Social Media Pressure Induce Corporate Hypocrisy? Evidence of ESG Greenwashing From China." *Journal of Business Ethics* 197, no. 2: 311–338. https://doi.org/10.1007/s10551-024-05747-3.

Lu, Q., G. Wan, and L. Xu. 2025. "Generalist Versus Specialist CEOs and the Scope of Corporate Social Responsibility." *Journal of Business Ethics* 197, no. 1: 143–158. https://doi.org/10.1007/s10551-024-05733-9.

Luo, D., J. Yan, and Q. Yan. 2023. "The Duality of ESG: Impact of Ratings and Disagreement on Stock Crash Risk in China." *Finance Research Letters* 58: 104479. https://doi.org/10.1016/j.frl.2023.104479.

Luo, W., Z. Tian, X. Fang, and M. Deng. 2024. "Can Good ESG Performance Reduce Stock Price Crash Risk? Evidence From Chinese Listed Companies." *Corporate Social Responsibility and Environmental Management* 31, no. 3: 1469–1492. https://doi.org/10.1002/csr.2646.

Mahoney, L. S., L. Thorne, L. Cecil, and W. LaGore. 2013. "A Research Note on Standalone Corporate Social Responsibility Reports: Signaling or Greenwashing?" *Critical Perspectives on Accounting* 24, no. 4–5: 350–359. https://doi.org/10.1016/j.cpa.2012.09.008.

Mahrani, M., and N. Soewarno. 2018. "The Effect of Good Corporate Governance Mechanism and Corporate Social Responsibility on Financial Performance With Earnings Management as Mediating Variable." *Asian Journal of Accounting Research* 3, no. 1: 41–60. https://doi.org/10.1108/AJAR-06-2018-0008.

Marquis, C., M. W. Toffel, and Y. Zhou. 2016. "Scrutiny, Norms, and Selective Disclosure: A Global Study of Greenwashing." *Organization Science* 27, no. 2: 483–504. https://doi.org/10.1287/orsc.2015.1039.

Martínez-Ferrero, J., S. Banerjee, and I. M. García-Sánchez. 2016. "Corporate Social Responsibility as a Strategic Shield Against Costs of Earnings Management Practices." *Journal of Business Ethics* 133, no. 2: 305–324. https://doi.org/10.1007/s10551-014-2399-x.

Michelon, G., S. Pilonato, and F. Ricceri. 2015. "CSR Reporting Practices and the Quality of Disclosure: An Empirical Analysis." *Critical Perspectives on Accounting* 33: 59–78. https://doi.org/10.1016/j.cpa.2014.10.003.

Miller, G. S. 2006. "The Press as a Watchdog for Accounting Fraud." *Journal of Accounting Research* 44, no. 5: 1001–1033. https://doi.org/10.1111/j.1475-679X.2006.00224.x.

Nagy, M., K. Valaskova, and P. Durana. 2022. "The Effect of CSR Policy on Earnings Management Behavior: Evidence From Visegrad Publicly Listed Enterprises." *Risks* 10, no. 11: 203. https://doi.org/10.3390/risks10110203.

Orazalin, N., C. Kuzey, A. Uyar, and A. S. Karaman. 2024. "Does CSR Contribute to the Financial Sector's Financial Stability? The Moderating Role of a Sustainability Committee." *Journal of Applied Accounting Research* 25, no. 1: 105–125. https://doi.org/10.1108/JAAR-12-2022-0329.

Pasko, O., F. Chen, N. Proskurina, R. Mao, V. Gryn, and I. Pushkar. 2021. "Are Corporate Social Responsibility Active Firms Less Involved in Earnings Management? Empirical Evidence From China." *Business: Theory and Practice* 22, no. 2: 504–516. https://doi.org/10.3846/btp.2021.14940.

Patro, S., L. Y. Zhang, and R. Zhao. 2018. "Director Tenure and Corporate Social Responsibility: The Tradeoff Between Experience and Independence." *Journal of Business Research* 93: 51–66. https://doi.org/10.1016/j.jbusres.2018.08.033.

Pedersen, L. H., S. Fitzgibbons, and L. Pomorski. 2021. "Responsible Investing: The ESG-Efficient Frontier." *Journal of Financial Economics* 142, no. 2: 572–597. https://doi.org/10.1016/j.jfineco.2020.11.001.

Prior, D., J. Surroca, and J. A. Tribó. 2008. "Are Socially Responsible Managers Really Ethical? Exploring the Relationship Between Earnings Management and Corporate Social Responsibility." *Corporate Governance: An International Review* 16, no. 3: 160–177. https://doi.org/10.1111/j.1467-8683.2008.00678.x.

Quan, X. F., S. N. Wu, and H. Y. Yin. 2015. "Corporate Social Responsibility and Stock Price Crash Risk: Self-Interest Tool or Value Strategy." *Economic Research* 11: 49–64.

Ren, J., P. Wu, and L. Hou. 2024. "Social Media Attention and Corporate Greenwashing: Evidence From China." *Corporate Social Responsibility and Environmental Management* 31, no. 6: 5446–5465. https://doi.org/10.1002/csr.2875.

Santos-Jaén, J. M., A. León-Gómez, and J. Serrano-Madrid. 2021. "The Effect of Corporate Social Responsibility on Earnings Management: Bibliometric Review." *International Journal of Financial Studies* 9, no. 4: 68. https://doi.org/10.3390/ijfs9040068.

Sarfraz, M., S. G. M. Shah, L. Ivascu, and M. A. A. Qureshi. 2022. "Explicating the Impact of Hierarchical CEO Succession on Small-Medium Enterprises' Performance and Cash Holdings." *International Journal of Finance and Economics* 27, no. 2: 2600–2614. https://doi.org/10.1002/ijfe.2289.

Saunders, M., P. Lewis, and A. Thornhill. 2019. *Research Methods for Business Students*. 8th ed. Pearson.

Scholtens, B., and F. Kang. 2013. "Corporate Social Responsibility and Earnings Management: Evidence From Asian Economies." *Corporate Social Responsibility and Environmental Management* 20, no. 2: 95–112. https://doi.org/10.1002/csr.1286.

Seele, P., and I. Lock. 2015. "Instrumental and/or Deliberative? A Typology of CSR Communication Tools." *Journal of Business Ethics* 131, no. 2: 401–414. https://doi.org/10.1007/s10551-014-2282-9.

Setiawan, D., R. Prabowo, V. Arnita, and A. Wibawa. 2019. "Does Corporate Social Responsibility Affect Earnings Management? Evidence From the Indonesian Banking Industry." *Business: Theory and Practice* 20: 372–378. https://doi.org/10.3846/btp.2019.35.

Sial, M. S., Z. Chunmei, T. Khan, and V. K. Nguyen. 2018. "Corporate Social Responsibility, Firm Performance and the Moderating Effect of Earnings Management in Chinese Firms." *Asia-Pacific Journal of Business Administration* 10, no. 2–3: 184–199. https://doi.org/10.1108/APJBA-03-2018-0051.

Sino-Securities Index Information Service Company. 2022. "Sino-Securities ESG Rating Methodology V2.0."

Tan, Y. 2014. "Corporate Governance in the Banking Sector." In *Performance, Risk and Competition in the Chinese Banking Industry*, 39–64. Chandos Publishing (Elsevier).

Tata, J., and S. Prasad. 2015. "CSR Communication: An Impression Management Perspective." *Journal of Business Ethics* 132, no. 4: 765–778. https://doi.org/10.1007/s10551-014-2328-z.

Tyan, J., S.-C. Liu, C. Y.-Y. Lin, and T.-Y. Chang. 2025. "Unlocking the Connection Between Corporate Social Responsibility Strategy and Firm Performance: Unveiling Mediating and Moderating Effects." *Journal of Business Ethics* 197, no. 3: 597–611. https://doi.org/10.1007/s10551-024-05758-0.

Valentinov, V., and A. Hajdu. 2021. "Integrating Instrumental and Normative Stakeholder Theories: A Systems Theory Approach." *Journal of Organizational Change Management* 34, no. 4: 699–712. https://doi.org/10.1108/JOCM-07-2019-0219.

Velte, P. 2023. "Determinants and Consequences of Corporate Social Responsibility Decoupling—Status Quo and Limitations of Recent Empirical Quantitative Research." *Corporate Social Responsibility and Environmental Management* 30, no. 6: 2695–2717. https://doi.org/10.1002/csr.2538.

Velte, P. 2024. "Corporate Social Responsibility and Earnings Management: A Structured Literature Review With a Focus on Contextual Factors." *Corporate Social Responsibility and Environmental Management* 31, no. 6: 6000–6018. https://doi.org/10.1002/csr.2903.

Velte, P. 2025. "Corporate Social Responsibility (CSR) Decoupling and Tax Avoidance: Symbolic Use of Sustainable Boards in the

European Union?" *Corporate Social Responsibility and Environmental Management* 32, no. 3: 4179–4193. https://doi.org/10.1002/csr.3172.

Wang, L., Y. Lian, and J. Dong. 2022. "Study on the Impact Mechanism of ESG Performance on Corporate Value." *Securities Market Herald* 5: 23–24.

Wang, Y., and C. Marquis. 2025. "Does Product Market Competition Promote or Reduce Firms' Corporate Social Responsibility Behavior? How Stakeholder Attention Shapes Responsiveness to Stakeholders." *Journal of Business Ethics* 200: 867–896. https://doi.org/10.1007/s10551-024-05859-w.

Wang, Y., F. S. Wang, and S. H. I. Y. U. Liu. 2021. "The Influence of Executive Compensation Gap on Earnings Management From the Perspective of Media Supervision: Evidence From China." *Discrete Dynamics in Nature and Society* 2021: 1–10. https://doi.org/10.1155/2021/3203759.

Westphal, J. D. 2023. "Systemic Symbolic Management, Corporate Social Responsibility, and Corporate Purpose: A Cautionary Tale." *Strategy Science* 8, no. 2: 221–232. https://doi.org/10.1287/stsc.2023.0188.

Wickert, C., A. G. Scherer, and L. J. Spence. 2016. "Walking and Talking Corporate Social Responsibility: Implications of Firm Size and Organizational Cost." *Journal of Management Studies* 53, no. 7: 1169–1196. https://doi.org/10.1111/joms.12209.

Wooldridge, J. M. 2002. *Econometric Analysis of Cross Section and Panel Data*. Mit.

Wu, P., L. Gao, and X. Li. 2016. "Does the Reputation Mechanism of Media Coverage Affect Earnings Management?: Evidence From China." *Chinese Management Studies* 10, no. 4: 627–656. https://doi.org/10.1108/CMS-08-2016-0177.

Xu, W., and D. Qi. 2020. "Abnormal Tone in Management Earnings Forecast, Media Negative Coverage, and Insider Trading." *Asia-Pacific Journal of Accounting and Economics* 29: 1–25. https://doi.org/10.1080/16081625.2020.1808796.

Zhang, D., L. Pan, L. Liu, and H. Zeng. 2023. "Impact of Executive Pay Gap on Environmental, Social, and Governance Disclosure in China: Is There a Strategic Choice?" *Corporate Social Responsibility and Environmental Management* 30, no. 5: 2574–2589. https://doi.org/10.1002/csr.2503.

Zhang, K., A. A. M. Kassim, and Y. Guo. 2024. "Study on the Impact of ESG Performance on Corporate Value: Based on a Media Attention Perspective." *International Journal of Applied Economics, Finance and Accounting* 18, no. 2: 216–229. https://doi.org/10.33094/ijaefa.v18i2.1363.

Zhang, Z., and H. Chen. 2019. "Media Coverage and Impression Management in Corporate Social Responsibility Reports: Evidence From China." *Sustainability Accounting, Management and Policy Journal* 11, no. 5: 863–886. https://doi.org/10.1108/SAMPJ-10-2018-0293.

Zhang, Z., T. L. Yap, and J. Park. 2021. "Does Voluntary CSR Disclosure and CSR Performance Influence Earnings Management? Empirical Evidence From China." *International Journal of Disclosure and Governance* 18, no. 2: 161–178. https://doi.org/10.1057/s41310-021-00104-6.