

RESEARCH

Open Access



A pathway to local legitimacy: the impact of corporate governance on corporate social responsibility in *chaebol*-affiliated firms

Chune Young Chung¹, Hoje Jo² and Junyoun Lee^{3*} 

*Correspondence:
junlee@ajou.ac.kr

¹ School of Business
Administration, Chung-Ang
University, Seoul 06974, Korea

² Leavey School of Business,
Santa Clara University, Santa
Clara, CA 95053, USA

³ School of Business
Administration, Ajou University,
Suwon 16499, Korea

Abstract

Drawing on local legitimacy theory, which posits that firms seek acceptance and approval from their local community and stakeholders, we examine the effect of corporate governance (CG) quality on corporate social responsibility (CSR) activities in Korea. Enhancing CG quality and engaging in CSR activities are increasingly important for firms' long-term sustainability. Using the KEJI-CSR index and the KCGS CG score, we find that CG quality positively influences CSR activities. Specifically, if the CG quality score increases by one standard deviation, CSR improves by approximately 1.6–2.3% of the mean CSR score. Furthermore, the relationship between CG and CSR is stronger for business conglomerates (*chaebol*-affiliated firms), suggesting that sound CG practices can promote CSR activities more effectively when the interests of management and stakeholders are better aligned. This finding supports local legitimacy theory. Our findings are robust under various tests, including difference-in-differences analysis and propensity score matching. An interesting policy implication is that multinational enterprises or foreign investors should prioritize the CG quality of their local subsidiaries or investee firms. Better CG practices can enhance CSR activities, which are essential for long-term survival in local markets. This study, however, is limited to Korea and may not be generalizable to other emerging markets with different governance structures.

Keywords: Corporate social responsibility, Corporate governance, Local legitimacy theory, *Chaebol*, Electronic voting system, Difference-in-differences

Introduction

Corporate governance (CG) and corporate social responsibility (CSR) have become critical areas of study in the realm of international business, particularly for firms seeking long-term sustainability and legitimacy in local markets. The concept of local legitimacy in the international business literature emphasizes that “firms, in order to survive, need to comply with the rules and belief systems of the local stakeholder environment in which they operate” (Reimann et al. 2012; Hillman and Wan 2005). In this context, “local” refers specifically to the immediate geographical and sociopolitical environment in which a firm operates, which in this study is Korea.

Scholars also emphasize that MNEs increasingly need to consider local values and the social consequences of their activities (Gifford and Kestler 2008). Local legitimacy often takes the form of organizational policies and processes that reflect a firm's responsibility to act for the benefit of the local society, a concept encapsulated in corporate social responsibility (CSR) (Toffel et al. 2015; Wijen 2014). CSR is particularly relevant to firms' stakeholders, as it enhances labor rights and environmental standards (Greenhill et al. 2009; Prakash and Potoski 2007). Recent studies have investigated the influence of board diversity and foreign ownership on CSR activities (Beji et al. 2021; Joubert 2021; Tokas and Yadav 2023). Lawless (2024) also suggested that strong corporate governance can create a foundation for effective CSR. He further claims that good governance practices, such as transparency, ethical behavior, and accountability, are essential for implementing effective CSR programs.

However, few studies have specifically investigated how community-based chaebols establish and maintain legitimacy among local citizens and organizational leaders in their regions. This "local legitimacy" is a potentially complex concept in specific communities of Korea, which have undergone substantial economic growth and restructuring (Joh 2003; Nam and Jun 2011) and which remain riven by competing narratives of CSR development by business groups (Choi et al. 2018). However, certain countries may lack the formal and informal regulations or the institutional infrastructure required to promote CSR activities. In institutional contexts, known as institutional voids (Khanna and Palepu 1997, 2000; Khanna and Yafeh 2007), sound governance mechanisms at the firm level can reduce institutional voids and foster CSR engagement to improve the local legitimacy of a firm. Despite the recognized importance of CG and CSR, the mechanisms through which chaebols establish and maintain local legitimacy remain under-explored. Rapid economic growth and restructuring in Korea have led to a complex environment where business groups are often caught between competing narratives of CSR development (Choi et al. 2018). Furthermore, institutional voids—gaps in formal and informal regulations—pose significant challenges to effective CSR implementation (Khanna and Palepu 1997, 2000; Khanna and Yafeh 2007).¹ This study aims to fill these gaps by asking the following research questions: (1) How does CG quality influence CSR activities in the Korean context? (2) Does the relationship between CG and CSR differ between chaebol-affiliated firms and nonchaebol firms? (3) Does the adoption of an EVS impact the relationship between CG and CSR? (4) How has the 2012 Korean CG amendment affected the CG-CSR nexus?

By leveraging a dataset spanning from 2009 to 2017, we assess whether and to what extent CG practices influence CSR. Our research employs robust empirical methods, including difference-in-differences analysis and propensity score matching, to ensure the validity of our findings. Our findings indicate that a one standard deviation increase in the CGS leads to a 1.6–2.3% improvement in the mean CSR score. This

¹ Comparative institutional perspectives in international business literature (Jackson and Deeg 2008) similarly suggest that CSR may complement regulatory institutions, encouraging firms to engage in socially responsible behavior (Campbell 2007; Rathert 2016). However, studies on the institutional conditions in which CSR emerges due to corporate governance (CG) tend to be vague, particularly regarding whether and how CSR substitutes for or complements regulatory institutions (Matten and Moon 2008). CG refers to internal and external control mechanisms that minimize the conflicts of interest between managers and shareholders that may arise from the separation of control (by managers) and ownership (by shareholders; Baysinger and Hoskisson 1990; Berle and Means 1932; Shleifer and Vishny 1997). Thus, the different dimensions of CG structures and instruments may create conditions that can profoundly affect the nature and direction of CSR activities.

positive relationship is stronger in chaebol-affiliated firms, supporting the view that sound CG practices are essential for effective CSR engagement.

This study considers a unique institutional setting: the Korean market. The Korean market features several unique CG practices and CSR engagement trends. First, Korean firms tend to advance CSR activities (Chapple and Moon 2005; Choi et al. 2018), even though firms in emerging markets do not typically engage extensively in CSR activities. Moreover, stakeholders increasingly demand that firms protect their rights and fulfill their social responsibilities (Nam and Jun 2011). In response to these demands, corporate investment in CSR activities is growing in Korea (Sharma 2013), with managers becoming more aware of their social norms and duties (Choi et al. 2018). In particular, since the 1997 Asian financial crisis, government authorities and investors have pressured Korean firms to engage in CSR activities. For example, they compel firms to invest in CSR-related projects by improving corporate transparency (Choi and Aguilera 2009).

Although numerous studies have investigated the effects of CG mechanisms on CSR activities, empirical evidence regarding the relationship between CG and CSR remains inconclusive. Some scholars find that effective governance monitoring positively impacts CSR (Jo and Harjoto 2011, 2012; Kassinis and Vafeas 2002; Neubaum and Zahra 2006). Conversely, others maintain that effective monitoring negatively affects CSR (Arora and Dharwadkar 2011; Coffey and Fryxell 1991; Coffey and Wang 1998; Wang and Coffey 1992). Nevertheless, others claim that governance monitoring and CSR are unrelated (Graves and Waddock 1994).

Additionally, Choi et al. (2013) reported that firms voluntarily focus on CSR activities to enhance their social reputation. According to Choi et al. (2013), the 2010 *Corporate Community Relations White Book* published by the Federation of Korean Industries states that in 2000, the average corporate spending on social contributions amounted to USD 3.07 million, further increasing to USD 11.7 million in 2010. In 2010, firms spent an average of 4.8% of their operating income on community contributions. This average is approximately four times greater than that of US firms and twice that of Japanese firms.

Second, Korea has a unique *chaebol* system (see Appendix A for the top 30 *chaebol* groups in Korea) that substantially affects Korean firms' CG and CSR activities. After the 1997 Asian financial crisis, the government introduced dramatic changes to its economic policies and regulations regarding large *chaebols*, which were considered to be partly responsible for the crisis owing to their short-term decision-making and poor governance. According to Choi and Aguilera (2009), the government may address this issue by forcing *chaebols* to engage actively in CSR. Choi and Aguilera (2009) and Choi et al. (2018) revealed that *chaebols* have actively become involved in CSR since such active CSR engagement improved and restored their damaged reputations after the crisis. However, the *chaebol* system is still highly susceptible to corruption scandals. Korea's former president, Park Geun-Hye, was impeached and sentenced to 24 years in prison for bribery and abuse of power. Choi Soon-Sil, a long-term friend and mentor of President Park, allegedly used her relationship with Park to extort money and solicit contributions to foundations controlled by Park in exchange for favors from South Korea's largest *chaebols*. Most of the attention surrounding this scandal, known as "Choi-Soon-Sil-gate,"

can be attributed to the strangeness of Choi's relationship with the former president (Rubinfeld 2018; Wall Street Journal 2017a, b).

More recently, Jae-Yong Lee, head of the Samsung Group, was imprisoned twice and pardoned in 2022 because of the illegal succession of control rights, accounting fraud, tax evasion, and breach of duty. As a result, by first establishing a more transparent governance structure, Jae-Yong Lee creates a foundation that facilitates active engagement in CSR activities. This sequence highlights how improved CG practices can lead to more effective CSR initiatives, thereby enhancing visibility and legitimacy. Indeed, the Samsung Group established a corporate compliance monitoring committee headed by former Supreme Court justice in Korea to improve the internal governance system and obtain local legitimacy from Korean community members. In addition, Tae-won Choi, the current head of the SK group and the chairperson of the Korea Chamber of Commerce and Industry, was jailed twice because of economic crimes and was granted two clemencies from the government. He recognizes the importance of CSR and commits to CSR activities after he returns to business to obtain and maintain local legitimacy. Similarly, many chaebol heads, partially owing to their previous unethical behaviors, aim to engage more in CSR to enhance their local and social legitimacies (Chun et al. 2024). However, while these examples show that some managers drive CSR initiatives to enhance personal and organizational legitimacy, broader trends indicate that governance structures aligning various stakeholder interests are crucial in driving CSR engagement.²

On the basis of local legitimacy theory (Hillman and Wan 2005; Rathert 2016; Reimann et al. 2012), we examine the CG-CSR nexus in the Korean market, where CSR has become increasingly important (Chapple and Wan 2005; Choi et al. 2018) and where CG is receiving considerable attention from stakeholders (Choi and Aguilera 2009; Choi et al. 2018; Yanagimachi 2014; Lawless 2024). Considering the unique characteristics of the Korean market from the perspective of local legitimacy theory, we examine whether and to what extent CG practices influence CSR. We conducted empirical tests on 1,627 observations from 2009 to 2017. Our findings show that CG quality in a given year significantly positively affects CSR engagement in the following year. This finding is consistent with the view that effective CG promotes CSR activities, thus increasing a firm's long-term sustainability, and supports local legitimacy theory rather than agency theory (Jensen and Meckling 1976; Masulis and Reza 2015). Furthermore, the positive relationship between CG quality and CSR is more pronounced in chaebol-affiliated firms.

CG quality is defined via the Korea Corporate Governance Service (KCGS) score, which evaluates firms listed on the Korea Stock Exchange and KOSDAQ. The score is based on shareholder rights, board quality, disclosure practices, audit quality, and management oversight, with a total of 300 points. Higher scores indicate stronger

² Korean firms have recently adopted electronic voting systems (EVSs) to cast and count votes. In Korea, approximately 62% of shareholder meetings are held in and around Seoul on the second and third Fridays in March, which makes it difficult for firms to secure their voting rights and for shareholders to exercise their voting rights. The Korea Securities Depository introduced EVSs in 2010 to solve these issues. The Korea Securities Depository, established in 1974, is a comprehensive securities services company. As of 2017, it has safely secured up to KRW 4000 trillion (approximately USD 3.38 trillion) in securities, efficiently handled the settlements of securities transactions, and accurately exercised the rights of various securities. Firms can voluntarily adopt an EVS via the Korea Securities Depository to encourage minority shareholders to participate in general shareholder meetings. Thus, adopting an EVS to facilitate the participation of minority shareholders in the decision-making process of the firms can provide legitimacy to business processes, improve CG by promoting transparency, accountability, and shareholder engagement (Abdennadher et al. 2020), and subsequently promote CSR. That eventually provides local legitimacy (Hillman and Wan 2005; Reimann et al. 2012). Overall, EVS can contribute to efficient and effective corporate governance management and provide shareholders with a more accessible and transparent voting process.

governance. After examining the six subcategories of CG scores, we find that CG characteristics, including the board of directors, shareholder rights protection, and audit committees, have a more significant positive effect on CSR activities. Positive CG-CSR relationships are more pronounced for *chaebol*-affiliated firms, further supporting local legitimacy theory. This finding is consistent with the positive influence of better CG practices in firms with self-interested owner-managers, whose long-term perspectives do not necessarily coincide with those of other stakeholders. Regarding the effect of EVS on CSR activities, individual investors do not seem to voice their opinions on firms' CSR activities aggressively.

Our results regarding the use of alternative CG measures are robust. Furthermore, the endogeneity tests using the difference-in-differences (DiD) approach and propensity score matching corroborate our main findings. Our robust results are consistent with the proposition that effective CG practices align stakeholders' interests with those of managers and positively impact CSR. Our findings also highlight CG's critical role in CSR engagement in Korea's emerging economy, where financial systems offer limited legal protection for investors. Thus, the CG-CSR linkage has become increasingly important for firms' long-term sustainability and organizational legitimacy.

This study contributes to the literature in several ways. First, from the perspective of local legitimacy theory, this study highlights CG's important role in CSR engagement in Korea. In such markets, financial systems offer limited legal protection for outside investors, and corporate decision-making often lacks transparency. Thus, CSR has become increasingly important for firms' long-term sustainability and social legitimacy. Second, *chaebols* have received increased attention because of their documented poor business practices, such as tunneling (via related business groups) and cross-shareholding. However, despite the extensive research conducted on *chaebols*, to our knowledge, the current study is the first to use local legitimacy theory to understand the CSR-*chaebol*-EVS-CG nexus. Third, Korean regulators have made significant efforts to improve firm governance. Government authorities pressure firms to invest in CSR activities (Choi and Aguilera 2009; Kim et al. 2013). By using the 2012 amendment to the Korean Commercial Code as a quasinatural experiment and adopting a DiD approach, we demonstrate that government-induced CG enhancements significantly impact CSR activities. This approach helps mitigate the inherent CG-CSR endogeneity problem and reconfirms that CG is the main driver of CSR, supporting the premise of Lawless (2024).³ Adopting the propensity score matching approach to address the reverse causality between CGS and CSR further strengthens our results.

The remainder of this paper is organized as follows. Section "Related Literature and hypothesis development" presents a review of prior studies and the institutional background of the Korean market and discusses the development of our hypotheses. Section "Sample and research design" describes the sample data and research design, while Section "Empirical results" presents the empirical results. Section "Robustness checks" presents the results of the robustness tests, and Section "Conclusion" presents the conclusions of this study.

³ By introducing the EVS as a private governance effort, it is expected to increase the participation of minority shareholders. However, our results show that such participation does not necessarily lead firms to undertake long-term investment activities and thus may not positively impact their CSR actions. This finding is consistent with previous findings that minority shareholders' involvement could reduce management efficiency (Kim 2013).

Related literature and hypothesis development

Related literature

CG and CSR in the Korean market

Despite the increasing importance of CSR in Korea, few studies have documented the effects of CG practices on CSR activities. Notably, most existing research focuses predominantly on firm ownership structure as a dimension of CG. Oh et al. (2011) examine the relationship between institutional ownership and CSR in the Korean market and suggest that institutional monitoring positively influences firms' CSR activities. However, their study relies on a small, one-year sample, limiting the generalizability of their findings. Extending this work, Choi et al. (2013) find that CSR ratings are negatively correlated with earnings management, with this relationship being weaker for chaebols and firms with highly concentrated ownership. They suggested that firms might abuse CSR practices to conceal poor earnings quality. Furthermore, Choi et al. (2018) examine the relationships between business conglomerates and CSR as well as those between controlling shareholder ownership and CSR but do not focus on the broader impact of CG on CSR engagement. Prior studies do not appropriately address the inherent CG-CSR endogeneity issue or incorporate local legitimacy theory effectively.

Empirical evidence on the CG-CSR

Recent studies have continued to explore the dynamics between CG and CSR. Beji et al. (2021) investigated the influence of board diversity on CSR activities in French firms and reported that diversity, particularly in terms of gender and experience, is positively associated with greater CSR engagement. Their research emphasized the role of gender diversity in enhancing CSR performance. Similarly, Toka and Yadav (2023) examined the impact of foreign ownership on CSR activities and demonstrated that firms with higher foreign ownership are more likely to engage in CSR practices, driven by expectations and pressures from international stakeholders. Bhaskar et al. (2024) analyzed the impact of CEO duality on CSR activities and reported that separating the roles of CEO and board chairperson leads to more robust CSR engagement. You (2024) examined the role of social norms in CSR, finding that firms operating in regions with strong social norms regarding corporate responsibility tend to exhibit higher levels of CSR activities.

Theoretical perspectives on CG and CSR

A local organizational legitimacy perspective is crucial for studying the CG-CSR linkage. Managers of public corporations in Korea are increasingly aware of the need for local community and stakeholder approval—beyond mere legal compliance. Local legitimacy refers to the acceptance and approval of a firm's actions by its local community and stakeholders. This perspective is vital, as it highlights the unique sociopolitical and cultural environment that influences corporate behavior in Korea.

Organizational legitimacy, as defined by Suchman (1995), is "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions." Legitimacy, a central concept in organizational institutionalism, involves social relations and business practices such as CSR initiatives. To the extent that local legitimacy theory holds,

we postulate that Korean chaebol firms that improve their CG engage in CSR activities as responsible management tactics to obtain or regain organizational and local legitimacy.

Chaebol-affiliated firms are characterized by their complex ownership structures, family control, and significant influence over the Korean economy. These features can affect the CG-CSR relationship by creating unique challenges and opportunities for aligning management and stakeholder interests. Chaebols often face scrutiny regarding their governance practices, making CSR activities a strategic tool for improving their public image and gaining local legitimacy.

By reviewing these studies, we identified key gaps in understanding the CG-CSR relationship within the context of Korean chaebols. Our study aims to fill these gaps by providing empirical evidence on how CG quality impacts CSR activities in these firms. We build on prior studies by incorporating recent findings and addressing the endogeneity issue via advanced statistical methods. This approach allows us to contribute to the literature by offering a more nuanced understanding of the CG-CSR linkage and its implications for policy and practice.

Hypothesis development

Corporate governance (CG) plays a crucial role in shaping a firm's engagement in corporate social responsibility (CSR) activities. Effective CSR requires long-term efforts and substantial investment for firms to maintain sustainable relationships with stakeholders, interact consistently with local communities, and foster a productive long-term firm culture (Graves and Waddock 1994; Johnson and Greening 1999). Effective CG aligns the interests of shareholders and managers, focusing on long-term firm value rather than short-term gains. By promoting transparency, accountability, and ethical behavior, CG encourages managers to undertake CSR initiatives that benefit the firm in the long run, building sustainable relationships with stakeholders and enhancing the firm's reputation (Turban and Greening 1997). Firms engaging in CSR can decrease the risk of explicit claims and reduce potential conflicts of interest between stakeholders and managers (Hong and Kacperczyk 2009; Waddock and Graves 1997). Effective CG ensures that managers are accountable and that the firm's strategies align with stakeholder interests, minimizing conflicts and fostering trust and cooperation (Harjoto and Jo 2011; Jensen 2002; Jo and Harjoto 2011, 2012; Scherer et al. 2006).

Additionally, CSR activities can significantly enhance a firm's reputation, which is an invaluable asset in competitive markets. Good CG practices not only ensure that a firm's CSR efforts are genuine and substantial, thereby enhancing public image, attracting and retaining customers, and securing the support of local communities and other stakeholders (Turban and Greening 1997) but also create a strong foundation for effective CSR by emphasizing transparency, ethical behavior, and accountability (Lawless 2024). Given that CG aligns shareholders' long-term perspectives with the benefits of CSR and enhances local legitimacy, a robust CG system positively affects a firm's CSR activities. Firms actively engaging in CSR are more likely to gain legitimacy in their local communities, which is essential for long-term sustainability and success. By conforming to accepted social norms and demonstrating a commitment to social responsibility, firms secure their position and operate more effectively within their local environments. Thus, we propose the following hypotheses:

Hypothesis 1

All else being equal, CSR engagements affect the effectiveness of CG.

However, CSR engagement requires an investment that will only pay off in the long run. This situation can conflict with the interests of short-term managers and investors. Various scholars document that managers focus on investments that produce short-term payoffs and are thus less likely to make long-term investments that do not produce apparent benefits until several years later (Bushee 1998; Lundstrum 2002; Wahal and McConnell 2000). If CG practices accommodate the short-term motivations of investors, they may deter firms from active CSR engagement. Nonetheless, it is essential to acknowledge that some managers, particularly owner-managers in family-owned firms, may have long-term horizons and recognize the value of CSR for enhancing firm reputation and sustainability. These managers might drive CSR initiatives to align with their long-term goals and personal reputations, particularly in chaebol firms where owner-managers often have significant control and a vested interest in the firm's legacy.

Our theoretical framework distinguishes the CSR demands of different types of investors, recognizing that institutional investors, family investors, minority shareholders, and activist investors have varying interests and time horizons. While some institutional investors may prioritize short-term gains, others, especially those with a long-term investment horizon, may value CSR initiatives for their potential to enhance long-term firm value and reputation (Dhaliwal et al. 2011; Husted and Allen 2006). Family investors often prioritize the firm's legacy and social standing, aligning with CSR goals (Block and Wagner 2014). Minority shareholders, facilitated by mechanisms such as electronic voting systems (EVS), may advocate for CSR as a means to enhance transparency and ethical governance (Gillan and Starks 1998). Furthermore, while some managers, particularly in family-owned firms, may drive CSR initiatives to improve their personal reputation and align with long-term goals, the overall governance structure's role in aligning stakeholder interests remains crucial. While we acknowledge that detailed firm-level data on the composition of these investor types are not available, our theoretical framework provides a nuanced understanding of how different investor interests can impact CSR activities.

The Korean market provides a unique environment for investigating the relationship between CG and CSR. Chaebols have long influenced Korean firms—the Korean version of family-oriented business conglomerates. Owner-managers largely control chaebol-affiliated firms.⁴ Chang and Hong (2000) highlight that these companies are generally interlinked through internal business, cross-debt guarantees, and reciprocal shareholdings. Chang (2003) reported that the boards of these companies are associated with chaebol families, eroding the transparency of their decision-making. Such close business ties and weak governance enable managers to implement self-serving measures to the detriment of shareholders.

⁴ According to the Korea Fair Trade Commission, as of April 2015, *chaebols* (e.g., Samsung, Hyundai, LG, Doosan, and GS Group) comprise 61 business conglomerates and 1696 subsidiary companies—see Appendix A for the top 30 *chaebols* in Korea and their structures, as documented by Choi et al. (2018). The total market value of *chaebols* exceeds KRW 2258 trillion (approximately USD 2.26 trillion), and they account for a substantial proportion of the firms listed on the KRX (Choi et al. 2018).

Bae et al. (2002) discovered that the controlling shareholders of *chaebol*-affiliated firms divert resources to affiliated targets to benefit from acquisitions at the expense of minority shareholders. Baek et al. (2006) further reveal that *chaebol* issuers of equity-linked private securities grant controlling shareholders favorable offer prices for intragroup deals. Under *chaebol*-affiliated firms' weak internal governance structure, owner-managers are more likely to achieve their goals at the expense of other stockholders. Thus, the variation in CG quality among firms and the effect of sound CG mechanisms on corporate decision-making could be more pronounced in the Korean market.

However, after the Asian financial crisis, late President Kim Dae-Jung's administration began implementing rapid *chaebol* reforms. The undesirable business practices of Korean *chaebols* (i.e., concentration of ownership within the founder's family and their diversified business structure) are considered the main drivers of the crisis. Yanagimachi (2014) stated that *chaebol* reforms were initiated for two reasons: (1) to mitigate the traditional characteristics of *chaebols* and (2) to foster an Anglo–American CG system. Owing to the Korean government's forced *chaebol* reforms, informational transparency and financial soundness have improved substantially in *chaebols*. For instance, large *chaebol* affiliates must now include outside and independent directors in their decision-making. However, the most important issue facing *chaebol* reforms is whether outside directors have sufficient power to monitor and influence the absolute control of founder-owners. Furthermore, Choi et al. (2007) and Yanagimachi (2014) suggest that an equally important issue is the rapid increase in foreign ownership since the Asian financial crisis, resulting in more instances of Anglo–American CG systems and a greater risk of mergers and acquisitions. Choi et al. (2007) and Yanagimachi (2014) claim that Anglo–American CG systems must be integrated with the traditional Korean business climate, particularly the *chaebol* system, to enhance Korean firms' global competitiveness.

Choi et al. (2018) postulated that, to the extent that CG reform is effective for *chaebol*-affiliated firms, it should play a role in managing short-term managerial behavior and promoting CSR activities rather than accommodating short-term pressure from investors. Furthermore, firms with effective CG, such as those with a higher proportion of outside directors, should engage in higher levels of CSR. This is because outside directors, often being less influenced by internal managerial interests and more focused on the broader, long-term sustainability of the firm, may prioritize CSR as a means to enhance the firm's reputation and compliance with social norms (Johnson and Greening 1999). However, we acknowledge that not all shareholders may value investments in CSR equally. The influence of outside directors on CSR engagement may vary depending on their perspectives on the long-term benefits of CSR and the specific stakeholder pressures faced by the firm.

Next, the recent amendment to CG regulations in the Korean market has caused material changes in firms' CG practices by encouraging long-term corporate decisions and considering the circumstances of various stakeholders. On April 11, 2011, the Korean Financial Services Commission promulgated the most considerable amendment to the Commercial Code since its enactment in 1962. The amendment, which took effect in April 2012, included material changes to firms' CG practices since it was devised to increase accountability and transparency in CG and enforce responsible management. For example, the amendment implements stricter regulations on directors' duties,

responsibilities, and compensation structures (e.g., a higher proportion of outside independent directors) to encourage directors to make decisions in favor of the company's long-term survival. Using this critical CG regulatory change in Korea as a quasi-natural experiment, we can revisit the endogeneity problem inherent in the CG-CSR linkage, which has not been successfully addressed in the literature.

One notable aspect of the CG-related amendment is the revision of the roles and responsibilities of managers and directors to better align them with shareholder rights and interests. For example, the amendment prohibits usurping the corporate opportunity doctrine, strengthening directors' fiduciary duties and fair dealing. In addition, the publication of financial statements and the distribution of dividends must now be approved through board resolutions. The board and shareholders must also approve changes to annotations, capital statements, and cash flow statements because they have been added to the category of financial statements. This exogenous change mitigates CG's causal impact on CSR activities. Since the amendment aims to improve chaebols' chronic governance problems, we anticipate that a positive CG-CSR relationship will be prominent in *chaebol*-affiliated companies following the 2012 regulatory change.

Chaebol heads, partially because of their previous unethical behavior, engage more in CSR to enhance their local legitimacy to operate their businesses (Chun et al. 2024). However, this finding indicates a direct effect of chaebol membership on CSR rather than a moderating effect through CG quality. To comprehensively understand the dynamics at play, it is essential to consider the pressures and regulations faced by non-chaebol firms as well. Non-chaebol firms, although not as prominently scrutinized as chaebols, also face stakeholder pressures and regulatory requirements that influence their CSR activities. These pressures can vary significantly and impact CSR engagement differently from that of chaebol firms. Hence, we propose the following CG-CSR hypotheses for chaebol firms on the basis of local legitimacy theory:

Hypothesis 2

The impact of CG quality on CSR activities is more pronounced for chaebol firms than for non-chaebol firms.

Minority shareholders, although holding a smaller portion of the total shares, play a crucial role in corporate governance by providing checks and balances on the actions of majority shareholders and management. The influence of minority shareholders is essential for promoting transparency, accountability, and ethical behavior within a firm. Their ability to voice concerns and vote on corporate matters can significantly impact a firm's strategic decisions, including those related to corporate social responsibility (CSR).

The theoretical construct of minority shareholder influence is rooted in agency theory, which suggests that dispersed ownership structures can mitigate the agency problem by aligning the interests of shareholders and management. Minority shareholders, motivated by the desire to protect their investments and promote long-term firm value, often advocate for policies that enhance corporate governance and social responsibility (Gillan and Starks 1998). Their influence can lead to more equitable decision-making processes and ensure that the firm's actions align with the broader

interests of all stakeholders, not just the controlling shareholders. Additionally, the presence and influence of minority shareholders can counteract the potential for opportunistic behavior by majority shareholders and management. By exercising their voting rights and participating in shareholder meetings, minority shareholders can hold management accountable and push for greater transparency and ethical standards. This dynamic can create a more balanced and responsible governance framework, fostering an environment conducive to CSR activities.

An EVS enables investors to vote electronically on company resolutions. We examine how introducing EVSs impacts the relationship between CG and CSR. On the one hand, the Korean government's introduction of EVSs to encourage minority shareholders to participate in annual meetings can reduce institutional voids by reinforcing the private governance channel and improving the CG environment. However, adopting an EVS may reflect a company's efforts to adapt to changing social norms, although the EVS is initiated by government pressure. Thus, similar to CSR engagement, EVS adoption must concord with local legitimacy theory, which contends that companies benefit by adapting to changing societal norms. In this study, we propose two competing hypotheses to explain the EVS-CG association on the basis of two different theories. In Hypothesis 3a, EVS strengthens the monitoring of corporate policies by allowing numerous minority shareholders who would otherwise be unable to participate in shareholder meetings to vote electronically. This increased monitoring can prevent self-interested managers from engaging in opportunistic decision-making, reduce the cost of principal-agent problems (Jensen 1993), and democratize the company's critical decision-making process. Barber and Odean (2001) posit that adopting an EVS may encourage individual investors to become involved in CG. EVS may also help enhance corporate governance by promoting transparency, accountability, and shareholder engagement (Abdennadher et al. 2020). This approach can make it easier for shareholders to exercise their voting rights and hold the company's board of directors accountable for their actions. Furthermore, they argue that an EVS can promote CSR by accelerating the exchange and integration of information via the internet, safeguarding rights, and strengthening the monitoring function of minority shareholders.

Hypothesis 3b holds that excessive participation by minority shareholders who have insufficient knowledge or are disinterested in a company's long-term agenda may delay important decisions, decreasing the company's net present value if timely decisions are not made during economic turmoil. Aghion and Tirole (1997) argue that excessive monitoring by shareholders may discourage managers from seeking new investment opportunities. Crémer (1995) highlights that the excessive monitoring of agents by the principal decreases their willingness to work. Mallin (2001) finds that EVS reduces management efficiency because of undue interference from minority shareholders, who lack the ability or information to make critical management-related decisions. Minority shareholders might not be interested in corporate investments that have a long-term horizon and may instead focus on short-term value maximization (Carpenter and Sanders 2004). This can delay managerial decisions and enterprise operations (Kim 2013).

In Korea, companies tend to adopt EVSs primarily to extend shadow voting. Shadow voting refers to the voting exercised by the depository in proportion to the “pro-and-con ratio” realized at shareholders’ meetings, at the request of issuing companies, and in cases where a quorum of voters is needed. Minority shareholders do not respond to solicitations via proxies, leading companies to use shadow voting to avoid failed shareholder meetings. However, the shadow voting-related provisions of the Financial Investment Business and Capital Markets Act were repealed on May 28, 2013, and shadow voting has not been permitted since January 1, 2015. This change poses significant challenges for companies not ready to pass resolutions at their general shareholder meetings without shadow voting, including those related to auditor appointments.

Hypothesis 3a Introducing an EVS enhances the effect of CG quality on a firm’s CSR activities by increasing minority shareholders’ ability to participate actively and effectively in corporate monitoring.

Hypothesis 3b Introducing an EVS weakens the effect of CG quality on a firm’s CSR activities because minority shareholders may focus on short-term value maximization rather than long-term corporate investments.

Sample and research design

Sample

To construct the sample for this study, we consider all firms listed on the KOSPI for 2009–2017, as CSR data are available from 2009 onward. We obtained the data for our analysis from multiple sources. We utilize multiple data sources for our analysis. The Korea Economic Justice Institute’s (KEJI) CSR index, developed by the Citizens’ Coalition for Economic Justice (CCEJ), serves as a proxy for CSR activities. The KEJI-CSR index, widely used in academic research and as the basis for the annual Good Corporation Awards, initially evaluated firms into seven categories: financial soundness, fairness, social charity/aid, consumer protection, environmental commitment, employee satisfaction, and contribution to economic development, with a maximum score of 75. Since 2012, the index has excluded contributions to economic growth and now has a maximum score of 100. We scale the pre-2012 scores to 100 for consistency.

According to Choi et al. (2013), the KEJI-CSR index is comparable to the Dow Jones Sustainability Korea index (DJSI Korea), which assesses the top 30% of the 200 largest Korean companies on the basis of long-term economic, environmental, and social criteria. We used the KEJI-CSR index’s environmental and social criteria to measure CSR engagement. Corporate governance data were obtained from the Korea Corporate Governance Service (KCGS), which annually reviews companies’ governance ratings via disclosure materials, sustainability reports, media reports, and government data. The KCGS CG score, comprising six categories and nine subcategories for a total of 300 points, evaluates firms listed on the Korea Stock Exchange (KRX) and the KOSDAQ. High CGS scores indicate well-governed firms and help monitor chaebol influence over affiliates.

We manually collected data on firms' adoption of EVS from the Korea Securities Depository website and financial data from DataGuidePro, provided by FnGuide. This database compiles financial information for firms listed on the KRX, similar to the Compustat database in the U.S. After merging data from the KEJI-CSR index, KCGS, manually collected EVS data, and DataGuidePro, the final sample included 1627 firm-year observations from 538 firms for the 2009–2017 period. Figure 1 shows the sample firms' yearly cross-sectional averages of the CGS and CSR, indicating a positive association at the aggregate level. However, this relationship may not hold at the firm level, which we analyze via the panel data in the next section. Notably, both CGS and CSR decreased substantially in 2016, likely influenced by the impeachment of former President Park and the sentencing of several chaebol heads due to unethical ties with Park's regime.

Model specification

We utilize the following regression as a baseline model to test the relationship between firms' CGS and CSR disclosures:

$$CSR_{i,t} = \alpha_0 + \alpha_1 CGS_{i,t-1} + \alpha_2 SIZE_{i,t-1} + \alpha_3 LEV_{i,t-1} + \alpha_4 ROA_{i,t-1} + \alpha_5 Q_{i,t-1} + \alpha_6 RNDS_{i,t-1} + \alpha_7 BM_{i,t-1} + \alpha_8 CASHF_{i,t-1} + \alpha_9 SD_{i,t-1} + \alpha_{10} HHI_{i,t-1} + \alpha_{11} MARKET_D_{i,t-1} + IndustryDummies + YearDummies \quad (1)$$

where CSR is the total score for the seven categories of the KEJI Index and CGS is the CG index provided by the KCGS. The highest CGS is 300, with higher values indicating better CG. Following Jo and Harjoto (2011, 2012), we include the following control variables: SIZE is calculated as the natural logarithm of sales, and LEV is the firm's total debt divided by its total assets. ROA is net income divided by total assets, and Q is the sum of the market value of equity and long- and short-term debt divided by total assets. RNDS is research and development (R&D) expenditure divided by sales; BM is total equity divided by the market value of equity.

Dey (2008) uses various firm characteristics, such as organizational complexity, size, and leverage, which create agency conflicts. They show that governance mechanisms are in place in the context of greater agency conflicts. Ciceksever, Kale, and Ryan employ firm size, investment opportunities, and intangible assets as proxies for monitoring costs, and their results show that companies with greater monitoring costs have better governance structures. In addition, Linck et al. (2008) consider firm complexity and monitoring costs determinants of corporate governance. They use firm size and the debt ratio as proxies for firm complexity and the book-to-market ratio and R&D spending as proxies for monitoring costs. Klapper and Love (2004) show that corporate governance structures are significantly related to firm size and capital intensity. CASHF denotes the free cash flow divided by total assets. SD represents the standard deviation values of the daily stock returns. Moreover, the Herfindahl–Hirschman index (HHI) is calculated by squaring the market share of each firm in the industry and summing the results. Finally, MARKET_D is a dummy variable that equals one if a firm is listed on the KOSPI 200 and zero otherwise.

On the basis of the baseline regression model, we examine two tests for endogeneity. First, we utilize the 2012 amendment to the Korean Commercial Code as a quasi-natural experiment and apply a difference-in-differences (DiD) methodology. This approach

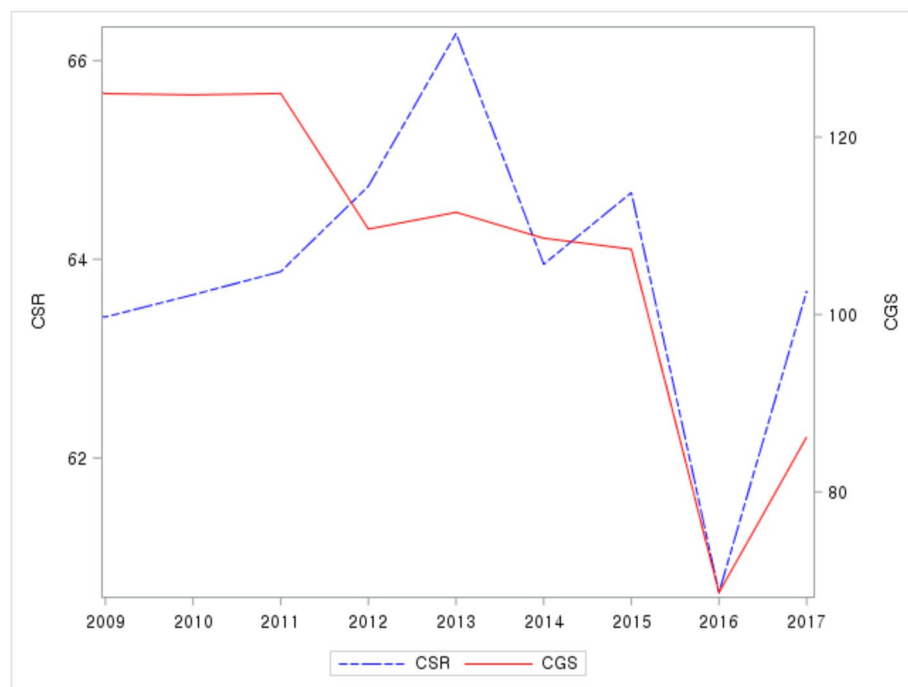


Fig. 1 Yearly cross-sectional average CG quality and CSR for 2009–2017. This figure shows the yearly cross-sectional averages of CSR and CGS for 2009–2017. The left (right) y-axis represents the CSR (CGS). The dash-dotted line represents the CSR, whereas the solid line represents the CGS

shows that government-driven corporate governance (CG) improvements have a significant effect on corporate social responsibility (CSR) activities. DiD is a quasi-experimental design that leverages data from both treatment and control groups to create a suitable counterfactual for estimating causal effects. It is commonly used to assess the impact of specific interventions, such as new laws or policies. This method helps alleviate the inherent endogeneity issue between CG and CSR, reaffirming that CG is a key factor influencing CSR, in line with Lawless (2024). Second, we employ propensity score matching to further address the reverse causality between CG and CSR, which enhances our findings. This method is also regarded as a quasi-experimental technique that uses statistical methods to create an artificial control group by pairing each treated unit with a nontreated unit that has similar characteristics. We utilize the 2012 amendment in Korean corporate governance (CG) regulations as a quasi-natural experiment to assess the impact of CG on corporate social responsibility (CSR) activities. The treatment group consists of firms with above-median governance quality, whereas the control group includes those below the median. This setup helps isolate the effects of regulatory change on CSR activities.

Empirical results

Baseline results and a comparison between *chaebol* and *non-chaebol* firms

Panel A of Table 1 presents the descriptive statistics for all the variables used in this study. All the continuous variables are winsorized at the 1% level to mitigate the effects of potential outliers. The average CSR score is 63.49 (median=63.51), and the average CGS score is 105.93 (median=104). Panel B of Table 1 shows that chaebol-affiliated

firms have higher CGS (126.80) and CSR scores (63.99) than non-chaebol-affiliated firms do (CGS of 98.46 and CSR scores of 63.32), with both differences being statistically significant at the 1% level.

Panel A (Panel B) of Table 2 presents a matrix of bivariate correlations among the variables of interest, including (not including) an EVS dummy.⁵ Both panels show that CSR is positively correlated with CGS ($\rho=0.3878$ in Panel A and 0.4215 in Panel B), SIZE, ROA, Q, RNDs, and CASHF. However, it negatively correlates with LEV, BM, SD, and HHI. Although EVS is not significantly correlated with CSR, it is negatively correlated with CGS.

Table 3 presents the results of the regression of the CGS on the CSR scores. The positive coefficient of lagged CGS in Models (1) and (2) is significantly associated with the CSR score at the 1% level, supporting Hypothesis 1. The coefficients imply that a one standard deviation increase in the CGS results in a 1.6% to 2.3% improvement in the CSR score. Including industry and year dummies does not eliminate the effect of CGS on CSR. The coefficient estimates for our control variables are consistent with those in previous CSR research. For instance, leverage is negatively associated with CSR (Bae et al. 2018, 2011). Furthermore, consistent with Jo and Harjoto (2011, 2012), we show that Tobin's Q and R&D expenses are positively associated with CSR activities.⁶

In Model (2) of Table 3, a Fama–MacBeth cross-sectional regression confirms the robustness of our results, with the CGS coefficient increasing from 0.0298 to 0.0431 after correcting for cross-sectional dependence. In Models (3) and (4) of Table 3, we compare the effects of CGS on CSR for both the *chaebol* and *non-chaebol* groups. CSR activities are long-term investments that require time and financial resources. *Chaebol* groups would like to become shareholder- and environmentally friendly social enterprises by improving their image of unethical business practices. They aim to obtain, maintain, and enhance local legitimacy. Consequently, we maintain that the effect of CGS on CSR activities is more pronounced for *chaebol* groups, supporting local legitimacy theory for chaebol firms. The model for testing whether the effect of CGS on CSR activities is more pronounced for chaebol groups is as follows.

$$\begin{aligned} CSR_{i,t} = & \alpha_0 + \alpha_1 CGS_{i,t-1} + \alpha_2 Chaebol dummy + \alpha_3 CGSt - 1 \times Chaebol dummy + \alpha_4 SIZE_{i,t-1} \\ & + \alpha_5 LEV_{i,t-1} + \alpha_6 ROA_{i,t-1} + \alpha_7 Q_{i,t-1} + \alpha_8 RNDs_{i,t-1} + \alpha_9 BM_{i,t-1} + \alpha_{10} CASHF_{i,t-1} \\ & + \alpha_{11} SD_{i,t-1} + \alpha_{12} HHI_{i,t-1} + \alpha_{13} MARKET_D_{i,t-1} + Industry Dummies + Year Dummies \end{aligned} \quad (2)$$

Our findings show that *chaebols* with available time and financial resources engage in higher levels of CSR activities. In Model (3), the magnitude of the coefficient (0.0338) is greater for *chaebol* groups.

⁵ The number of observations is substantially reduced when we include the EVS dummy because data is only available for the period between 2014 and 2017. Additionally, EVS is voluntary so the sample limits the firms participated in EVS during the sample period.

⁶ Older firms have more established routines and ability than younger ones and have better proper form to engage in innovation, risk-taking, and proactivity (Anderson et al. 2013). From this point of view, older firms can engage CSR more effectively. Hence, as a robustness test, we consider a firm age (the number of years a firm has been listed in the Korean market) as additional control variable in Table 2. The results show that the firm age is positively related to the CSR activities without altering the main findings. Although unreported for brevity, the results are available upon requests.

Table 1 Descriptive statistics and mean difference test

Variable	Mean	Std. Dev	Min	25th pct	Median	75th pct	Max
Panel A Descriptive statistics							
CSR	63.4992	3.1262	50.3350	61.4840	63.5105	65.5358	76.2013
CGS	105.9312	33.3562	16.0000	87.0000	104.0000	123.0000	260.0000
SIZE	20.1198	1.6230	15.7208	18.9912	19.8569	21.0019	26.1556
LEV	0.4324	0.1943	0.0483	0.2705	0.4189	0.5770	0.9558
ROA	0.0486	0.0614	-0.4183	0.0192	0.0424	0.0734	1.5265
Q	1.1174	0.6612	0.2817	0.7709	0.9480	1.2102	7.5200
RNDS	0.0096	0.0191	0.0000	0.0000	0.0012	0.0096	0.1347
BM	1.3330	0.8999	0.0799	0.7106	1.1412	1.7405	9.3265
CASHF	0.0774	0.0655	-0.3079	0.0434	0.0708	0.1047	1.5744
SD	0.4003	0.1725	0.0120	0.2879	0.3807	0.4971	1.1152
HHI	0.0755	0.0706	0.0461	0.0483	0.0494	0.0629	0.9177
Mean	(1) Chaebol-affiliated firms			(2) Non-chaebol-affiliated firms			(1)–(2) (t-stat)
Panel B Mean difference test							
CGS	126.80			98.46			28.34 (13.51)***
CSR	63.99			63.32			0.67 (3.49)***
Observations	429			1198			

This table reports the mean, standard deviation, minimum, 25th percentile, median, 75th percentile, and maximum values of the key variables used in the empirical analysis for the sample comprising 1627 observations from 2009 to 2017. The variables are defined in Appendix B. The t statistics are reported in parentheses, and *** $p < 0.001$

This finding supports Hypothesis 2A, which states that *chaebols* tend to be more actively engaged in CSR activities. With respect to economic significance, a one standard deviation (33.36%) increase in the CGS of a *chaebol* group implies a 1.78% (0.0338×33.3562) increase in the CSR score, whereas the same statistic implies a 0.66% increase in the CSR score for *non-chaebol* firms.⁷ Thus, the impact of CG is nearly three times greater for *chaebol* groups. In Model (5), instead of dividing the sample into *chaebol* and *non-chaebol* groups, we include the interaction term between CGS and the *chaebol* dummy and find that the coefficient of the interaction term is positive and significant, thus supporting Hypothesis 2.

To check for potential omitted variable bias, we test a model that includes a *chaebol* dummy, an EVS dummy, and a financial constraint variable (KZ index) in addition to our previous control variables. This helps to overcome potential concerns related to unobserved variable bias. By incorporating the additional independent variables reported in Table 4, our results reinforce our finding of a positive CGS–CSR association in our baseline regression models. However, the number of observations would be reduced due to insufficient EVS data. Additionally, in unreported findings, our baseline regression results remain intact when we add only a *chaebol* dummy instead of adding all three additional control variables. In these models, the coefficients of the *chaebol* dummy are

⁷ One may interpret this with caution since the CGS is not a direct measure of corporate governance quality, but rather it is a proxy variable based on the six components that affect corporate governance.

Table 2 Bivariate correlation matrix

Panel A Bivariate correlation with the EVS dummy (N = 580)

	CSR	CGS	EVS	SIZE	LEV	ROA	Q	RNDS	BM	CASHF	SD	HHI
CSR	1											
CGS	0.38778 [<0.0001]	1										
EVS	− 0.04232 [0.24]	− 0.15619 [<0.0001]	1									
SIZE	0.09501 [0.0082]	0.3644 [<0.0001]	− 0.08493 [0.0182]	1								
LEV	− 0.14425 [<0.0001]	0.17001 [<0.0001]	0.04913 [0.1724]	0.33424 [<0.0001]	1							
ROA	0.12318 [0.0006]	0.03398 [0.3455]	− 0.03546 [0.3249]	0.02279 [0.527]	− 0.24649 [<0.0001]	1						
Q	0.13438 [0.0002]	0.01258 [0.727]	0.09301 [0.0097]	0.02244 [0.5334]	− 0.04436 [0.218]	0.22399 [<0.0001]	1					
RNDS	0.2608 [<0.0001]	0.01606 [0.6558]	0.029 [0.4208]	0.01292 [0.7199]	− 0.15883 [<0.0001]	0.12657 [0.0004]	0.23182 [<0.0001]	1				
BM	− 0.09251 [0.0101]	0.02101 [0.598]	− 0.10532 [0.0034]	− 0.00354 [0.9217]	0.03568 [0.3219]	− 0.2078 [<0.0001]	− 0.59089 [<0.0001]	− 0.22992 [<0.0001]	1			
CASHF	0.15521 [<0.0001]	0.03206 [0.3735]	− 0.04628 [0.1987]	0.09534 [0.008]	− 0.22592 [<0.0001]	0.94415 [<0.0001]	0.22066 [<0.0001]	0.15567 [<0.0001]	− 0.2464 [<0.0001]	1		
SD	− 0.21147 [<0.0001]	− 0.27672 [<0.0001]	0.05845 [0.1044]	− 0.33257 [<0.0001]	0.04655 [0.1961]	− 0.02284 [0.5261]	0.1186 [0.001]	− 0.03979 [0.2692]	− 0.03118 [<0.0001]	− 0.18579 [<0.0001]	1	
HHI	− 0.06185 [0.0857]	− 0.00308 [0.9319]	− 0.03084 [0.3918]	0.08698 [0.0156]	0.05573 [0.1216]	0.00896 [0.8036]	0.01066 [0.7672]	− 0.08344 [0.0203]	0.01708 [0.6354]	0.05034 [0.162]	0.00042 [0.9907]	1

Table 2 (continued)

	CSR	CGS	SIZE	LEV	ROA	Q	RNDS	BM	CASHF	SD	HHI
<i>Panel B Bivariate correlation without the EVS dummy (N = 1627)</i>											
CSR	1										
CGS	0.4215 [<0.0001]	1									
SIZE	0.1950 [<0.0001]	0.4813 [<0.0001]	1								
LEV	− 0.0945 [0.0001]	0.1913 [<0.0001]	0.4258 [<0.0001]	1							
ROA	0.1542 [<0.0001]	0.0518 [0.0364]	0.0270 [0.2759]	− 0.3005 [<0.0001]	1						
Q	0.1835 [<0.0001]	0.0522 [0.0352]	0.1242 [<0.0001]	− 0.0051 [0.8369]	0.2803 [<0.0001]	1					
RNDS	0.2121 [<0.0001]	0.0439 [0.0764]	− 0.0099 [0.6897]	− 0.1415 [<0.0001]	0.0838 [0.0007]	0.2452 [<0.0001]	1				
BM	− 0.1699 [<0.0001]	− 0.0274 [0.2679]	− 0.1222 [<0.0001]	0.0117 [0.6371]	− 0.2574 [<0.0001]	− 0.5775 [<0.0001]	− 0.2048 [<0.0001]	1			
CASHF	0.1829 [<0.0001]	0.0793 [0.0014]	0.1054 [<0.0001]	− 0.2796 [<0.0001]	0.9314 [<0.0001]	0.2903 [<0.0001]	0.1276 [<0.0001]	− 0.2926 [<0.0001]	1		
SD	− 0.1170 [<0.0001]	− 0.0426 [0.0853]	− 0.1651 [<0.0001]	0.1343 [<0.0001]	− 0.0893 [0.0003]	0.0472 [0.0568]	− 0.0373 [0.1320]	− 0.0612 [0.0134]	− 0.0893 [0.0003]	1	
HHI	− 0.0194 [0.4322]	0.0834 [0.0008]	0.1172 [<0.0001]	0.0759 [0.0022]	− 0.0001 [0.9989]	0.0418 [0.0917]	− 0.0600 [0.0154]	0.0224 [0.3665]	0.0274 [0.2682]	− 0.0708 [0.0042]	1

This table presents the Pearson (contemporaneous) correlation coefficients of the key variables used in the empirical analysis. The definitions of the variables are presented in Appendix B. The *p* values are reported in parentheses. Panel A reports the bivariate correlation values, including an EVS dummy, on the basis of a sample of 580 observations. Panel B presents the bivariate correlation values without the EVS dummy; these correlations are based on the full sample of 1627 observations

Table 3 Baseline regressions: Influence of CG quality on CSR activities

Variable	Model (1)	Model (2)	Model (3) <i>Chaebol</i> firms	Model (4) Non- <i>chaebol</i> firms	Model (5) <i>Chaebol</i> dummy
Intercept	55.4255*** (19.33)	57.6081*** (18.83)	47.1258*** (9.07)	59.2938*** (15.82)	56.1023*** (19.19)
CGS _{t-1}	0.0298*** (9.58)	0.0431*** (18.39)	0.0338*** (5.97)	0.0126*** (5.51)	0.0234*** (5.95)
<i>Chaebol</i> dummy					− 1.5973*** (− 3.22)
CGS _{t-1} × <i>Chaebol</i> dummy					0.0125*** (2.96)
SIZE _{t-1}	0.0658 (1.01)	− 0.0414 (− 0.61)	0.1579 (1.22)	0.0352 (0.42)	0.0734 (1.07)
LEV _{t-1}	− 2.1711*** (− 4.94)	− 1.5297*** (− 3.26)	− 3.3993*** (− 3.24)	− 1.7354*** (− 3.55)	− 2.1598*** (− 4.92)
ROA _{t-1}	− 2.4571 (− 0.79)	− 1.0353 (− 0.31)	3.1637 (0.47)	− 1.3173 (− 0.36)	− 2.3425 (− 0.75)
Q _{t-1}	0.4638*** (3.87)	0.4894*** (3.80)	0.8729*** (2.65)	0.3707*** (2.91)	0.4653*** (3.89)
RNDS _{t-1}	15.7609*** (4.64)	16.5216*** (4.49)	11.0904 (0.94)	16.9557*** (4.80)	15.9811*** (4.67)
BM _{t-1}	− 0.3158*** (− 3.57)	− 0.2681*** (− 2.87)	0.0933 (0.39)	− 0.3825*** (− 4.08)	− 0.3025*** (− 3.38)
CASHF _{t-1}	2.7546 (0.92)	1.9112 (0.59)	0.6357 (0.10)	0.7100 (0.20)	2.4903 (0.84)
SD _{t-1}	− 0.3892 (− 0.79)	− 1.6271*** (− 3.94)	− 0.2412 (− 0.20)	− 0.6268 (− 1.17)	− 0.5321 (− 1.08)
HHI _{t-1}	6.7212 (0.98)	3.0277 (0.41)	20.8684* (1.77)	2.2645 (0.25)	6.3193 (0.92)
MARKET_D	0.2471 (1.30)	0.1324 (0.66)	− 0.3921 (− 0.85)	0.5480*** (2.64)	0.2892 (1.52)
Industry dummy	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	No	Yes	Yes	Yes
Adj. <i>R</i> ²	0.4076	0.3019	0.4547	0.4008	0.4106
Obs	1627	1627	429	1198	1627

Model (1) presents the estimation results of the panel regression of CSR on lagged CGS. Model (2) presents the estimation results for the Fama–MacBeth (1973) cross-sectional regression of CSR on the lagged CGS. Models (3) and (4) present the estimation results for the panel regression of CSR on the lagged CGS for *chaebol* and non-*chaebol* firms, respectively. Model (5) presents the estimation results for the panel regression of CSR on the lagged CGS interacting with the *chaebol* dummy variable. For Models (1) and (2), the *t* statistics, given in parentheses, are adjusted for Newey–West (Newey and West 1987) autocorrelations with three lags. For Models (3)–(5), the *t*-statistics, reported in parentheses, are adjusted for two-way clustered standard errors at the firm level to allow for heteroscedasticity and arbitrary within-firm correlation. This approach is based on Petersen's (2009) methodology. The variables are defined in Appendix B. **p* < 0.10; ****p* < 0.01

all negative and significant at the 5% (or less) level, and the coefficient of the interaction between *chaebol* and CGS is positive and significant (Model (5)).

The baseline model specification reported in Table 3 uses lagged variables to predict future CSR outcomes. Although this assumption is reasonable for the first approximation of the relationship between CGS and CSR, stronger operationalization considers the effect of changes in CGS on changes in CSR. On the basis of the proposed arguments, we expect that improvements in CGS will result in higher CSR scores. Table 5 reports

first-difference regressions, showing that changes in CGS positively influence changes in CSR. The *chaebol* dummy is negative, whereas the interaction term is positive and significant, supporting Hypothesis 2. Overall, our baseline finding of a positive CGS–CSR association is mainly uncontaminated by unobserved omitted variable bias.

The impact of each CGS component on CSR

The CGS index includes scores for the following six categories: shareholder rights (CGS_1), board quality (CGS_2), information disclosure practices (CGS_3), audit quality (CGS_4), treatment of managerial negligence (CGS_5), and other negative factors (CGS_6). In this section, we investigate which of these six CGS index components has the greatest impact on CSR activities. Understanding the influence of specific CGS components on CSR is crucial because it helps to pinpoint the governance mechanisms that most effectively drive a firm's commitment to socially responsible practices. This, in turn, provides practical insights for both policymakers and firms aiming to enhance CSR engagement through targeted improvements in governance.

Table 6 reports the estimated coefficients obtained from the panel data regression performed using industry and year fixed effects to examine whether each CGS component influences firms' CSR activities in period t in period $t-1$. The results for Models (1) and (2) suggest that CGS_1, CGS_2, CGS_3, and CGS_4 (lagged by one year) positively influence the composite CSR scores for the current period. Additionally, we adjust the t statistics for two-way clustering at the firm level, allowing for heteroscedasticity and arbitrary within-firm correlation. Consistent with our prediction, we find that the first four CGS components significantly explain CSR engagement, at least at the 5% level. These findings suggest that correctly functioning devices that aim to protect shareholder rights (CGS_1); the activities, composition, and quality of the board of directors (CGS_2); the timely disclosure of business reports and other corporate matters (CGS_3); and an established and correctly functioning audit committee (CGS_4) can influence a firm's CSR investment decisions.

The Fama–MacBeth (Fama and MacBeth 1973) cross-sectional regression in Model (2) suggests that the protection of shareholder rights is the most significant component, as evidenced by its coefficient's magnitude being the largest, followed by those of board quality (CGS_2) and audit quality (CGS_4). This finding is justifiable because CSR is a long-term investment requiring continuous monitoring feedback. Therefore, the results support our first hypothesis on the basis of the CSR components. Regarding the interactions between CGS components and the *chaebol* dummy in Models (3) and (4), we find that board and audit quality are seemingly more important for *chaebol* firms. These results are reasonable because both boards and auditors are known to play monitoring roles when CEOs potentially deviate from shareholders' interests. Tables 3, 4, 5 and 6 show that well-governed firms engage in higher CSR activities than poorly governed firms do.

DiD endogeneity test around the Korean CG regulation change in 2012

Next, we exploit the change in Korean CG regulations in 2012 as a quasi-natural experiment to compare the effects of CG on CSR activities before and after the change. To mitigate the endogeneity issue in the relationship between CG quality and CSR activities,

Table 4 Baseline test with the *chaebol* dummy, EVS dummy, and financial constraint variable (KZ index)

Variable	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)
Intercept	65.9064*** (27.98)	64.9345*** (30.39)	25.6187** (2.12)	49.5247*** (4.23)	48.2657*** (4.10)
CGS _{t-1}	0.0446*** (10.42)	0.0128** (2.53)	0.0517*** (11.82)	0.0210*** (3.55)	0.0251*** (3.68)
<i>Chaebol</i> dummy	− 0.9989*** (− 3.03)	− 0.7507** (− 2.51)	− 0.9325*** (− 2.88)	− 0.7443** (− 2.43)	− 0.0592 (− 1.20)
CGS _{t-1} × <i>Chaebol</i> dummy					0.0178** (2.14)
EVS dummy	− 0.4548 (− 1.19)	0.0696 (0.20)	− 0.4902 (− 1.34)	− 0.0818 (− 0.23)	− 0.0844 (− 0.24)
KZ index	0.0512*** (3.79)	0.0159 (1.26)	0.0188 (1.36)	0.0074 (0.56)	0.0069 (0.53)
SIZE _{t-1}	− 0.4053*** (− 3.15)	− 0.2344** (− 2.00)	− 0.4840*** (− 3.87)	− 0.2973** (− 2.48)	− 0.2931** (− 2.44)
LEV _{t-1}	− 0.9358 (− 1.32)	− 0.5708 (− 0.88)	1.0617 (1.37)	0.0548 (0.07)	0.0514 (0.07)
ROA _{t-1}	− 3.4359 (− 0.56)	1.2091 (0.22)	− 1.7194 (− 0.26)	− 1.0701 (− 0.17)	− 1.5645 (− 0.25)
Q _{t-1}	0.2377 (1.20)	0.1594 (0.88)	0.2961 (1.54)	0.2197 (1.21)	0.2040 (1.12)
RNDS _{t-1}	26.6778*** (4.67)	26.1782*** (5.05)	23.4489*** (4.18)	23.4607*** (4.44)	23.3319*** (4.41)
BM _{t-1}	0.1748 (0.74)	0.3556* (1.65)	0.2518 (1.09)	0.3097 (1.40)	0.2778 (1.25)
CASHF _{t-1}	15.9647*** (3.08)	10.8226** (2.26)	13.2981** (2.23)	12.6926** (2.24)	13.2000** (2.32)
SD _{t-1}	− 1.7781** (− 2.58)	1.0514 (1.24)	− 1.7784*** (− 2.66)	1.0243 (1.19)	1.0914 (1.26)
HHI _{t-1}	− 0.1380 (− 0.08)	0.1294 (0.08)	118.653*** (3.17)	42.3277 (1.16)	45.0521 (1.24)
MARKET_D	1.5762*** (4.23)	1.6192*** (4.72)	1.5964*** (4.43)	1.5785*** (4.55)	1.5928*** (4.59)
Industry dummy	No	No	Yes	Yes	Yes
Year dummy	No	Yes	No	Yes	Yes
Adj. R^2	0.3159	0.4402	0.3785	0.4487	0.4491
Obs	580	580	580	580	580

This table presents the estimation results for the regression of CSR on the lagged CGS, including the EVS dummy and KZ index, along with the *chaebol* dummy in the baseline regression models in Table 3. The KZ index is based on Kaplan and Zingales' (1997) research. Models (1), (2), (4), and (5) present the estimation results for the panel regression of CSR on the lagged CGS. The t statistics, reported in parentheses, are adjusted for two-way clustered standard errors at the firm level to allow for heteroscedasticity and arbitrary within-firm correlation. This approach is based on Petersen's (2009) methodology. Model (3) presents the estimation results for the Fama–MacBeth (Fama and MacBeth 1973) cross-sectional regression of CSR on the lagged CGS. The t statistics, reported in parentheses, are adjusted for Newey–West (Newey and West 1987) autocorrelation with three lags. The variables are defined in Appendix B; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

we consider the regulatory change in 2012 as an exogenous shock for CG. Therefore, we conducted a DiD test similar to that conducted by Giroud (2013) and Leary (2009) to investigate the causal effect of CG on CSR engagement. The following equation was estimated:

Table 5 Change-in-change analysis of the effect of CG quality on CSR activities

Variable	Model (1) ΔCSR_t	Model (2) ΔCSR_t	Model (3) ΔCSR_t	Model (4) ΔCSR_t	Model (5) ΔCSR_t
Intercept	− 0.2195 (− 1.13)	1.3415** (2.15)	11.0390* (1.90)	9.1917* (1.68)	9.4290* (1.73)
ΔCGS_{t-1}	0.0456*** (7.64)	0.3429 (1.53)	0.0450*** (7.43)	0.3540* (1.89)	0.2014* (1.94)
<i>Chaebol</i> dummy					− 0.4995* (− 1.87)
$\Delta CGS_{t-1} \times$ <i>Chaebol</i> dummy					0.0288** (2.20)
$\Delta SIZE_{t-1}$	0.7071 (1.04)	− 0.1361 (− 0.21)	0.8241 (1.20)	− 0.0423 (− 0.07)	− 0.0871 (− 0.14)
ΔLEV_{t-1}	2.2950 (1.10)	1.4188 (0.74)	2.5748 (1.20)	1.4964 (0.76)	1.1832 (0.60)
ΔROA_{t-1}	6.3227 (0.66)	7.2356 (0.79)	7.3274 (0.76)	8.4509 (0.91)	9.4348 (1.02)
ΔQ_{t-1}	− 0.0914 (− 0.33)	0.0274 (0.11)	− 0.1300 (− 0.46)	− 0.0061 (− 0.02)	− 0.0314 (− 0.12)
ΔRND_{t-1}	15.4054 (1.00)	8.2118 (0.58)	11.8771 (0.76)	6.1254 (0.43)	4.5267 (0.32)
ΔBM_{t-1}	− 0.4081* (− 1.82)	− 0.3947* (− 1.83)	− 0.3831* (− 1.68)	− 0.3683* (− 1.67)	− 0.3432 (− 1.56)
$\Delta CASHF_{t-1}$	− 10.184 (− 1.08)	− 9.8532 (− 1.09)	− 11.094 (− 1.16)	− 10.990 (− 1.20)	− 12.005 (− 1.31)
ΔSD_{t-1}	− 0.6721 (− 0.99)	− 0.0013 (− 0.00)	− 0.9000 (− 1.30)	− 0.1125 (− 0.14)	− 0.1247 (− 0.15)
ΔHHI_{t-1}	0.5644 (0.39)	0.1222 (0.09)	− 28.679* (− 1.82)	− 19.775 (− 1.34)	− 21.418 (− 1.46)
MARKET_D	0.4146* (1.95)	0.1832 (0.92)	0.3792* (1.73)	0.1546 (0.75)	0.3814* (1.70)
Industry dummy	No	No	Yes	Yes	Yes
Year dummy	No	Yes	No	Yes	Yes
Adj. R^2	0.1305	0.2807	0.1238	0.2748	0.2812
Obs	716	716	716	716	716

This table presents the estimation results for the panel regression of the change in CSR on the lagged change in CGS. Models (1), (2), (4), and (5) present the estimation results of the panel regression of CSR on the lagged CGS. The t statistics, given in parentheses, are adjusted for two-way clustered standard errors at the firm level to allow for heteroscedasticity and arbitrary within-firm correlation. This approach is based on Petersen's (2009) methodology. Model (3) presents the estimation results for the Fama–MacBeth (Fama and MacBeth 1973) cross-sectional regression of CSR on the lagged CGS. The t statistics, given in parentheses, are adjusted for Newey–West (Newey and West 1987) autocorrelation with three lags. The variables are defined in Appendix B; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

$$CSR_{it} = \alpha + \alpha_1 POST + \alpha_2 DCGS_{i,t} + \alpha_3 POST * DCGS_{i,t} + X'_{it}\beta + Z'_t\gamma + \varepsilon_{it}, \quad (3)$$

where *POST* is an indicator variable that equals one in the post-event period; $DCGS_{i,t}$ is an indicator variable that equals one for the experimental group (i.e., firms with governance quality above the median⁸); and X'_{it} and Z'_t denote vectors of the firm- and period-specific control variables, respectively. In this specification, changes over time that are

⁸ Even when using the mean to categorize governance quality, our results remain largely similar.

Table 6 Influence of the CG quality components on CSR activities

Variable	Model (1)	Model (2)	Model (3)	Model (4)
Intercept	56.5033*** (19.07)	53.8852*** (17.32)	56.6427*** (19.00)	53.7693*** (17.09)
Shareholder rights (CGS_1 _{t-1})	0.0555*** (4.51)	0.0798*** (10.91)	0.0357*** (3.47)	0.0808*** (9.58)
Board quality (CGS_2 _{t-1})	0.0489*** (4.33)	0.0536*** (2.75)	0.0218* (1.82)	0.0495* (1.91)
Information disclosure practices (CGS_3 _{t-1})	0.0247** (2.56)	0.0330*** (3.21)	0.0212 (1.58)	0.0279** (2.09)
Audit quality (CGS_4 _{t-1})	0.0270*** (2.94)	0.0456*** (6.00)	0.0186*** (3.62)	0.0352*** (5.90)
Treatment of managerial negligence (CGS_5 _{t-1})	0.0154 (0.45)	0.0041 (0.43)	− 0.0273 (− 0.72)	0.0692* (1.79)
Other negative factors (CGS_6 _{t-1})	0.0021 (0.23)	− 0.0221** (− 2.36)	0.0161 (1.11)	− 0.0163 (− 1.08)
<i>Chaebol</i> dummy			− 1.4557* (− 1.92)	− 0.7527 (− 0.93)
CGS_1 _{t-1} × <i>Chaebol</i> dummy			0.0195 (1.19)	0.0028 (0.16)
CGS_2 _{t-1} × <i>Chaebol</i> dummy			0.0425** (2.49)	0.0350* (1.94)
CGS_3 _{t-1} × <i>Chaebol</i> dummy			0.0086 (0.47)	0.0128 (0.65)
CGS_4 _{t-1} × <i>Chaebol</i> dummy			0.0419** (2.28)	0.0362* (1.83)
CGS_5 _{t-1} × <i>Chaebol</i> dummy			0.1521** (2.06)	0.1198 (1.51)
CGS_6 _{t-1} × <i>Chaebol</i> dummy			− 0.0084 (− 0.48)	− 0.0010 (− 0.05)
Other controls	Yes	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes	Yes
Year dummy	Yes	No	Yes	No
Adj. R^2	0.4115	0.3197	0.4208	0.3242
Obs	1627	1627	1627	1627

Models (1) and (3) present the estimation results for the panel regression of CSR on the lagged CGS components. The t statistics, reported in parentheses, are adjusted for two-way clustered standard errors at the firm level to allow for heteroscedasticity and arbitrary within-firm correlation. This approach is based on Petersen's (2009) methodology. Models (2) and (4) present the estimation results for the Fama–MacBeth (Fama and MacBeth 1973) cross-sectional regression of CSR on the lagged CGS components. The t statistics, given in parentheses, are adjusted for Newey–West (Newey and West 1987) autocorrelation with three lags. CGS_1, CGS_2, CGS_3, CGS_4, CGS_5, and CGS_6 denote the CGS based on shareholder rights, board quality, information disclosure practices, audit quality, treatment of managerial negligence, and other negative factors, respectively. * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

common to both groups and time-invariant differences in the overall means are captured by α_1 and α_2 , respectively. Therefore, the interaction term $POST \times DCGS_{i,t}$ captures the impact of CGS on CSR activities. In other words, α_3 measures the change in CSR activities due to the governance regulation shock for well-governed firms in relation to poorly governed firms.

Table 7 presents the DiD test estimation results. We find that the coefficient of the $DCGS$ in Model (1) is positive and significant; this finding is consistent with our previous finding that a firm with better CG promotes CSR activities. More importantly, the

coefficient of the interaction term is also positive and significant, suggesting that the positive influence of better CG practices on CSR engagement increased following the regulatory change in 2012. In Models (2) and (3), we restrict the full sample period to two years and one year before and after the regulatory changes, respectively, to control for the unobserved noise factors that may affect long-term CSR activities. We find that the positive influence of CG on CSR activities becomes more evident after the implementation of regulatory change. Next, since the amendment of commercial law in 2012 was designed mainly to alleviate the chronic governance problems of *chaebols*, we further investigate whether the positive influence of better CG practices on CSR engagement holds in *chaebol* groups. We combine the chaebol dummy with the $DCGS \times POST$ variables to test this prediction. The relationship between CG and CSR following the 2012 regulatory change was more pronounced in *chaebol* groups than in non-*chaebol* groups. This evidence is consistent with the notion that the amendment of the regulatory change targeting *chaebol* groups effectively strengthened the positive CS–CSR relationship.

Following Roberts and Whited (2013), we substantiate our results via a falsification test in Model (4). Thus, we assume that the onset of our treatment occurs one year before it actually does. Therefore, we examine whether the false post-regulation period that began in 2011 affects the $DCGS \times POST$ and $DCGS \times POST \times chaebol$ dummy interaction effects. Suppose that the estimated treatment effect is statistically insignificant. In that case, the observed change is more likely to be due to the actual treatment of Korean CG regulations in 2012, as opposed to some alternative forces. The insignificant coefficients of the $DCGS \times POST$ and $DCGS \times POST \times chaebol$ dummies provide evidence that the Korean CG regulation of 2012 provides a valid quasi-natural experiment and reconfirms the positive CG–CSR nexus after controlling for endogeneity.

Additionally, we conducted a falsification test in Model (5) by assuming that the false post-regulation period started in 2013. As in Model (4), the coefficients of the $DCGS \times POST$ and $DCGS \times POST \times chaebol$ dummy interactions are insignificant, thereby reconfirming the legitimacy of our endogeneity test. Overall, after controlling for endogeneity, the findings support Hypothesis 2 that the positive role of CG in encouraging long-term and sustainable CSR decisions is more pronounced for *chaebol* firms.

CG and CSR in firms adopting an EVS

This section investigates the influence of CG quality on CSR activities in firms that adopt an electronic voting system (EVS), using EVS as a proxy for minority shareholder influence. Previous studies have described the advantages and disadvantages of adopting an EVS. EVS encourages minority shareholders to participate in meetings with general shareholders, thereby improving the transparency of democratic decisions. By enabling remote and convenient voting, EVS increases the likelihood of minority shareholder engagement, amplifying their influence on corporate governance and CSR activities. However, excessive interference from minority shareholders can hinder managerial efficiency (Mallin 2001).

Well-governed firms can promote or discourage CSR activities by adopting an EVS. If the views of large and minority shareholders are well aligned such that they foster the long-term value of the firm (e.g., through CSR), firms that adopt EVS will increase their

Table 7 Difference-in-differences analysis before and after the change in Korean corporate governance regulations in 2012

	Full sample period (1)	Two years before and after the regulation change (2)	One year before and after the regulation change (3)	Full sample period falsely assuming that the regulation change occurred in 2011 (4)	Full sample period falsely assuming that the regulation change occurred in 2013 (5)
Intercept	59.4442*** (26.58)	57.9322*** (13.37)	64.6202*** (7.69)	58.2335*** (25.50)	57.6117*** (25.74)
DCGS _{R_{t-1}}	1.5224*** (6.07)	1.3364*** (4.72)	1.4850*** (4.16)	0.6885*** (4.53)	0.7557*** (5.21)
POST	− 0.1166 (− 0.49)	0.5578* (1.92)	2.8448*** (6.88)	− 0.4480 (− 1.23)	3.2024*** (5.98)
DCGS _{R_{t-1}} × POST	1.1936*** (3.93)	0.6885*** (4.53)	0.7557*** (5.21)	− 0.3570 (− 1.02)	− 0.9411 (− 1.12)
Chaebol dummy	− 0.2020 (− 1.01)	0.0603 (0.23)	0.1397 (0.42)	− 0.2346 (− 1.15)	− 0.1817 (− 0.91)
DCGS _{R_{t-1}} × POST × Chaebol Dummy	0.6739** (2.16)	2.1172** (2.46)	1.5279* (1.81)	− 0.7237 (− 1.39)	− 1.6433 (− 1.52)
SIZE _{t-1}	0.0207 (0.30)	0.3625*** (4.14)	0.2332** (1.97)	0.1635 (0.10)	0.7224 (0.89)
LEV _{t-1}	− 1.5732*** (− 3.12)	− 2.2570*** (− 3.56)	− 2.4980*** (− 2.90)	− 1.3906*** (− 2.70)	− 1.4696*** (− 2.90)
ROA _{t-1}	− 9.6807*** (− 2.68)	− 5.8379 (− 1.30)	− 1.1559 (− 0.18)	− 8.8221** (− 2.39)	− 7.1081** (− 1.97)
Q _{t-1}	0.6603*** (5.38)	0.6317*** (3.41)	0.7951*** (3.44)	0.5845*** (4.68)	0.5876*** (4.80)
RNDS _{t-1}	19.2061*** (6.15)	− 3.1081 (− 0.77)	11.8259** (1.98)	17.8119*** (5.64)	18.3318*** (5.94)
BM _{t-1}	− 0.1581 (− 1.58)	− 0.3341*** (− 2.80)	− 0.1679 (− 1.02)	− 0.1168 (− 1.15)	− 0.1067 (− 1.07)
CASHF _{t-1}	12.5646*** (3.63)	4.0833 (0.96)	− 1.7524 (− 0.31)	12.4472*** (3.52)	11.0258*** (3.18)
SD _{t-1}	− 1.9874*** (− 4.11)	− 1.2770 (− 1.44)	− 1.6890 (− 1.57)	− 0.8021* (− 1.70)	− 0.6885 (− 1.49)
HHI _{t-1}	6.2128 (1.50)	− 1.7862 (− 0.16)	− 12.849 (− 0.59)	8.9293** (2.12)	9.9524** (2.41)
MARKET_D	0.7388*** (3.55)	− 0.3242 (− 1.27)	0.2907 (0.88)	0.9237*** (4.43)	0.9522*** (4.67)
Industry dummy	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.2448	0.1926	0.2940	0.2104	0.2406
Obs	1567	792	445	1567	1567

This table presents the estimation results of the difference-in-differences analysis of CSR on the lagged CGS, subject to the change in Korean corporate governance regulations in 2012. The *t* statistics, given in parentheses, are adjusted for two-way clustered standard errors at the firm level to allow for heteroscedasticity and arbitrary within-firm correlation. This approach is based on Petersen's (2009) methodology. POST is an indicator variable that equals one in the post-event period. DCGS_{it} is an indicator variable that equals one for the experimental group (i.e., firms with governance quality above the median). All other variables are defined in Appendix B; **p* < 0.10; ***p* < 0.05; ****p* < 0.01

CSR activities. However, a lack of information and understanding regarding CSR investments, such as in Korea, may indicate that minority shareholders lack experience in corporate decision-making. Consequently, they may generate noise, which hinders managerial efficiency and may instead focus on short-term value maximization (Carpenter and Sanders 2004). Shareholders can directly or indirectly pressure managers to reduce a firm's CSR. Furthermore, introducing EVSs in Korean firms is indirectly related to private governance (Rathert 2016). In a country such as Korea, without effective regulatory institutions and private governance, EVSs may serve as both substitutes for and complements to regulatory institutions. Thus, we hypothesize that introducing an EVS to a firm may affect the variation in CSR activities.

To measure the influence of minority shareholders, we used the Korea Securities Depository website to manually establish whether firms employed EVSs in annual or special meetings between 2014 and 2017. Since the website does not show all the firms that adopted an EVS as a single list, we searched for information on each company individually. The model for testing whether introducing an EVS to a firm may affect the variation in CSR activities is as follows.

$$\begin{aligned}
 CSR_{i,t} = & \alpha_0 + \alpha_1 CGS_{i,t-1} + \alpha_2 EVSdummy + \alpha_3 CGS_{i,t-1} \times EVSdummy \\
 & + \alpha_4 Chaeboldummy + \alpha_5 CGS_{i,t-1} \times Chaeboldummy + \alpha_6 EVSdummy \\
 & \times Chaeboldummy + \alpha_7 CGS_{i,t-1} \times EVSdummy \times Chaeboldummy + X'_{it}\beta + Z'_t\gamma + \varepsilon_{it}
 \end{aligned}
 \tag{4}$$

Table 8 investigates the influence of CG quality on CSR in firms adopting an EVS. Models (1) and (2) reveal that EVS adoption does not significantly influence CSR activities. However, adding the EVS and chaebol dummies in Model (4) shows that the positive CG-CSR effect is stronger for chaebol groups, supporting Hypothesis 2.

Robustness checks

Effect of CGS on alternative measures of CSR activities

We perform several robustness tests to validate our main findings. First, we investigate whether the results in Table 3 are specific to our CGS, based on several criteria (shareholder rights, board quality, information disclosure practices, audit quality, the treatment of managerial negligence, and other negative factors) as proxies for CG quality. Next, we conduct a similar regression by replacing CGS with alternative proxies for CG. We follow the literature to construct three variables to capture the internal governance of a firm. Specifically, we use the size of the board of directors (Board_size) and the proportion of outside directors (Out_board) to capture board composition (Boone et al. 2007; Coles et al. 2008; Linck et al. 2008). Additionally, we consider foreign institutional ownership (Foreign_Own) since it is widely used as a governance-related variable and enhances the long-term value of firms in markets where foreign investors are active participants (Choi et al. 2007; He et al. 2013; Ramaswamy et al. 2002).

Table 9 reports the coefficients of these alternative CG measures. The regressions include the same additional controls as those in Table 3. Similar to Table 3, a firm with better-quality CG is associated with significantly greater engagement in CSR activities. In particular, Model (1) suggests that a firm with a larger board and greater foreign institutional ownership promotes CSR activities. Additionally, when we include each CG

measure jointly with the control variables in Model (2), the coefficients on board size and foreign institutional ownership remain significant, and the coefficient on the proportion of outside board members becomes significant. Fama–MacBeth's (1973) cross-sectional regression in Model (3) suggests that the coefficients of board size, outside board proportion, and foreign ownership are significant. Thus, although various measures of the quality of CG have different effects on the CG–CSR association, our main result of a positive CG–CSR association generally remains intact. Model (4) indicates that *chaebols* with large boards and higher foreign institutional ownership foster CSR activities. Although the effectiveness of board size is controversial (Jensen 1993), to understand the positive influence of foreign ownership on CSR performance, it is necessary to identify the profiles of foreign owners that may indicate their investment orientations and preferences. Prior studies widely document that foreign ownership increases the demand for disclosure by local firms, enhancing institutional monitoring, shareholder activism, and board representation (Choi et al. 2007).⁹

Further endogeneity test based on propensity score matching

Reverse causality is less likely to be a concern in our empirical setting since the unreported results show that the impact of lagged CSR on the CGS is insignificant, as previously reported by Jo and Harjoto (2012). However, unobservable firm characteristics may simultaneously affect the structures of CG and CSR activities, resulting in spurious correlations. Additionally, firms that actively invest in CSR activities are more likely to have better CG because they strive to make their governance structures more transparent and shareholder friendly to maintain their image as CSR enterprises. Thus, firms that undertake more CSR activities may be better governed. Our propensity scoring method can partially address this concern. Therefore, we create a matched sample of high- and low-governance firms (Rosenbaum and Rubin 1983). First, we estimate the following logit model to determine the types of firms (or variables) that affect CG:

$$CGS_{it} = \alpha_0 + \alpha_1(Foreign_Own)_{it-1} + \alpha_2(Size)_{it-1} + \alpha_3(LEV)_{it-1} + \alpha_4(RNDS)_{it-1} + \alpha_5(BM)_{it-1} + \alpha_6(CASHF)_{it-1} + \alpha_7(SD)_{it-1} + \alpha_8(HHI)_{it-1} + \alpha_9(MARKET_D)_{it-1} \quad (5)$$

Panel A of Table 10 presents the estimates for the model. We find that larger firms (as represented by sales) and those that invest heavily in R&D are more likely to have better governance. However, firms with higher leverage and a higher Herfindahl–Hirschman index (higher product market concentration with lower product market competition) are more likely to have a less effective governance structure. We obtain two sets of matching data following Lowry et al. (2010). The first set is the result of one-to-one matching, wherein we match each high-governance firm to the closest low-governance firm. The second set involves one-to-two matching, wherein we match each high-governance firm to the closest low-governance firm with a propensity score that is higher than that of the high-governance firm and to the closest low-governance firm with a propensity score lower than that of the high-governance firm. However, regardless of the matching technique used, our results do not differ significantly from the main results in Table 3. In

⁹ Moreover, foreign ownership increases the demand for more sophisticated valuation methods (Wei et al. 2005). In addition, the understanding of how foreign ownership shapes earnings guidance in a stakeholder-oriented setting (Aguilera et al. 2017). Those result in a higher relevance of non-financial CSR information (Dhaliwal et al. 2011, 2012).

Table 8 Influence of CG quality on CSR activities in firms that adopt an EVS

Variable	Firms with an EVS	Firms without an EVS	EVS dummy	EVS and <i>chaebol</i> dummies
Intercept	65.4654*** (8.32)	79.3940*** (4.59)	49.9846*** (4.26)	55.6708*** (9.68)
CGS _{t-1}	- 0.0205 (- 1.32)	0.0228*** (3.60)	0.0216*** (3.56)	0.0197*** (3.52)
EVS dummy			1.3873 (1.46)	- 0.2185 (- 0.25)
CGS _{t-1} × EVS dummy			- 0.0203* (- 1.76)	0.0034 (0.32)
<i>Chaebol</i> dummy				- 1.0996 (- 1.56)
CGS _{t-1} × <i>Chaebol</i> dummy				0.0755* (1.81)
EVS dummy × <i>Chaebol</i> dummy				0.38595** (2.11)
CGS _{t-1} × EVS dummy × <i>Chaebol</i> dummy				- 0.0409* (- 1.93)
SIZE _{t-1}	- 0.2961 (- 0.84)	- 0.3920*** (- 3.18)	- 0.3843*** (- 3.35)	- 0.0564 (- 0.60)
LEV _{t-1}	1.0902 (0.43)	0.4756 (0.61)	0.2160 (0.29)	- 1.0727* (- 1.86)
ROA _{t-1}	13.6062 (0.53)	1.0416 (0.16)	0.4748 (0.08)	- 8.0204* (- 1.79)
Q _{t-1}	0.7639 (1.54)	0.1637 (0.83)	0.2469 (1.36)	0.3251** (2.14)
RNDS _{t-1}	26.4591 (1.17)	27.1646*** (4.94)	25.0874*** (4.77)	21.3654*** (4.90)
BM _{t-1}	1.8627** (2.62)	0.2523 (1.07)	0.3923* (1.76)	0.0397 (0.26)
CASHF _{t-1}	2.1985 (0.09)	10.0523* (1.70)	11.8106** (2.10)	8.1931* (1.92)
SD _{t-1}	2.0279 (0.94)	0.7740 (0.82)	1.1022 (1.28)	0.3690 (0.57)
HHI _{t-1}	- 19.031 (- 0.45)	- 46.252 (- 0.86)	45.6752 (1.25)	14.2810 (0.88)
MARKET_D	1.3602 (1.43)	1.4696*** (3.97)	1.4767*** (4.27)	0.9373*** (3.42)
Industry dummy	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes
Adj. R ²	0.5250	0.4429	0.4463	0.4305
Obs	61	519	580	580

Models (1) and (2) present the estimation results for the panel regression of CSR on the lagged CGS in firms with and without an EVS, respectively. Models (3) and (4) present the estimation results for the panel regression of CSR on the lagged CGS interacting with the EVS dummy variable and both the EVS and *chaebol* dummy variables, respectively. The *t* statistics, given in parentheses, are adjusted for two-way clustered standard errors at the firm level to allow for heteroscedasticity and arbitrary within-firm correlation. This approach was based on Petersen's (2009) methodology. All other variables are defined in Appendix B; * denotes $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

Table 9 Influence of alternative measures of CG on CSR activities

Variable	Model (1)	Model (2)	Model (3)	Model (4)
Intercept	61.7223*** (158.28)	57.8660*** (17.89)	53.5204*** (13.49)	58.0386*** (17.53)
Board_size _{t-1}	0.1424*** (3.43)	0.0835** (2.48)	0.1164*** (2.85)	0.0957** (2.29)
Out_board _{t-1}	0.7359 (1.08)	1.5774*** (2.59)	1.6707** (2.36)	2.0155*** (2.73)
Foreign_own _{t-1}	0.0354*** (5.69)	0.0208*** (3.46)	0.0198*** (2.68)	0.0138** (2.08)
<i>Chaebol</i> dummy				− 0.6818 (− 0.98)
Board_size _{t-1} × <i>Chaebol</i> dummy				0.1431* (1.80)
Out_board _{t-1} × <i>Chaebol</i> dummy				− 1.9409 (− 1.64)
Foreign_own _{t-1} × <i>Chaebol</i> dummy				0.0270** (2.39)
SIZE _{t-1}		− 0.0152 (− 0.20)	− 0.0160 (− 0.18)	− 0.0301 (− 0.37)
LEV _{t-1}		− 1.4780*** (− 3.08)	− 0.4213 (− 0.72)	− 1.2892*** (− 2.68)
ROA _{t-1}		− 4.5770 (− 1.32)	− 1.0327 (− 0.24)	− 3.9286 (− 1.14)
Q _{t-1}		0.3258** (2.54)	0.2958* (1.88)	0.3355*** (2.62)
RNDS _{t-1}		20.0760*** (5.57)	22.9298*** (5.15)	19.5645*** (5.42)
BM _{t-1}		− 0.1671 (− 1.55)	0.0684 (0.53)	− 0.1691 (− 1.57)
CASHF _{t-1}		3.8367 (1.18)	2.7506 (0.69)	3.2383 (1.00)
SD _{t-1}		0.2846 (0.50)	− 1.2218** (− 2.17)	0.0280 (0.05)
HHI _{t-1}		9.1311 (1.12)	16.6624* (1.67)	9.2537 (1.14)
MARKET_D		0.4265** (2.01)	0.6166** (2.40)	0.4868** (2.29)
Industry dummy	No	Yes	Yes	Yes
Year dummy	No	Yes	Yes	Yes
Adj. R ²	0.0510	0.4386	0.1407	0.4435
Obs	1222	1222	1222	1222

Models (1), (2), and (4) present the estimation results for the panel regression of CSR on alternative measures of the lagged CG variables. The *t* statistics, given in parentheses, are adjusted for two-way clustered standard errors at the firm level to allow for heteroscedasticity and arbitrary within-firm correlation. This approach is based on Petersen's (2009) methodology. Model (3) presents the estimation results for the Fama–MacBeth (Fama and MacBeth 1973) cross-sectional regression of CSR on alternative measures of the lagged CG variables. The *t* statistics, given in parentheses, are adjusted for Newey–West (Newey and West 1987) autocorrelation with three lags. Board_size refers to the size of the board, Out_board is the proportion of independent outside directors, and Foreign_Own refers to foreign ownership. All other variables are defined in Appendix B; **p* < 0.10; ***p* < 0.05; ****p* < 0.01

Panel B of Table 10, well-governed firms increase their investment in CSR activities after controlling for selection bias. This finding is consistent with the notion that firms with better CG that aligns their corporate decisions with shareholders' long-term objectives tend to invest more resources in CSR activities.

When we include both the *chaebol* dummy and the interaction between the CGS and the *chaebol* dummy in Models (4) and (5), we find that the coefficient of the *chaebol* dummy continues to be negative. However, the impact of CG quality on a firm's CSR activities—based on the positive coefficient of the CGS–*chaebol* dummy interaction variable—is more pronounced for *chaebol* firms than for *non-chaebol* firms, further supporting Hypotheses 1 and 2.

Discussion

The economic and practical implications of our overall results for managers, investors, and policymakers are as follows. Enhancing corporate governance is pivotal for managers to leverage corporate social responsibility (CSR) as a strategic asset, building local legitimacy and achieving sustainable competitive advantage. Strong governance structures not only improve CSR performance but also enhance stakeholder trust and operational resilience. For investors, especially in emerging markets such as Korea, prioritizing governance quality is essential in investment decisions, as it signals a firm's long-term viability and ethical operations, which are crucial for ensuring sustainable returns and mitigating risks. Policymakers, in turn, should develop and enforce robust corporate governance standards that stimulate responsible corporate behavior and enhance socioeconomic development. Such effective governance frameworks can help bridge institutional voids, promote transparency and accountability in business practices, which are essential for fostering a stable and prosperous economic environment.

Our study refines the understanding of the impact of corporate governance (CG) on corporate social responsibility (CSR) within Korean chaebol-affiliated firms, in contrast with the mixed results from previous research. By using the 2012 Korean CG regulation amendments as a quasi-natural experiment, we demonstrate that enhanced CG practices significantly boost CSR activities, a finding supported by robust empirical methods such as difference-in-differences and propensity score matching. This research not only aligns with prior positive findings but also provides novel insights into how governance reforms in a specific institutional setting such as Korea can align stakeholder interests and enhance corporate accountability, offering actionable guidance for stakeholders in similar emerging markets."

Conclusion

This research seeks to answer the following question: do better CG practices promote CSR engagement in Korea? Our findings show that CG quality is positively and significantly related to the level of CSR engagement in Korea, supporting the local legitimacy theory perspective that effective CG enhances a firm's social legitimacy and long-term sustainability. Specifically, we find that governance characteristics associated with the protection of shareholder rights, board roles, and audit committee activities have the most significant positive effects on CSR activities.

Table 10 Endogeneity control via propensity score matching

Panel A Influence of CG quality on CSR activities on the basis of propensity score matching (prematching logit regression)

Intercept	− 5.110*
	(0.0709)
Foreign_own _{t−1}	0.007
	(0.1412)
SIZE _{t−1}	0.535***
	(< 0.0001)
LEV _{t−1}	− 1.123***
	(0.0077)
RNDS _{t−1}	16.485***
	(< 0.0001)
BM _{t−1}	− 0.116
	(0.1292)
CASHF _{t−1}	− 1.428
	(0.1544)
SD _{t−1}	− 0.896*
	(0.058)
HHL _{t−1}	− 14.455**
	(0.0338)
MARKET_D	0.339*
	(0.052)
Industry dummy	Yes
Year dummy	Yes
Pseudo- R^2	0.225
Likelihood ratio statistic	1764.779
(<i>p</i> value)	(< 0.0001)
Obs	1627

Variable	One-to-one (1)	One-to-two (2)	One-to-one (3)	One-to-two (4)	One-to-one (5)	One-to-two (6)
----------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------

Panel B Influence of CG quality on CSR activities on the basis of propensity score matching (postmatching panel regression)

Intercept	55.0364*** (20.32)	55.0777*** (24.74)	131.491* (2.07)	133.164* (2.10)	55.6020*** (20.15)	55.6760*** (24.50)
CGS _{t−1}	0.0248*** (9.47)	0.0233*** (10.87)	0.0276** (2.38)	0.0262* (2.20)	0.0151*** (4.15)	0.0127*** (4.28)
Chaebol dummy					− 1.7457*** (− 3.93)	− 1.8573*** (− 5.26)
CGS _{t−1} × Chaebol dummy					0.0152*** (3.99)	0.0172*** (5.41)
SIZE _{t−1}	0.0693 (1.23)	0.0657 (1.40)	0.1639 (1.40)	0.1284* (1.85)	0.0978 (1.62)	0.0880* (1.78)
LEV _{t−1}	− 2.2898*** (− 5.11)	− 1.8761*** (− 5.31)	− 2.8738 (− 1.81)	− 2.2020 (− 1.65)	− 2.2530*** (− 5.05)	− 1.8715*** (− 5.32)
ROA _{t−1}	− 2.3868 (− 0.74)	− 1.2291 (− 0.49)	− 6.6175 (− 0.93)	− 3.5111 (− 0.68)	− 1.4639 (− 0.46)	− 0.1417 (− 0.06)
Q _{t−1}	0.7674*** (7.18)	0.8880*** (9.90)	0.4898* (1.97)	0.4537** (2.29)	0.7617*** (7.13)	0.8886*** (9.94)
RNDS _{t−1}	14.0361***	15.4232***	16.1658**	16.0829***	14.0934***	15.2592***

Table 10 (continued)

Variable	One-to-one (1)	One-to-two (2)	One-to-one (3)	One-to-two (4)	One-to-one (5)	One-to-two (6)
BM_{t-1}	(5.22) − 0.0192 (− 0.22)	(7.69) 0.1518** (2.20)	(2.74) − 0.3869* (− 2.06)	(3.59) − 0.3681 (− 1.70)	(5.17) 0.0144 (0.16)	(7.53) 0.1844*** (2.67)
$CASHF_{t-1}$	4.2896 (1.40)	4.6357* (1.92)	7.8605 (0.80)	5.3784 (0.82)	3.2615 (1.06)	3.3881 (1.40)
SD_{t-1}	0.7417 (1.39)	1.0773*** (2.58)	− 14.785 (− 1.18)	− 9.9607 (− 1.28)	0.3942 (0.73)	0.6880 (1.63)
HHI_{t-1}	4.1345 (0.62)	2.6159 (0.47)	− 215.81 (− 1.26)	− 220.27 (− 1.27)	3.9799 (0.60)	3.0991 (0.56)
$MARKET_D$	0.4234** (2.29)	0.4684*** (3.24)	0.1823 (0.45)	0.3062 (0.91)	0.4249** (2.30)	0.4677*** (3.25)
Industry dummy	Yes	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	No	No	Yes	Yes
Adj. R^2	0.4287	0.4506	0.3912	0.4172	0.4338	0.4571
Obs	1610	2377	1610	2377	1610	2377

Panel A presents the maximum likelihood estimates of a logit model, which explains which firms are more likely to receive a higher corporate governance score (CGS):

$$CGS_{it} = \alpha_0 + \alpha_1(Foreign_Own)_{it-1} + \alpha_2(Size)_{it-1} + \alpha_3(LEV)_{it-1} + \alpha_4(RNDS)_{it-1} + \alpha_5(BM)_{it-1}$$

$$+ \alpha_6(CASHF)_{it-1} + \alpha_7(SD)_{it-1} + \alpha_8(HHI)_{it-1} + \alpha_9(MARKET_D)_{it-1}$$

where Foreign_Own represents foreign ownership. The sample comprises firms listed on the KOSPI from 2009 to 2017;

the p values are given in parentheses. The pseudo- R^2 value measures the goodness-of-fit of the model, whereas the likelihood ratio statistic measures the joint significance of the model, with the p values given in parentheses. Panel B presents the estimation results for the panel regression of CSR on the lagged CGS performed via propensity score matching. The t statistics, given in parentheses, for Models (1), (2), (5), and (6) are adjusted for two-way clustered standard errors at the firm level to allow for heteroscedasticity and arbitrary within-firm correlation. This approach is based on Petersen's (2009) methodology. Models (3) and (4) present the estimation results for the Fama–MacBeth (Fama and MacBeth 1973) cross-sectional regression of CSR on the lagged CGS performed via propensity score matching. The t statistics, reported in parentheses, are adjusted for Newey–West (Newey and West 1987) autocorrelation with three lags. The variables are defined in Appendix B; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

On the basis of a hand-collected sample of EVS firms, our results suggest that firms that adopt EVS do not engage in CSR. Although the Korean government designed EVS to encourage minority shareholder participation, these shareholders often lack the long-term perspective needed for high-risk CSR investments and tend to focus on short-term gains.

Our main finding of a positive relationship between CG and CSR activities is robust to alternative measures of CG. However, investigating the CG-CSR nexus from a local legitimacy theory perspective is complicated because of the inherent endogeneity problem. Hence, we use the 2012 exogenous change in Korean CG regulations to mitigate the causal impact of CG on CSR activities in Korean firms. Endogeneity tests based on a DiD approach and propensity score matching analysis reinforce our main findings of a positive CG-CSR linkage, thus providing further support for local legitimacy theory. Overall, our results are consistent with the proposition that effective CG practices align the interests of stakeholders and management by reducing institutional voids and conflicts of interest between the two groups. These practices positively impact CSR activities and a firm's long-term sustainability. To the best of our knowledge, this is the first study to extensively examine the CS-CSR relationship, which is subject to various

influencing factors, such as the presence of business conglomerates, EVS, and CG regulatory changes in a leading emerging market. Overall, this study contributes to the literature by shedding light on sound CG practices to fill institutional voids and their impact on CSR activities to achieve local legitimacy.

This study has several limitations. First, our results, which are based on the CG-CSR association in Korea, may not be generalized to other emerging markets unless they have similar stakeholder governance orientations and business conglomerate structures. In the context of differing CG structures, the effects of formal and informal country-level institutions, including laws and cultures, vary globally, especially at the disaggregated CSR category level. Maignan and Ralston (2002) reported that the extent and composition of CSR activities in France, the Netherlands, the UK, and the US are heterogeneous.

Second, the available Korean data on CG and CSR activities span 2009–2017. Although these data are relatively recent, they are limited in number. Thus, our findings are indicative rather than conclusive and should be interpreted cautiously. Therefore, future research should be conducted in this area. Moreover, the Korean government is planning to introduce a stewardship code in 2018 that extends the role of institutional investors from stockholding and voting rights to contributing to the sustainable growth of firms via active dialog and maximizing shareholders' profits. Therefore, it is worth investigating whether this change strengthens the effect of CG on CSR. These topics can be explored in future research.

A key policy implication is that multinational enterprises and foreign investors operating in emerging markets such as Korean markets should closely monitor the quality of corporate governance in their subsidiaries, partner firms, or investee companies. Our findings indicate that enhancing corporate governance practices can significantly increase CSR activities, which are crucial for achieving long-term success and local legitimacy. Moreover, this suggests that policymakers and corporate leaders should prioritize strengthening shareholder rights, improving board effectiveness, and ensuring audit quality as central drivers of CSR initiatives. Implementing governance reforms, such as improving audit committee functions and increasing transparency in board operations, could be particularly effective in advancing CSR engagement.

Appendix A Top 30 Business Groups (*Chaebols*) of Korea and their Structures

Rank	Group name	Ownership type	Number of industries	Number of firms
1	Samsung	Family	29	67
2	Hyundai Motors	Family	24	51
3	SK	Family	29	82
4	LG	Family	27	63
5	Lotte	Family	25	80
6	POSCO	Government	20	51
7	GS	Family	30	79
8	Hyundai Heavy Industry	Family	16	27
9	Hanjin	Family	13	46

Rank	Group name	Ownership type	Number of industries	Number of firms
10	Hanhwa	Family	25	52
11	KT	Diversified	17	50
12	Doosan	Family	11	22
13	SSG	Family	9	29
14	CJ	Family	19	65
15	LS	Family	25	48
16	Daewoo Shipbuilding	Financial institution	10	18
17	Kumho Asiana	Family	17	26
18	Daerim	Family	11	24
19	Booyoung	Family	8	15
20	Dongbu	Family	23	53
21	Hyundai	Family	12	20
22	Hyundai Dept Store	Family	13	32
23	OCI	Family	10	26
24	Hyosung	Family	21	45
25	Daewoo E&C	Financial institution	9	13
26	S-Oil	Foreign investor	1	2
27	Youngpoong	Family	13	22
28	KCC	Family	6	9
29	Mirae Assets	Family	9	31
30	Dongkuk Steel	Family	7	14

Appendix A is borrowed from Table 1 in Choi et al.'s (2018) study, wherein the top 30 business groups are ranked by asset size, ownership type, number of industries in which the group firms operate, and the number of affiliated firms as of 2015. The rank of each group changes over time. Ownership type is based on the identity of the largest controlling shareholder. The KT Group changed from a government-owned group to a private group in May 2002, although the National Pension Services, a passive government investment agency, retains 10.5% ownership

Appendix B Six Categories of the Corporate Governance Index, Variable Definitions, and Data Sources

Panel A CG scores from the KCGS

CG category	Subcategory
1. Shareholder rights	1-1. Protection of shareholder rights and convenience of exercising rights 1-2. Corporate ownership structure 1-3. Influence of affiliated shareholders
2. Board quality	2-1. Board composition 2-2. Operation, evaluation, and compensation for the board of directors
3. Information disclosure practices	3-1. Fair and timely disclosure practices 3-2. Quality of disclosure on firms' homepages
4. Audit quality	4. Soundness and fairness of audit committee
5. Treatment of managerial negligence	5. Sound and fair allocation of negligence to subjective executives
6. Other negative factors	

Panel B Variable definitions and data sources

Control variable	Definition	Data source
KEJI-CSR Index	KEJI-CSR index	CCEJ

Control variable	Definition	Data source
CGS	CG score	KCGS
SIZE	Natural logarithm of sales for firm i in year t	DataGuidePro
LEV	Total debt divided by total assets for firm i in year t	DataGuidePro
ROA	Net income divided by total assets for firm i in year t	DataGuidePro
Q	Sum of the market value of equity and long- and short-term debt divided by the total assets for firm i in year t	DataGuidePro
RNDS	R&D expenditure divided by sales for firm i in year t	DataGuidePro
BM	Total equity divided by the market value of equity for firm i in year t	DataGuidePro
CASHF	Free cash flow divided by total assets for firm i in year t	DataGuidePro
HHI	Calculated from the following equation: Herfindahl–Hirschman index $_j = \sum_{i=1}^N s_{ij}^2$ for industry j based on the KRX industry classification s_{ij} refers to the market share (%) of firm i belonging to industry j , and N represents the number of firms in the industry The market share of each firm is calculated based on the sum of the sales of all N firms included in each industry (using all possible sales data from firms listed on the KOSPI and KOSDAQ exchange)	DataGuidePro
MARKET_D	Dummy variable equal to one for firms listed on the KOSPI 200 and zero otherwise	DataGuidePro
SD	Standard deviation of daily stock returns for firm i in year t	DataGuidePro

Abbreviations

CG	Corporate governance
CSR	Corporate social responsibility
CGS	Corporate governance score
EVS	Electronic voting system
DiD	Difference-in-differences
KOSPI	Korea Composite Stock Price Index
KEJI	Korea Economic Justice Institute
CCEJ	Citizens' Coalition for Economic Justice
DJSI Korea	Dow Jones Sustainability Korea Index
KCGS	Korea Corporate Governance Service
KRX	Korea Stock Exchange (KRX)
KOSDAQ	Korea Securities Dealers Automated Quotations
HHI	Herfindahl–Hirschman Index
KZ Index	Kaplan–Zingales Index

Acknowledgements

We would like to thank the editor and anonymous reviewers for their valuable comments and suggestions, which greatly helped improve the quality of this paper. We are also grateful for the insightful feedback provided by Hyang Mi Choi, Jinhua Cui, Suk Jin Kim, Byungjin Kwak, and Jeroen Veldman, as well as by participants at the annual conferences of the Korean Academic Society of Business Administration, Korean Academic Society of Accounting, Korean Association of Financial Engineering, and Korea Money and Finance Association. We appreciate Beth Baugh for her editorial assistance. Hoje Jo acknowledges support from the Gerald and Bonita A. Wilkinson Professorship.

Author contributions

JY and CY carried out the data handling and empirical analysis. CY conceived of the study and draft the first manuscript, and HJ and JY carried out the test design and helped to draft, revise, and finalize the manuscript.

Funding

Not applicable.

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Competing interests

The authors declare that they have no competing interests.

Ethics approval and consent to participate

Not applicable. This study did not involve human participants or animals.

Consent for publication

Not applicable. This manuscript does not contain any individual person's data.

Received: 13 August 2022 Accepted: 10 August 2025

Published online: 21 August 2025

References

- Abdennadher S, Walid C (2020) The effectiveness of e-corporate governance: an exploratory study of internet voting at shareholders' annual meetings in France. *Corp Gov* 20(4):673–702
- Aghion P, Tirole J (1997) Formal and real authority in organizations. *J Polit Econ* 105(1):1–29
- Aguilera R, Desender K, Lamy M, Lee J (2017) The governance impact of a changing investor landscape. *J Int Bus Stud* 48:195–221
- Anderson BS, Eshima Y (2013) The influence of firm age and intangible resources on the relationship between entrepreneurial orientation and firm growth among Japanese SMEs. *J Bus Ventur* 28(3):413–429
- Arora P, Dharwadkar R (2011) Corporate governance and corporate social responsibility (CSR): the moderating roles of attainment discrepancy and organization slack. *Corp Gov Int Rev* 19(2):136–152
- Bae KH, Kang JK, Kim JM (2002) Tunneling or value-added? Evidence from mergers by Korean business groups. *J Finance* 57(6):2695–2740
- Bae KH, El Ghoul S, Guedhami O, Kwok C, Zheng Y (2018) Does corporate social responsibility reduce the costs of high leverage? Evidence from capital structure and product markets interactions. *J Bank Finance* (in press)
- Bae KH, Kang JK, Wang J (2011) Employee treatment and firm leverage: a test of the stakeholder theory of capital structure. *J Financ Econ* 100:130–153
- Baek JS, Kang JK, Lee I (2006) Business groups and tunneling: evidence from private securities offerings by Korean chaebols. *J Finance* 61(5):2415–2449
- Barber BM, Odean T (2001) The internet and the investor. *J Econ Perspect* 15(1):41–54
- Baysinger B, Hoskisson RE (1990) The composition of boards of directors and strategic control: effects on corporate strategy. *Acad Manag Rev* 15(1):72–87
- Beji R et al (2021) Board diversity and corporate social responsibility: empirical evidence from France. *J Bus Ethics* 173:133–155
- Berle AA, Means GGC (1932) *The modern corporation and private property*. Transaction Publishers, New Brunswick
- Bhaskar R, Bansal S, Pandey DK (2024) CEO duality and corporate social responsibility: a moderation effect of founder CEO. *Res Int Bus Finance* 71:102410
- Block JH, Wagner M (2014) Ownership versus management effects on corporate social responsibility concerns in large family and founder firms. *J Fam Bus Strateg* 5(4):339–346
- Boone A, Field L, Karpoff J, Raheja C (2007) The determinants of corporate board size and composition: an empirical analysis. *J Financ Econ* 85(1):66–101
- Bushee BJ (1998) The influence of institutional investors on myopic R&D investment behavior. *Account Rev* 73(3):305–333
- Campbell JL (2007) Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Acad Manag Rev* 32(3):946–967
- Carpenter MA, Sanders WG (2004) The effects of top management team pay and firm internationalization on MNC performance. *J Manag* 30(4):509–528
- Chang SJ (2003) Ownership structure, expropriation, and performance of group-affiliated companies in Korea. *Acad Manag J* 46(2):238–253
- Chang SJ, Hong J (2000) Economic performance of group-affiliated companies in Korea: intragroup resource sharing and internal business transactions. *Acad Manag J* 43(3):429–448
- Chapple W, Moon J (2005) Corporate social responsibility (CSR) in Asia: a seven-country study of CSR website reporting. *Bus Soc* 44(4):415–441
- Choi BB, Lee D, Park Y (2013) Corporate social responsibility, corporate governance and earnings quality: evidence from Korea. *Corp Gov Int Rev* 21(5):447–467
- Choi J, Jo H, Kim J, Kim M (2018) Business groups and corporate social responsibility. *J Bus Ethics* 153(4):931–954
- Cho J, Park S, Yoo S (2007) The value of outside directors: evidence from corporate governance reform in Korea. *J Finance Quant Anal* 42(4):941–962
- Choi S, Aguilera RV (2009) CSR dynamics in South Korea and Japan: a comparative analysis. In: Mallin CA (ed) *Corporate social responsibility: a case study approach*. Edward Elgar, Cheltenham
- Chun H, Jo H, Jazaieri H, Song H (2024) The clemency and imprisonment experience of Chaebol heads and ESG performance. Working paper. Santa Clara University
- Coffey BS, Fryxell GE (1991) Institutional ownership of stock and dimensions of corporate social performance: an empirical examination. *J Bus Ethics* 10(6):437–444
- Coffey B, Wang J (1998) Board diversity and managerial control as predictors of corporate social performance. *J Bus Ethics* 17(14):1595–1603
- Coles J, Daniel N, Naveen L (2008) Boards: does one size fit all? *J Financ Econ* 87:329–356
- Crémer J (1995) Arm's length relationships. *Q J Econ* 110(2):275–295
- Dey A (2008) Corporate governance and agency conflicts. *J Account Res* 46(5):1143–1181
- Dhaliwal DS, Li OZ, Tsang A, Yang YG (2011) Voluntary nonfinancial disclosure and the cost of equity capital: the initiation of corporate social responsibility reporting. *Account Rev* 86(1):59–100
- Dhaliwal DS, Radhakrishnan S, Tsang A, Yang YG (2012) Nonfinancial disclosure and analyst forecast accuracy: international evidence on corporate social responsibility disclosure. *Account Rev* 87(3):723–759
- Fama EF, MacBeth JD (1973) Risk, return, and equilibrium: empirical tests. *J Polit Econ* 81(3):607–636
- Gifford B, Kestler A (2008) Toward a theory of local legitimacy by MNEs in developing nations: newmont mining and health sustainable development in Peru. *J Int Manag* 14(4):340–352

- Gillan SL, Starks LT (1998) A survey of shareholder activism: motivation and empirical evidence. *Contemp Finance Dig* 2:10–34
- Giroud X (2013) Proximity and investment: evidence from plant-level data. *Q J Econ* 128:861–915
- Graves SB, Waddock SA (1994) Institutional owners and corporate social performance. *Acad Manag J* 37(4):1034–1046
- Greenhill B, Mosley L, Prakash A (2009) Trade-based diffusion of labor rights: a panel study, 1986–2002. *Am Polit Sci Rev* 103(4):669–690
- Harjoto M, Jo H (2011) Corporate governance and CSR nexus. *J Bus Ethics* 100(1):45–67
- He W, Li D, Shen J, Zhang B (2013) Large foreign ownership and stock price informativeness around the world. *J Int Money Finance* 36:211–230
- Hillman AJ, Wan WP (2005) The determinants of MNE subsidiaries' political strategies: evidence of institutional duality. *J Int Bus Stud* 36(3):322–340
- Hong H, Kacperczyk M (2009) The price of sin: the effects of social norms on markets. *J Financ Econ* 93(1):15–36
- Husted BW, Allen DB (2006) Corporate social responsibility in the multinational enterprise: strategic and institutional approaches. *J Int Bus Stud* 37(6):838–849
- Jackson G, Deeg R (2008) Comparing capitalisms: understanding institutional diversity and its implications for international business. *J Int Bus Stud* 39(4):540–561
- Jensen MC (1993) The modern industrial revolution, exit, and the failure of internal control systems. *J Finance* 48:831–880
- Jensen MC (2002) Value maximization, stakeholder theory, and the corporate objective function. *Bus Ethics Q* 12:233–256
- Jensen MC, Meckling W (1976) Theory of the firm: managerial behavior, agency costs, and capital structure. *J Financ Econ* 3(4):305–360
- Jo H, Harjoto MA (2011) Corporate governance and firm value: the impact of corporate social responsibility. *J Bus Ethics* 103(3):351–383
- Jo H, Harjoto MA (2012) The causal effect of corporate governance on corporate social responsibility. *J Bus Ethics* 106(1):53–72
- Joh SW (2003) Corporate governance and firm profitability: evidence from Korea before the economic crisis. *J Financ Econ* 68(2):287–322
- Johnson RA, Greening DW (1999) The effects of corporate governance and institutional ownership types on corporate social performance. *Acad Manag J* 42(5):564–576
- Joubert H (2021) Is the effect of board diversity on CSR diverse? New insights from one-tier vs two-tier corporate board models. *Corp Gov* 21(1):23–61
- Kaplan S, Zingales L (1997) Do investment cash flow sensitivities provide useful measures of financial constraints? *Q J Econ* 112(1):169–212
- Kassinis G, Vafeas N (2002) Corporate boards and outside stakeholders as determinants of environmental litigation. *Strateg Manag J* 23(5):399–415
- Khanna T, Palepu KG (1997) Why focused strategies may be wrong for emerging markets. *Harv Bus Rev* 75:41–51
- Khanna T, Palepu KG (2000) Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *J Finance* 55(2):867–891
- Khanna T, Yafeh Y (2007) Business groups in emerging markets: paragons or parasites? *J Econ Lit* 45(2):331–372
- Kim BT (2013) Compulsory electronic voting system and its problems. *Bus Law Rev* 27(3):79–114
- Kim CH, Amaeshi K, Harris S, Suh CJ (2013) CSR and the national institutional context: the case of South Korea. *J Bus Res* 66(12):2581–2591
- Klapper LF, Love I (2004) Corporate governance, investor protection, and performance in emerging markets. *J Corp Finance* 10(5):703–728
- Lawless J (2024) What is the relationship between corporate governance and social responsibility. Purple Griffon, Kendal
- Leary M (2009) Bank loan supply, lender choice, and corporate capital structure. *J Finance* 64(3):1143–1185
- Linck J, Netter J, Yang T (2008) The determinants of board structure. *J Financ Econ* 87(2):308–328
- Lowry M, Officer MS, Schwert GW (2010) The variability of IPO initial returns. *J Finance* 65(2):425–465
- Lundstrum LL (2002) Corporate investment myopia: a horse race of the theories. *J Corp Finance* 8(4):353–371
- Maignan I, Ralston DA (2002) Corporate social responsibility in Europe and the U.S.: insights from businesses' self-presentations. *J Int Bus Stud* 33(3):497–514
- Mallin C (2001) Institutional investors and voting practices: an international comparison. *Corp Gov Int Rev* 9(2):118–126
- Masulis R, Reza SW (2015) Agency problem of corporate philanthropy. *Rev Financ Stud* 28(2):592–636
- Matten D, Moon J (2008) "Implicit" and "explicit" CSR: a conceptual framework for a comparative understanding of corporate social responsibility. *Acad Manag Rev* 33(2):404–424
- Nam YS, Jun H (2011) The shaping of corporate social responsibility in Korea's economic development. *Glob J Bus Manag Account* 1(1):10–20
- Neubaum DO, Zahra SA (2006) Institutional ownership and corporate social performance: the moderating effects of investment horizon, activism, and coordination. *J Manag* 32(1):108–131
- Newey WK, West KD (1987) A simple, positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix. *Econometrica* 55(3):703–708
- Oh WY, Chang YK, Martynov A (2011) The effect of ownership structure on corporate social responsibility: empirical evidence from Korea. *J Bus Ethics* 104(2):283–297
- Petersen MA (2009) Estimating standard errors in finance panel data sets: comparing approaches. *Rev Financ Stud* 22(1):435–480
- Prakash A, Potoski M (2007) Investing up: FDI and the cross-country diffusion of ISO 14001 management systems. *Int Stud Q* 51(3):723–744
- Ramaswamy K, Li M, Veliyath R (2002) Variations in ownership behavior and propensity to diversify: a study of the Indian corporate context. *Strateg Manag J* 23(4):345–358
- Rathert N (2016) Strategies of legitimization: MNEs and the adoption of CSR in response to host-country institutions. *J Int Bus Stud* 47:858–879

- Reimann F, Ehr Gott M, Kaufmann L, Carter CR (2012) Local stakeholders and local legitimacy: MNEs' social strategies in emerging economies. *J Int Manag* 18(1):1–17
- Roberts M, Whited T (2013) Endogeneity in empirical corporate finance. In: Constantinides GM, Harris M, Stulz RM (eds) *Handbook of economics and finance*, vol 2B. Elsevier, Amsterdam, pp 493–572
- Rosenbaum PR, Rubin DB (1983) The central role of the propensity score in observational studies for causal effects. *Biometrika* 70:41–55
- Rubinfeld S (2018) South Korea sentences ex-president to 24 years in prison. *Wall Street Journal*, April 6
- Scherer A, Palazzo G, Baumann D (2006) Global rules and private actors toward a new role of the TNC in global governance. *Bus Ethics Q* 16(4):502–532
- Sharma B (2013) Contextualizing CSR in Asia: corporate social responsibility in Asian economies. *Lien Centre for Social Innovation*, Singapore Management University, Singapore
- Shleifer A, Vishny RW (1997) A survey of corporate governance. *J Finance* 52(2):737–783
- Suchman MC (1995) Managing legitimacy: strategic and institutional approaches. *Acad Manag Rev* 20(3):571–610
- Toffel MW, Short JL, Ouellet M (2015) Codes in context: how states, markets, and civil society shape adherence to global labor standards. *Regul Gov* 9(3):205–223
- Toka K, Yadav K (2023) Foreign ownership and corporate social responsibility: the case of an emerging market. *Glob Bus Rev* 24(6):1302–1325
- Turban DB, Greening DW (1997) Corporate social performance and organizational attractiveness to prospective employees. *Acad Manag J* 40(3):658–672
- Waddock SA, Graves SB (1997) The corporate social performance-financial performance link. *Strateg Manag J* 18(4):303–319
- Wahal S, McConnell JJ (2000) Do institutional investors exacerbate managerial myopia? *J Corp Finance* 6(3):307–329
- Wall Street Journal (2017a) South Korea's ousted president arrested. March 31:A7
- Wall Street Journal (2017b) Samsung boss goes to trial. April 8–9:B1
- Wang J, Coffey BS (1992) Board composition and corporate philanthropy. *J Bus Ethics* 11:771–778
- Wei Z, Xie F, Zhang S (2005) Ownership structure and firm value in China's privatized firms: 1991–2001. *J Financ Quant Anal* 40(1):87–108
- Wijen F (2014) Means versus ends in opaque institutional fields: trading off compliance and achievement in sustainability standard adoption. *Acad Manag Rev* 39(3):302–323
- Yanagimachi I (2014) Chaebol reform and corporate governance in Korea Working paper, Keio University
- You L (2024) The impact of social norms of responsibility on corporate social responsibility. *J Bus Ethics* 190(2):309–326

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.