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**Corporate Governance and Performance in Socially Responsible Corporations: New Empirical
Insights from a Neo-Institutional Framework**

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Corporate Governance and Performance in Socially Responsible Corporations: New Empirical Insights from a Neo-Institutional Framework

Abstract

Manuscript Type: Empirical

Research Question/Issue: This paper investigates the relationship between corporate governance (CG) and corporate social responsibility (CSR), and consequently, examines whether CG can positively moderate the association between corporate financial performance (CFP) and CSR.

Research Findings/Insights: Using a sample of large listed corporations from 2002 to 2009, we find that, on average, better-governed corporations tend to pursue a more socially responsible agenda through increased CSR practices. We also find that a combination of CSR and CG practices has a stronger positive effect on CFP than CSR alone, implying that CG positively influences the CFP-CSR relationship. Our results are robust to controlling for different types of endogeneities, as well as alternative CFP, CG and CSR proxies.

Theoretical/Academic Implications: The paper generally contributes to the literature on CG, CSR and CFP. Specifically, we make two main new contributions to the extant literature by drawing on new insights from an overarching neo-institutional framework. First, we show why and how better-governed corporations are more likely to pursue a more socially responsible agenda. Second, we provide evidence on why and how CG might strengthen the link between CFP and CSR.

Practical/Policy Implications: Our findings have important implications for corporate regulators and policy-makers. Since our evidence suggests that better-governed corporations are more likely to be more socially responsible with a consequential positive effect on CFP, it provides corporate regulators, managers and policy-makers with a new impetus to develop a more explicit agenda of jointly pursuing CG and CSR reforms, instead of merely considering CSR as a peripheral component of CG or as an independent corporate activity.

Keywords: Corporate Governance, Corporate Social Responsibility, Corporate Financial Performance, Neo-Institutional Theory

INTRODUCTION

This study focuses on the relationship between corporate governance (CG) and corporate social responsibility (CSR). As such, it is at the intersection of two topical and closely-related research strands, namely: (i) the effects of CG on corporate financial performance (CFP) (Gompers, Ishii, & Metrick, 2003; Henry, 2008; Bozec & Bozec, 2012); and (ii) the determinants/consequences of a company's CSR practices (McGuire, Sundgren, & Schneeweis, 1988; Fifka, 2013). However, studies investigating the link between a company's CG and its CSR strategy (Haniffa & Cooke, 2005; Michelon & Parbonetti, 2012) and/or how a company's CG might potentially influence the CFP-CSR nexus (Arora & Dharwadkar, 2011; Ntim, Opong, & Danbolt, 2012a) are very rare. This study, therefore, investigates why and how a company's internal CG mechanisms may drive its CSR practices. We also examine why and how the CSR and CFP association might be intensified by CG.

The past decades have witnessed a significant interest in the extent of CSR practices (Mackenzie, 2007; Jo & Harjoto, 2012). Whilst a large number of reasons have been offered to explain why corporations may engage in CSR activities (Prior, Surroca, & Tribo, 2008; Young & Marais, 2012), recent theoretical developments suggest that the substantial growth in CSR activities can also be explained by institutional context and theory (Aguilera et al., 2007). In particular, neo-institutional theory suggests that institutional forces, such as economic, political and social institutions can interact to shape, limit and/or facilitate the diffusion and/or imposition of business practices and innovations in corporations (DiMaggio & Powell, 1983, 1991; Scott, 1987, 2001). In general such institutional antecedents have been demonstrated to be driven by two main motives: legitimation (moral/relational) and efficiency (instrumental) (Aguilera & Cuervo-Cazurra, 2004; Aguilera et al., 2007; Zattoni & Cuomo, 2008). However, whilst neo-institutional theory has been successfully used in explaining the diffusion and/or imposition of a number of corporate practices, such as differences in the adoption of international accounting and CG standards (Aguilera & Jackson, 2003; Yoshikawa et al., 2007; Zattoni & Cuomo, 2008; Judge et al., 2008, 2010), little is known about institutional antecedents and explanations for the

rapid proliferation of CSR practices among corporations. This limits current understanding of the main institutional antecedents of the global diffusion of CSR practices at the organisational level.

Consequently, the current study seeks to extend and apply an overarching¹ neo-institutional theory to explain differences in CSR practices at the organisational level - with an emphasis on the theoretical implications of legitimation and efficiency. From a legitimation/moral perspective (Ashforth & Gibbs, 1990; Suchman, 1995), neo-institutional theory suggests that regulative institutional pressures can compel economic units to conform to expected social behaviour and international standards. This is because conforming to such expected social behaviour can enhance legitimacy and social acceptance. Thus, compliance with good CSR practices in the form of increased CSR disclosures can facilitate congruence of corporate goals and norms with those of the larger society, and thereby improving organisational legitimacy. Similarly, the need to maintain good relationships with various corporate stakeholders (Aguilera et al., 2007), and therefore improving corporate legitimacy can influence economic actors to engage in or mimic accepted social behaviour (Mizruchi & Fein, 1999). Hence, corporate engagement in CSR activities can strategically enhance organisational legitimacy by winning the support of powerful corporate stakeholders, such as governments, politicians, shareholders and trade unions (Freeman & Reed, 1983; Freeman, 1984).

In parallel, the efficiency/instrumental view of neo-institutional theory predicts that regulative, cognitive and normative institutional pressures can also compel economic entities to compete for critical resources in order to protect shareholder interests and maximise corporate performance (Aguilera et al., 2007; Chen & Roberts, 2010). Thus, corporate investments in socially responsible activities can enhance efficiency by reducing economic, social, environmental and political costs, but also can increase access to critical resources, such as finance, business contracts, skilled management, and labour (Pfeffer & Salancik, 1978; Branco & Rodrigues, 2006). Furthermore, greater commitment to CSR can improve corporate efficiency and maximise CFP by minimising agency conflicts through a reduction in information asymmetry between managers and corporate stakeholders (Jensen & Meckling, 1976; Rhodes & Soobaroyen, 2010). Therefore, in consideration of the apparent multi-faceted nature and consequences of

CSR and CG practices (Parker, 2005; Devinney, 2009), there is an increasing consensus that these practices have to be examined from a theoretical perspective, which encompasses both legitimation and efficiency motives (Zattoni & Cuomo, 2008; Judge et al., 2008, 2010).

Thus, this study makes two main new contributions to the extant literature by examining the links among CFP, CG, and CSR. First, by relying on a generalised neo-institutional theory, which emphasises the legitimation and efficiency effects of CSR, we seek to investigate the extent to which a firm's internal CG structures may influence its CSR practices. Specifically, using an integrated CG index, as well as alternative CG mechanisms, we investigate the relationship between CG and CSR mechanisms. Our results contribute to the literature by showing that, on average, better-governed corporations are also more likely to pursue a more socially responsible agenda. In this case, our organisational-level findings complement existing studies that have employed neo-institutional theory to primarily predict institutional factors that drive the diffusion of business practices at the country level (Aguilera & Cuervo-Cazurra, 2004; Yoshikawa et al., 2007; Zattoni & Cuomo, 2008; Judge et al., 2008, 2010).

Second, the considerable numbers of studies that have examined the effect of CSR on CFP report conflicting evidence (McGuire et al., 1988; Mahoney & Roberts, 2007; Becchetti & Ciciretti, 2009). Whilst this has been attributed primarily to potential methodological weaknesses and endogeneities (McWilliams & Siegel, 2000; Jo & Harjoto, 2011), recent studies that adequately control for such problems still generally report similar mixed results (Scholtens, 2007, 2008; Cai et al., 2012). However, given that the decision to engage in CSR activities emanates from corporate boards and top management (Haniffa & Cooke, 2005; Michelon & Parbonetti, 2012), we conjecture that CG is likely to have a positive effect on the CFP-CSR link. Our results contribute to the extant literature by demonstrating that a combination of CSR and CG has a stronger positive effect on CFP compared to the effect of CSR alone.

The rest of the paper is structured as follows. The next section discusses the theoretical framework. The following sections discuss the related literature, outline the research context and design, and present the empirical analyses, with the concluding remarks containing a summary and a brief discussion of policy implications.

A NEO-INSTITUTIONAL FRAMEWORK FOR CSR PRACTICES

While the concept of 'institution' has been defined in different ways (DiMaggio & Powell, 1983, 1991; Scott, 1987, 2001), it generally refers to accepted socio-economic beliefs, norms and practices associated with different aspects of society, such as education, law, politics, religion, and work (Judge et al., 2008, 2010). Economic institutions focus on determining the motives for members of society (e.g., individuals, corporations, and nations) in engaging in economic activities, such as growth maximisation (North, 1990; Judge et al., 2008). Such institutions can be formal (e.g., laws and regulations) and/or informal (e.g., norms and conventions). Thus, institutional theory from an economic standpoint can be directly linked to the concept of 'economic efficiency' (Aguilera & Cuervo-Cazurra, 2004; Zattoni & Cuomo, 2008) or 'instrumentality' (Aguilera et al., 2007) in that it suggests that societal members primarily tend to seek to maximise their self-interests by competing for resources. In contrast, sociologists consider institutions as being more than just efficient means of producing goods and services, but also as social and cultural systems with some symbolic value (Meyer & Rowan, 1977). Hence, the sociological approach to institutional theory suggests that individuals, groups and corporations not only compete for economic resources ('economic efficiency'), but also seek social approval for the right to exist ('social legitimacy') (Zattoni & Cuomo, 2008). In this respect, legitimation is seen as a relational motive because it encompasses a concern for how a firm's actions are perceived by others (Aguilera et al., 2007). In addition, it is argued that this concern is driven by the individual values and ethics of organisational actors, which might steer the firm to adopt practices that have no immediate or obvious benefit (i.e., infusing organisations with a moral motive).

In particular, the neo-institutional theory proposed by Scott (2001) places great emphasis on three levels of analysis: societal (global) institutions; governance structures; and actors. Briefly, and at the top of Scott's model are societal and global institutions, which provide a platform, where what is considered to be possible, acceptable and legitimate models and menus of social behaviour are officially proposed and informally passed (Judge et al., 2008, 2010). These higher level institutions can shape, impede and/or spur structures and actions at lower levels. Governance structures occupy the middle level of Scott's

model, consisting of organisational fields (e.g., corporations that operate in similar industries, as reflected in the similarity of goods and services offered) and organisations themselves. As corporations differ in complexity, culture, function, and structure, the organisational level of analysis is equally important as it has the capacity to affect, and be affected by the organisational fields and the general institutional context. At the bottom of Scott's institutional model are actors, consisting of individuals and groups. Drawing from DiMaggio and Powell's (1983, 1991) 'coercive/regulative' (i.e., the presence of institutions that can force actors to conform to accepted standards), 'cognitive/mimetic' (i.e., the capacity to copy the behaviour of other social actors), and 'normative' (i.e., expected and accepted social behaviour) concepts of institutions, Scott (2001) suggests that these institutional pressures can affect (and are affected by) the forces of diffusion and/or imposition of institutional norms and practices, whilst inventing new ways of operating and/or negotiating the development of new institutional norms and practices (North, 1990; Judge et al., 2010). Therefore, a major underlying assumption within an 'overarching' neo-institutional perspective is that the actors are not only competing for resources ('efficiency'), but they are also seeking ultimate legitimacy and social acceptance ('legitimation'). Finally the actors at the three levels interplay to create similarities in structure, thought, and action (i.e., 'institutional isomorphism') within institutional contexts.

Neo-institutional theory has been successfully employed in predicting the diffusion and/or imposition of a number of corporate practices at the national level, such as the adoption of good CG practices (Aguilera & Cuervo-Cazurra, 2004; Yoshikawa et al., 2007; Zattoni & Cuomo, 2008), international accounting standards (Judge et al., 2010), and CG legitimacy (Aguilera & Jackson, 2003; Judge et al., 2008). However, neo-institutional theory has been rarely applied at the organisational level of analysis relating to CG/CSR, and this is particularly relevant with respect to the rapid global diffusion and/or imposition of CSR practices over the past decades. Arguably, there is scope to extend our understanding of the institutional antecedents and explanations for the rapid proliferation of CSR practices among corporations (Aguilera et al., 2007). The current study, therefore, seeks to extend and apply neo-institutional theory to explain differences in CSR practices at the firm level with particular

emphasis on its legitimation and efficiency implications. Our study is also informed by Aguilera et al.'s (2007) multilevel theory, which models corporate CSR activities as having both legitimation (moral/relational) and efficiency (instrumental) motives.

In this respect, a primary resource of all economic organisations is to retain or gain the basic right to exist and legitimacy for their operations (Ashforth & Gibbs, 1990; Suchman, 1995). Suchman (1995) indicates that a corporation's right to exist is legitimised if its value system is in congruence with that of the larger social system of which it is part of, but threatened when there is a potential/actual mismatch between the two value systems (Ashforth & Gibbs, 1990; Suchman, 1995). Thus, the capacity of a corporation to achieve social acceptance will depend on its ability to demonstrate (i) 'moral, and/or (ii) relational' responsibility, respectively, towards (i) higher-order values and stewardship interests, and (ii) stakeholder interests and societal expectations (Aguilera et al., 2007: 837). Neo-institutional theory suggests that a major way of achieving legitimacy is to incorporate accepted institutional norms, rules, conventions and practices into corporate operations (DiMaggio & Powell, 1983, 1991; Scott, 1987, 2001). Hence, complying with CSR practices through increased CSR disclosures can enhance corporate legitimacy. Similarly, voluntarily engaging in good CSR practices can help corporations to gain moral and relational legitimacy by fairly balancing the diverse and often conflicting demands of their various powerful stakeholders, such as shareholders, governments, politicians, and employee unions (Freeman & Reed, 1983; Freeman, 1984).

In addition to seeking legitimacy for their operations, economic organisations, especially Anglo-American corporations have a major objective of enhancing efficiency in order to maximise CFP (Aguilera & Cuervo-Cazurra, 2004; Devinney, 2009). From an efficiency perspective, neo-institutional theory suggests that conformance to 'regulative/coercive', 'cognitive/mimetic', and 'normative' institutional forces can be a strategic/instrumental attempt at competing for critical resources, which can enhance CFP. In this case, engaging in CSR activities, such as investing in employees and environmentally friendly technology can improve CFP by gaining competitive advantages (Pfeffer & Salancik, 1978; Branco & Rodrigues, 2006, 2008). Further, increased commitment to CSR can improve

efficiency and enhance CFP by minimising agency costs via a reduction in information asymmetry among financial stakeholders (Jensen & Meckling, 1976; Rhodes & Soobaroyen, 2010).

CG, CSR, AND CFP LITERATURE AND HYPOTHESES DEVELOPMENT

Prior Studies on the Association between CG and CSR, and Hypotheses Development

Past studies have investigated how CG influences voluntary disclosures (Eng & Mak, 2003; Barako et al., 2006; Collett & Hrasky, 2005; Beekes & Brown, 2006) and CFP (Gompers et al., 2003; Renders et al., 2010; Bozec & Bozec, 2012). Others have examined how general firm-level features, such as size affect CSR practices (Adams, 2002; Reverte, 2009; Mahadeo et al., 2011; Fifka, 2013), whilst a limited number of studies have explored how ownership and board characteristics influence CSR disclosures (Hillman et al., 2001; Lattemann et al., 2009; Judge, 2012). We draw from these strands of the literature to identify potential CG variables that might influence CSR disclosures and develop a hypothesis for each of the variables. Specifically, we investigate how: (i) the quality of a firm's internal governance mechanisms, as measured by a CG disclosure index; (ii) ownership variables (government ownership, block ownership, and institutional ownership); and (iii) board characteristics (board size, independent directors, and board diversity) affect CSR practices.

Corporate Governance Disclosure Index. The past decades have witnessed a rapid global diffusion of codes of good CG (Aguilera & Cuervo-Cazurra, 2009). Whilst most of these codes have focused on good practices for the benefits of shareholders, a few emphasise the firm's responsibility towards a broader constituency of stakeholders, including recommendations for good CSR practices (Mallin, 2006, 2007). Empirically, a considerable number of studies suggest that good CG enhances CFP (see Bozec & Bozec, 2012). By contrast, evidence on whether good CG improves CSR practices is rare (Jamali et al., 2008; Michelon & Parbonetti, 2012). However, and to the extent that good CG is associated with better monitoring, it can be expected to positively influence CSR (Starks, 2009; Arora & Dharwadkar, 2011). Similarly, from a neo-institutional perspective, complying with good CG rules (i.e., coercive/regulative pressures) in the form of increased CSR practices can improve the legitimacy of corporate structures and

operations by enhancing corporate reputation (Scott, 1987; Suchman, 1995). Similarly, greater commitment to replicate (i.e., cognitive/mimetic pressures) and/or adopt (i.e., normative pressures) good CSR practices can improve efficiency and CFP by gaining access to critical resources, such as finance, government contracts, skilled employees, and management by winning the support of powerful stakeholders (Pfeffer & Salancik, 1978).

CG has been broadly theorised as either a pillar/dimension of or complement to CSR (Jamali et al., 2008). This suggests that CG is inextricably linked to CSR (Elkington, 2006); with better-governed firms more likely to engage in CSR as a credible way of signalling their CG quality (Beekes & Brown, 2006). Further, the CG-CSR nexus becomes more visible when the broader conception of CG is considered, which does not only require honesty, transparency and accountability to shareholders, but also responsibility to all stakeholders (Jamali et al., 2008).

Although a limited number of studies have empirically examined how ownership and board structures influence CSR practices (Aguilera et al., 2006; Barako & Brown, 2008; Dam & Scholtens, 2012), studies using CG indices are generally scarce. Consistent with past evidence (Gibson & O'Donovan, 2007; Jamali et al., 2008; Lattermann et al., 2009), using Gompers et al.'s (2003) CG index (*GIM*), Arora and Dharwadkar (2011) find a positive effect of CG quality on good CSR practices. Similarly, using *GIM*'s index, Harjoto and Jo (2011) report that CG impacts positively on CSR. Further, the findings of recent US studies by Jo and Harjoto (2011, 2012) and Cai et al. (2012) support past evidence that better-governed corporations tend to engage in CSR practices than their poorly-governed counterparts. This suggests that good CG may impact positively on CSR practices and therefore, our first hypothesis is that:

Hypothesis 1: There is a positive association between internal CG quality, as measured by a CG disclosure index and the extent of CSR practices.

Government Ownership. From a neo-institutional perspective (DiMaggio & Powell, 1983, 1991; Scott, 1987, 2001), governments, as societal institutions, possess the coercive power of the State (e.g., laws and enforcement) to regulate the behaviour of lower societal actors, including those at the organisational level. Meanwhile codes of good CG and prescriptions for CSR practices (e.g., Global Reporting Initiative)

issued around the world have been supported by global institutions, such as the EU, OECD and World Bank, with a resultant influence on national governments (Aguilera & Cuervo-Cazzura, 2004; Zattoni & Cuomo, 2008). Therefore, our expectation is that corporations with higher government ownership will actively lobby for government support by engaging in increased CSR disclosures. This is because winning the support of government as an influential stakeholder may not only help in legitimising corporate operations (moral and/or relational legitimation) (Aguilera et al., 2007), but also facilitate access to extra resources (economic efficiency), such as subsidies/tax holidays, which can enhance CFP (Pfeffer & Salancik, 1978). Additionally, neo-institutional theory suggests that voluntarily adopting and/or copying good CSR practices can enhance efficiency and CFP by minimising agency conflicts between executives and government (as a powerful shareholder).

However, prior evidence suggests that the effectiveness of government ownership in facilitating good CSR practices depends on the size and type of government ownership (Cressy et al., 2010; Hou & Moore, 2010; Johan & Najar, 2010). The evidence suggests that in countries with poor governance in the form of high levels of corruption and fraud, high government ownership can lead to poor CSR practices and vice-versa. For example, Jia et al. (2009), and Hou and Moore (2010) provide evidence that suggests that dominant Chinese government ownership is associated with poor monitoring and high levels of fraud. This implies that strong support through tight political connection in state-owned companies effectively minimises enforcement action by weak regulatory authorities and corrupt officials. Cumming et al. (2010) also find that private equity returns in Asia are higher in countries with higher levels of corruption. This suggests that the economic costs of corruption or cronyism can be mitigated by greater monitoring by activist fund managers, leading to higher efficiency and returns in the investee companies.

Empirically, there is an acute lack of studies that examine the link between government ownership and CSR activities. However, Eng and Mak (2003), Tagesson et al. (2009), and Khan et al. (2012) find that government ownership is positively related to CSR practices, whilst Dam and Scholtens (2012) report that government ownership has a negative effect on CSR practices. Despite the mixed limited evidence, and following past suggestions and evidence (Jia et al., 2009; Hou & Moore, 2010), we

expect a positive link between government ownership and CSR practices in countries, where government has low, but strategic ownership interests in most large corporations with great interest in CSR practices (Ntim et al., 2012b). Therefore, our second hypothesis is that:

Hypothesis 2: There is a positive association between government ownership and the extent of CSR practices.

Block Ownership. From an efficiency-led perspective, higher managerial monitoring that is often associated with block ownership can be expected to reduce agency conflicts and thus, there is less demand for CSR disclosures from powerful stakeholders. From a legitimation perspective, the need for public accountability may be less of an issue in firms with concentrated ownership structures because of limited and less powerful outsider interests. In other words, closely held firms tend to be better at avoiding coercive, mimetic and normative institutional pressures to adopt new business practices, including CSR ones than their widely held counterparts. Consequently, managers of closely held firms tend to invest less in CSR because the costs of investing in such activities may outweigh their benefits (Khan et al., 2012). By contrast, managerial opportunism and conflict of interests are rife in firms with dispersed ownership structure (Oh et al., 2011). Thus, CSR disclosure can enhance efficiency and CFP for shareholders by acting as a bonding and monitoring mechanism to reduce agency conflicts between managers and diffused shareholders (Reverte, 2009).

Empirically, the literature is largely consistent with the view that concentrated ownership is associated with low CSR disclosures. For example, and in line with the findings of past studies (Haniffa & Cooke, 2005; Brammer & Pavelin, 2008; Reverte, 2009), Barnea and Rubin (2010) report that block ownership is negatively associated with CSR disclosures. Similarly, evidence by Arora and Dharwadkar (2011) suggests that managers of closely held firms engage in less CSR practices. The findings of more recent evidence (Harjoto & Jo, 2011; Jo & Harjoto, 2011, 2012; Oh et al., 2011; Khan et al., 2012) provide support for the view that ownership concentration leads to less CSR practices. Therefore, block ownership can be expected to impact negatively on CSR practices, and thus, our third hypothesis is that:

Hypothesis 3: There is a negative association between block ownership and the extent of CSR practices.

Institutional Ownership. Institutional shareholders have long been at the fore front of promoting the rapid proliferation of codes of good CG/CSR practices (Aguilera et al., 2006). From a legitimation perspective, institutional owners have financial, knowledge and information advantages over small shareholders. Institutional owners are, therefore, influential in corporate decision-making, including decisions on investment, executive appointment and disclosure (Oh et al., 2011). In particular, and because of their substantial ownership stakes, which they cannot easily sell, institutional shareholders have extra incentive to monitor corporate disclosures. Thus, large institutional shareholders can lobby corporate executives to engage in increased disclosures, including CSR ones. Furthermore, the relevance of CSR disclosures is heightened in the case of ethical investment funds, which explicitly rely on corporate social and environmental information to make investment decisions. This increased commitment to good CSR practices can enhance corporate legitimacy by winning the support of other powerful stakeholders, such as employees and governments, and also improve efficiency and CFP for shareholders by gaining access to critical resources.

However, the empirical evidence on the link between institutional shareholding and CSR practices is mixed. For instance, whilst Aguilera et al. (2006) report that differences in CG, including institutional shareholdings between the UK and US explain the differences in the extent of CSR activities, Dam and Scholtens (2012) find that institutional ownership has an insignificant effect on CSR disclosures. Similarly, whereas the findings of Barnea and Rubin (2010) suggest a negative connection between institutional ownership and CSR practices, recent evidence (see Harjoto & Jo, 2011; Jo & Harjoto, 2011, 2012; Oh et al., 2011) suggests a positive association between the two variables. However, institutional owners tend to have larger ownership stakes in incorporations with a motive of making profit. Therefore, our expectation is that institutional owners are likely to actively seek to win the support of other powerful stakeholders, such as governments and employees by lobbying managers to project a more socially responsible image. Therefore, our fourth hypothesis is that:

Hypothesis 4: There is a positive association between institutional ownership and the extent of CSR practices.

Board Size. Corporate boards perform two main strategic functions: conformance (e.g., monitoring compliance with rules and disciplining managers) and performance (e.g., providing advice and access to resources) (Jensen & Meckling, 1976; Jensen, 1993). From a neo-institutional perspective, larger boards are associated with higher managerial monitoring, which can improve efficiency and CFP for shareholders by ensuring conformance to corporate regulations and norms. This is because it is more difficult for a dominant CEO to control a larger board than a smaller one, and as such, executive decisions, including disclosure/CSR ones can effectively be scrutinised by larger boards. For example, Jia et al. (2009), and Hou and Moore (2010) report that larger Chinese supervisory boards are more likely to be punished for fraudulent behaviour, suggesting that greater monitoring is expected of larger boards. Thus, since CSR information is increasingly an important element of voluntary disclosures, we expect firms with larger boards to engage in good CSR practices than their smaller counterparts. Similarly, and from a legitimisation perspective, larger boards are associated with greater diversity in terms of expertise, experience and stakeholder representation, which can enhance corporate reputation and image. The presence of diverse stakeholders on larger boards can lead to greater demand for different CSR activities, and therefore larger boards can be expected to engage in good CSR practices.

By contrast, others contend that larger boards are ineffective because of greater co-ordination and communication problems (Jensen, 1993). That is, as the size of the board increases, the tendency for directors to engage in free-riding and shirking of responsibilities also increases, leading to lower managerial monitoring. Hence, there is a greater risk of larger boards being dominated by powerful managers, which can impact negatively on corporate disclosures, including CSR practices.

Empirical evidence on the relationship between board size and CSR practices is generally rare, but Mackenzie (2007) reports that corporate boards have a positive impact on CSR disclosures, whereas Lindgreen et al. (2010) find that corporate boards have insignificant impact on CSR disclosures. Given the conflicting literature, however, our fifth hypothesis is that:

Hypothesis 5: There is an association between board size and the extent of CSR practices.

Independent Directors. From a neo-institutional perspective, it can be observed that a legitimacy gap inherently exists in modern companies, whereby ownership is separate from control. Indeed, at the core of the agency ‘problem’ is a lack of trust between managers and shareholders, which translates into a threat to, or concern about, the legitimacy of management’s decisions supposedly taken in the best interests of shareholders. This legitimacy threat could be minimised by electing independent directors to represent outside stakeholders. Hence, the appointment of independent directors constitutes a way of addressing the legitimacy gap by serving as a sign of congruence between corporate practices and societal or stakeholder expectations (Deegan, 2002). Therefore, the presence of independent directors can assist in improving efficiency and CFP for shareholders by reducing agency problems between executives and owners, and in advancing the interests of other stakeholders. Additionally, independent directors are perceived to be better at honouring the obligations of the firm, including CSR ones, as doing so may enhance their current and future reputation. Hence, independent directors may be more motivated to put pressure on managers to engage in good CSR practices.

Existing empirical evidence largely suggests that the presence of independent directors impacts positively on CSR practices. For example, and consistent with past evidence (Eng & Mak, 2003; Hillman et al., 2001; Haniffa & Cooke, 2005; Barako & Brown, 2008; Brammer & Pavelin, 2008), Lattermann et al. (2009) report a positive effect of independent directors on CSR disclosures. Further, recent evidence by Harjoto and Jo (2011), Jo and Harjoto (2011, 2012), and Michelon and Parbonetti (2012) suggests that firms with higher proportion of independent directors tend to be more socially responsible. However, the effectiveness of independent directors in improving CSR practices depends on the context, including the legal environment, their expertise/experience, and independence. Therefore, our sixth hypothesis is that:

Hypothesis 6: There is a positive association between independent directors and the extent of CSR practices.

Board Diversity. Board diversity broadly refers to the various characteristics that may be present among directors that can influence decision-making (Van der Walt & Ingley, 2003). These attributes include those that are directly observable (age, gender, ethnicity, and nationality) and those that are less visible (religion, education, and occupation) (Mahadeo et al., 2012). In particular, ethnicity and gender are

topical issues of concern worldwide and have attracted the attention of national (e.g., Australia, Canada, Malaysia, Norway, South Africa, and US) and/or global institutions (e.g., the World Bank, EU, and OECD), leading, for instance, to prescriptions on how to improve gender/ethnic minority representation on corporate boards. Neo-institutional theory suggests that boards of diverse gender and ethnic backgrounds can help enhance efficiency and CFP for shareholders by linking a firm to its external environment and attract resources, as well as enhance corporate legitimacy. Similarly, boards of diverse ethnic and gender origins can increase board independence, which can enhance efficiency by improving managerial monitoring and performance. Specifically, recruiting female directors and directors from ethnic minorities can bring about diversity in ideas and opinions to board discussions. In line with this view, Carter et al. (2003) report that more diverse (i.e., on the basis of ethnicity and gender) US boards perform better than their less diverse counterparts. Additionally, corporate boards of diverse backgrounds can help provide a better link with stakeholders. This can further enhance growth opportunities, as well as generate stronger orientation towards CSR practices (Barako & Brown, 2008). Therefore, and given that the extent of CSR involvement is primarily an executive decision, we expect more diverse boards to put more pressure (especially by ethnic minorities and female members) on corporate managers to engage in increased CSR practices.

Empirical evidence on the effect of board diversity on CSR is generally scarce, although Haniffa and Cooke (2005), and Barako and Brown (2008) report that boards of diverse ethnic and gender backgrounds impact positively on CSR disclosures. Therefore, our seventh hypothesis is that:

Hypothesis 7: There is a positive association between board diversity on the basis of ethnicity & gender, and the extent of CSR practices.

The Link between CFP and CSR: The Moderating Effect of CG

Informed by the neo-institutional perspective, we contend that CSR investments may be made for two main purposes: legitimation (social/moral/relational) and efficiency (instrumental) (Aguilera et al., 2007). Therefore, the expectation is that CSR may not necessarily have a strong link with CFP if corporations merely engage in CSR practices in response to regulative, cognitive and normative institutional forces in order to gain and improve corporate legitimacy. In contrast, if corporations show greater commitment to

good CSR practices in order to strategically enhance corporate efficiency, then CSR can be expected to have direct impact on CFP. In fact, there are two main contrasting theoretical views regarding the effect of CSR on CFP. One view is that socially responsible corporations incur costs that place them at an economic disadvantage compared with less responsible firms (Friedman, 1970; McGuire et al., 1988; Devinney, 2009), and thus leading to a negative CFP-CSR nexus. These costs include managerial opportunism (agency problems), socio-communal and environmental investments (financial), and ethically forgoing competitive investments/products, services and locations (strategic).

The alternative view is that being socially responsible can impact positively on CFP in a number of ways. First, engaging in CSR can enhance efficiency and CFP by reducing information asymmetry and agency costs (Jensen & Meckling, 1976; Reverte, 2009). Second, greater commitment to CSR can improve CFP by facilitating conformance to social norms in order to legitimise corporate operations that may not only enhance corporate reputation and image, but also provide access to critical resources (Pfeffer & Salancik, 1978; DiMaggio & Powell, 1983; Suchman, 1995). Third, addressing the needs of powerful stakeholders, such as customers, governments, and employees, can enhance CFP by reducing political costs (litigation, regulation, taxation, and nationalisation), labour frictions, and customer boycotts (Freeman, 1984; Donaldson & Preston, 1995).

Consistent with this conflicting set of theoretical perspectives, the considerable numbers of studies that have examined the CFP-CSR association report mixed evidence (McGuire et al., 1988; Nelling & Webb, 2009; Callado-Munoz & Ultrero-Gonzalez, 2011), although they are observably concentrated in a few developed countries with largely similar institutional contexts (Becchetti & Ciciretti, 2009; Fifka, 2012). Whilst the mixed evidence has been widely attributed to methodological weaknesses arising from endogeneities and omitted variables (McWilliams & Siegel, 2000; Orlitzky et al., 2003), the findings of recent studies that sufficiently address such problems are still mixed (Bird et al., 2007; Lo & Sheu, 2007; Scholtens, 2007, 2008; Harjoto & Jo, 2011; Cai et al., 2012; Jo & Harjoto, 2011, 2012).

In contrast, there is significant evidence to suggest that CG impacts positively on CFP (see Bozec & Bozec, 2012). Therefore, and given that the decision to engage in good CSR activities emanates from

corporate boards, we propose that CG is likely to have an enhancing effect on the CFP-CSR nexus. We base this conjecture on a new emerging theoretical and empirical evidence that suggests that although both CG and CSR disclosures are priced by the stock markets, CG disclosures have higher valuation than CSR ones (Jamali et al., 2008; Starks, 2009; Arora & Dharwadkar, 2011; Ntim et al., 2012a). That is, the potential positive effect of CSR practices on CFP is mainly through the likely positive impact of CG structures on CFP, and hence the profit creation is predominantly through CG rather than CSR practices.

More specifically, prior literature suggests a number of ways by which CG may heighten the link between CSR and CFP. First, Jamali et al. (2008) suggests that CG can be considered as a pillar, dimension of, and/or complement to CSR. CSR is, thus, conceptualised as an extension of good governance. This implies that in better-governed firms (i.e., firms depicting high levels of accountability, responsibility, and transparency), managers are more likely to engage in CSR practices as an important way of resolving genuine conflicts with stakeholders (Jo & Harjoto, 2011, 2012). In this case, CSR can have a positive effect on CFP due to the reduction of conflicts of interests with the various stakeholders through effective or good CG. By contrast, in poorly-governed firms (i.e., firms depicting high levels of corruption, fraud, and managerial entrenchment), negative/poor CSR practices are more likely to be adopted, which can exacerbate conflicts among the various stakeholders (Harjoto & Jo, 2011). This may be evident in the form of rampant labour strikes, consumer boycotts, and increased government intervention. Thus, CSR can have a negative effect on CFP through increased conflict of interests, resulting from ineffective or poor CG.

Second, good governance arising from corporate board structures, such as the presence of independent directors, board size, and board diversity can have a positive effect on CSR, and consequently CFP (Haniffa & Cooke, 2005; Jia et al., 2009). For example, strong managerial monitoring associated with the presence of independent directors can motivate managers to engage in sustainable CSR practices with potential favourable implications for CFP. Cumming et al. (2010), for instance, report that the returns of private equity funds are significantly higher in countries with higher levels of corruption. This suggests that even in corrupt countries, good governance can help activists fund

managers to mitigate the economic costs of corruption by enhancing efficiency in investee firms. Third, ownership structures (i.e., by block, government, and institutions) can mitigate or exacerbate agency problems (Eng & Mak, 2003; Barnea & Rubin, 2010; Hou & Moore, 2010). For instance, Hou and Moore (2010) show that increased monitoring associated with low government ownership in Chinese non-state owned enterprises impacts negatively on the incidence of corruption and fraud. Similarly, good governance in the form of greater activism by institutional shareholders can impact positively on CSR and CFP (Jo & Harjoto, 2011, 2012). A major problem, however, is that existing studies have predominantly investigated direct links between CSR and CFP without taking into consideration the potential interacting role of CG on the CSR-CFP link. Consequently, we seek to extend the literature by uniquely examining whether CG positively moderates the association between CFP and CSR, and therefore, our final hypothesis is that:

Hypothesis 8: The higher (lower) the CG quality, the more (less) positive is the relationship between CSR and CFP.

RESEARCH CONTEXT AND DESIGN

CG and CSR Policy Reforms and the South African Research Context

Empirical studies of organisational behaviour informed by neo-institutional theory generally require a contextual grounding to situate the specific impact of cultural, economic, political, and social factors on the selected corporate practices (i.e., CG and CSR). In this respect, the current study focuses on reforms pursued in South Africa and the choice of the context is underpinned by a number of reasons. Major corporate collapses, especially in the developed economies, such as UK and US in the 1990s/2000s highlighted the importance of good CG, corporate accountability, social responsibility, transparency and disclosure practices (King Committee, 1994, 2002; Mallin, 2002; Judge, 2012). Gradually, and largely through global and/or national institutional impositions, CG codes and policy reforms have been disseminated to a large number of countries (Aguilera & Jackson, 2003; Aguilera & Cuervo-Cazurra, 2009; Cicon et al., 2012). Our general contention is that South Africa has been at the forefront of leading ('cutting-edge') CG/CSR reforms, with particular focus on addressing the governance challenges of corporations operating in developing countries (Mallin, 2006, 2007).² Arguably, the pioneering nature of

the South Africa reforms implies that significant insights from the current study may be learnt by academics, regulators, managers, and policy-makers; especially those from emerging or transitional economies in Africa, America, Asia, Europe, and the Middle East, experiencing similar cultural, economic, political, and social challenges.

More specifically, due to the need to address socio-economic problems, such as widespread poverty, high crime rate, and the legacy of inequality emanating from a long history of apartheid, CG reforms carried out in South Africa since the beginning of the 1990s have placed special emphasis on improving CG practices broadly for both shareholders and stakeholders (Ntim et al., 2012b). In contrast, CG reforms that have been pursued in most Anglo-American countries have primarily focused narrowly on enhancing shareholder-related protections (Cicon et al., 2012; Ntim et al., 2012a) and the emergence of a stakeholder-oriented model of CG practice only arose about a decade after the South African experience (e.g., the first OECD model was published in 1999, whilst the Global Reporting Initiative's popular triple bottom line reporting framework was first issued in 2000). Hence, this created a natural and distinct setting, whereby the links among CSR, CG and CFP can be explored. Furthermore, with respect to reforms pursued in South Africa, the 1994 Report (King I) adopted the 'integrated' CG approach (Mallin, 2006; Ntim et al., 2012a, b). The 'integrated' CG approach encourages corporations to go beyond the usual narrow financial aspects of CG and take into consideration a number of broader stakeholder (CSR) concerns, such as those regarding the environment, health, safety, and affirmative action (King Committee, 2002; Mallin, 2007; Ntim & Soobaroyen, 2013).

This trend persisted in the later report (King II)³, which further distinguished the South African CG model from other Anglo-American ones by formally adopting the 'inclusive' CG approach (Ntim et al., 2012a, b; Soobaroyen & Ntim, 2013). The "inclusive" CG approach builds on and expands the Anglo-American ('shareholding') features of King I, as well as encourages corporations to comply with a broad range of affirmative action and stakeholder ('stakeholding – CSR') issues meant to address the resulting historical socio-economic inequalities between white and non-white South Africans. These include

provisions on black economic empowerment (BEE)⁴, environment, ethics, health and safety, HIV/Aids, and social investments (see Appendix; King Committee, 2002; Ntim & Soobaroyen, 2013).

In addition, corporate ownership in South Africa has been and remains highly concentrated, reflecting the traditional inter-relations and inter-dependencies between a small/white-dominated business elite and more contemporarily, the opening up of corporate ownership to government-backed entities or individuals (Ntim et al., 2012a). This concentration is apparent from the existence of complex cross shareholdings and tall pyramid-shaped ownership structures by a small number of very large corporations (King Committee, 2002; Ntim & Soobaroyen, 2013).⁵ In particular, through the Public Investment Commission, the South African government maintains strategic, but low ownership stakes in a number of large corporations with keen interests in CG and CSR practices (Ntim et al., 2012a, b; Soobaroyen & Ntim, 2013). Apart from the concentrated and government ownership features, shareholder activism is observably weak along with a noticeable poor record of implementing and enforcing corporate regulations (King Committee, 2002; Ntim & Soobaroyen, 2013). These contextual developments appear to have substantially impaired the effectiveness of the market for corporate and managerial control in South Africa (Henry, 2008). Consequently, managerial entrenchment and expropriation of minority wealth is widespread (Ntim et al., 2012a, b), with potentially adverse implications for CFP and CSR.

Thus, in summary, although South Africa has arguably pursued a combination of CG and CSR reforms compared with other Anglo-American countries, critical concerns have been raised as to whether a voluntary compliance regime like King II, can effectively improve CG and CSR standards. Therefore, we seek to investigate the relationship between CG and CSR practices, and consequently, examine whether CG has any influence on the link between CFP and CSR.

Data Sources and Sample Selection

We focus on an initial sample of 291 non-financial firms listed on the Johannesburg Stock Exchange over the 2002-2009 period from 5 main industries: basic materials; consumer goods; consumer services; industrials; and technology/telecoms. Since financials/utilities are subject to different regulatory oversight and capital structure restrictions that can impact differently on CG, CFP and CSR, companies in these

industries are not included in the sample, as is the case in previous studies (Henry, 2008; Reverte, 2009). To be included in our final sample, a firm's CFP, CG and CSR data must be available for each of the 8 years. The criterion was set for a number of reasons. First, in line with previous studies (Scholtens, 2008; Oh et al., 2011), it ensured that the conditions for a balanced panel analysis would be met. Some of the advantages for using panel data include having both time-series and cross-sectional observations, and less multicollinearity among the variables (Gujarati, 2003; Wooldridge, 2010). Second, examination of eight-year data with both cross-sectional and time series properties may be useful in detecting whether the observed cross-sectional links among CFP, CG and CSR holds over time. Third, as King II became operational in 2002 and ended in 2009, our sample period covers this period.

Twenty-eight and 94 firms, had no and incomplete data, respectively, leaving us with a total of 169 firms. However, given the extensiveness of the CG and CSR data, coupled with the labour-intensive nature of manual data collection, an additional sample limitation exercise became necessary. As past evidence indicates that company size and industry affect CG and CSR practices (Collett & Hrasky, 2005; Campbell et al., 2003, 2006), we selected the largest 15 corporations from each of the five industries based on their market capitalisation in order to control for size and industry. Thus, our final sample consisted of 75 corporations over eight firm-years, giving a total of 600 firm-year observations from five main industries for our regression analyses. The CG and CSR variables were extracted from both the sampled companies' annual (600) and sustainability (62) reports collected from the *Perfect Information Database*, while the financial variables were obtained from *DataStream*.

A potential limitation of our sample selection criteria is that it may introduce survivorship bias into the sample selection process. However, the criteria generated a reasonable number of observations and therefore, generalisability of the findings of our study should arguably not be affected by our sample selection criteria. To be certain, however, we further explored this potential problem by following Graham and Harvey (2001) and Beiner et al. (2006) and compare the characteristics of our final 75 sampled firms to those of the 263 out of the initial 291 with at least one year's financial data available rather than the complete eight years. Specifically, we test for equality in means and medians of all our

financial variables, including *Capital expenditure*, *Firm size*, *Leverage*, *Return on assets*, *Sales growth*, *Tobin's Q*, and *Total share returns*, between our final balanced sample of 75 and the unbalanced sample of 263. If the two groups depict similar characteristics, then we can conclude that our final sample is representative of the underlying population. The results (which for brevity are not reported, but available upon request) indicate that there are no statistically significant differences in the mean or median values for all the variables. We interpret this observation as indicating that the characteristics of our final 75 sample are largely similar to the underlying population and that our findings are not likely to be seriously impaired by survivorship bias.

Measures and Variables

We classify our variables into six main types and Table 1 contains full definitions of all of them. First, and to test *Hypotheses 1 to 7*, our main dependent variables are the summary CSR practice scores based on the *CSR word count (CSR index)*, which seeks to measure⁶ the quantity (quality) of CSR disclosures in six broad areas as set out by King II, consisting of both South African context-specific [(i) *BEE word count or sub-index*]; and (ii) *HIV/Aids (HIV word count or sub-index)*] and general/conventional [(iii) *environment (Environment word count or sub-index)*; (iv) *ethics (Ethics word count or sub-index)*; (v) *health and safety (Health and safety word count or sub-index)*; and (vi) *social investment (Social investment word count or sub-index)*] CSR. This constitutes one of the most extensive CSR data to be used to-date and we used the content analysis method of codifying written texts into various categories to collect all our CSR data (Hackston & Milne, 1996; Unerman, 2000).

Insert Table 1 about here

Second, and to test *Hypothesis 1*, our main independent variable is a binary *CG disclosure index*, containing 41 CG provisions based on King II covering four broad sections: (i) boards, directors and ownership; (ii) accounting and auditing; (iii) risk management, internal audit and control; and (iv) compliance and enforcement. For brevity, the detailed discussions of the 41 CG provisions are presented in the Appendix of Ntim et al. (2012a). Third, and to test *Hypotheses 2 to 7*, we collect data on ownership, including *Block ownership*, *Government ownership*, and *Institutional ownership*, and on board

characteristics, including *Board size*, *Independent directors*, and *Board diversity* on the basis of ethnicity and gender. Fourth, and to test for the moderating effect of CG on the CSR-CFP link (*Hypothesis 8*), we create an interaction variable between our CG index and CSR disclosures. Also, and in testing *Hypothesis 8*, we employ *Tobin's Q* as our main measure for CFP, but as a sensitivity check, we use *Total share returns* and *Return on assets* as alternative market and accounting-based CFP measures, respectively. Finally, and to control for potential omitted variables bias (Gujarati, 2003; Wooldridge, 2010), we include an extensive number of control variables. These include *Audit firm size*, *Capital expenditure*, *Cross-listing*, *The presence of a CG committee*, *The presence of a CSR committee*, *Leverage*, *Firm size*, *Risk*, *Sales growth*, *Industry dummies*, and *Year dummies*. For brevity, we do not develop direct theoretical links between these control variables and CSR or CFP, but there is extensive theoretical and empirical literature that suggests they can potentially affect either CSR or CFP (McGuire et al., 1988; Beiner et al., 2006; Henry, 2008; Reverte, 2009; Ntim et al., 2012a; Fifka, 2013).

We present the empirical analyses, including the descriptive statistics, bivariate and multivariate regression analyses, and robustness analyses in the following sections.

EMPIRICAL ANALYSES

Summary Descriptive Statistics and Bivariate Regression Analyses

Table 2 contains summary descriptive statistics of the variables. For brevity, we do not conduct detailed discussions, but it generally suggests that both our quantity (*CSR word count*) and quality (*CSR index*) CSR measures display wide variations. For example, *CSR word count* (*CSR index*) ranges from a minimum of 186 (6.19%) to a maximum of 23,371 (77.32%) with an average of 4,081 (56.42%) words. This suggests that there is a great degree of heterogeneity in terms of the importance that South African corporations attach to CSR disclosures. The six sub CSR disclosure variables, namely *BEE word count* (*BEE sub-index*), *Environment word count* (*Environment sub-index*), *Ethics word count* (*Ethics sub-index*), *HIV word count* (*HIV sub-index*), *Health and safety word count* (*Health and safety sub-index*), and *Social investment word count* (*Social investment sub-index*) depict similar wide variations. Observably, and consistent with its six broad dimensions, *BEE word count* has the largest number of

word count disclosures, ranging from a minimum (maximum) of 50 (8,347) with a mean of 1,334 words. By contrast, *Ethics word count* has the least level of disclosures, ranging from a minimum (maximum) of 10 (222) with a median of 150 words.

The CG (*CG index, Board diversity, Board size, Block ownership, Government ownership, Independent directors, and Institutional ownership*), CFP (*Tobin's Q, Total share return, and Return on assets*), and control (*Audit firm size, Capital expenditure, The presence of a CG committee, Cross-listing, The presence of a CSR committee, Leverage, Firm size, Risk, and Sales growth*) all display similar wide spreads. For instance, the *CG index* ranges from a minimum of 4.88% to a maximum of 100% with the median corporation complying with 73.17% of the 41 CG provisions, whereas the average *Board size* is 11 with a minimum (maximum) of 4 (21) directors. This seems to suggest that the sampled corporations have been adequately selected, and thus minimises the possibilities of sample selection bias that have arguably characterised most past studies.

Further, and to inform our analyses, we split our sample into two sub-samples – firms with high (i.e., firms with CSR index score above the overall mean/median mark) and low (i.e., firms with CSR score below the overall mean/median mark) CSR scores. Columns 8 and 9 of Table 2 contain the results of the test (*t-test*) of comparison of differences in means and medians for our main independent variables. The results generally show that there are significant differences in means and medians between the two sub-samples. For example, the mean between the two groups is significantly different as follows: *CG index* (8.75, $p < 0.001$); *Board diversity* (6.48, $p < 0.001$); *Board size* (1.85, $p < 0.100$); *Block ownership* (-4.76, $p < 0.001$); *Government ownership* (2.39, $p < 0.010$); *Independent directors* (2.30, $p < 0.050$); and *Institutional ownership* (-4.96, $p < 0.001$). Briefly, the results imply that firms with better CG scores, more diverse boards, larger boards, high government ownership, and more independent directors show greater commitment to CSR practices. By contrast, firms with high block ownership and institutional ownership engage in low CSR disclosures. With the exception of *Institutional ownership*, all the results (which will be discussed in detail in the next subsection) are consistent with our hypotheses. The results of differences

in medians presented in Column 9 of Table 2 for the two sub-samples are largely similar to those reported for the means.

Insert Table 2 about here

Table 3 reports the correlation matrix for the variables to test for multicollinearity. For robust findings, we present both the Pearson's parametric and Spearman's non-parametric coefficients and, noticeably, the magnitude and direction of both coefficients are largely similar, and this indicates the absence of any serious non-normality problems. Observably, the correlations among the variables are also fairly low and thus, suggest that no major multicollinearities are present. Additionally, we calculate variance inflation factors for these variables, with their values (see Column 7 of Table 2), ranging from 1.06 to 3.97. This provides further support for the correlation analysis that our regression models do not suffer from any serious multicollinearities. Of interest and as hypothesised (i.e., focusing on Pearson's parametric correlation coefficients only), the *CG index* (0.480, $p < 0.001$), *Board diversity* (0.118, $p < 0.010$), *Board size* (0.122, $p < 0.001$), *Government ownership* (0.165, $p < 0.001$), and *Independent directors* (0.187, $p < 0.001$) are positively associated with the *CSR index*, whilst *Block ownership* (-0.130, $p < 0.010$) is negatively related to the *CSR index*. The negative link between *Institutional ownership* (-0.162, $p < 0.001$) and *CSR index* is again inconsistent with our hypothesis. Additionally, there are significant links among the CSR, CG, CFP and the control variables. For instance, *Audit firm size* (0.336, $p < 0.001$), *The presence of a CG committee* (0.384, $p < 0.001$), *Cross-listing* (0.469, $p < 0.001$), *The presence of a CSR committee* (0.391, $p < 0.001$), and *Firm size* (0.212, $p < 0.001$) are positively connected to the *CSR index*, whereas *Capital expenditure* (-0.010, $p > 0.100$) and *Leverage* (-0.038, $p > 0.100$) are negative, but insignificantly related to the *CSR index*.

Insert Table 3 about here

Multivariate Regression Analyses

Corporations usually vary in terms of the difficulties and prospects that they face over time (Larcker & Rusticus, 2010). This can lead to a scenario whereby CSR and CG practices are jointly and dynamically influenced by unobserved firm-specific heterogeneities, such as executive talent, corporate culture, and

complexity (Henry, 2008; Guest, 2009), which simple OLS regressions may fail to identify (Gujarati, 2003; Wooldridge, 2010). Hence, given the panel nature of our data and following past studies (Henry, 2008; Guest, 2009; Ntim et al., 2012a), we conduct our analyses by using panel data regression techniques so as to control for potential endogeneities that may emerge from unobserved company-specific heterogeneities. Therefore, we start our analyses with a basic fixed-effects regression model specified as follows:

$$CSR_{it} = \alpha_0 + \beta_1 CGI_{it} + \sum_{i=1}^n \beta_i CONTROLS_{it} + \gamma_i + \varepsilon_{it} \quad (1)$$

where the *CSR* is either our quality (*CSR index*) or quantity (*CSR word count*) proxy for CSR disclosures, *CGI* is the *CG disclosure index* and *CONTROLS* refers to the control variables, including *Audit firm size*, *Capital expenditure*, *The presence of a CG committee*, *Cross-listing*, *The presence of a CSR committee*, *Leverage*, *Firm size*, *Risk*, *Sales growth*, *Independent directors*, *Industry dummies*, and *Year dummies*, with γ referring to the company-specific fixed-effects, consisting of a vector of the mean-differences of all time variant variables.⁷

Table 4 contains fixed-effects regression results of the effects of CG on CSR based on our quality CSR measure (*CSR index*). First, we investigate whether our *CG index* influences the *CSR index*. The coefficient of the *CSR index* on the *CG index* in Model 1 of Table 4 is positive (0.203, $t = 3.968$, $p < 0.001$), thereby providing support for *Hypothesis 1*. The policy implication is that, on average, better-governed corporations are more likely to pursue a more socially responsible agenda. The economic significance of this evidence is that a one-standard deviation change (i.e., increase) in the *CG index* can be expected to be associated with about a 3.3% (16.30×0.203) change (i.e., increase) in the *CSR index*.

Theoretically, the evidence appears to be consistent with the predictions of our generalised neo-institutional framework, which places special emphasis on legitimation and efficiency motives for corporate engagement in CSR activities. For example, compliance with good CG rules (due to coercive/regulative institutional pressures) in the form of increased CSR practices can enhance the legitimacy of corporate structures and operations by improving corporate reputation (Scott, 1987;

Suchman, 1995). Similarly, and even in the absence of regulative institutional forces, better-governed corporations may voluntarily mimic and/or adopt good CSR practices in order to improve efficiency and CFP by obtaining access to critical resources, such as finance, contracts, and skilled labour by gaining the approval of influential stakeholders (Pfeffer & Salancik, 1978; Freeman, 1984). Empirically, the evidence provides support for both the recommendations of King II and the similar results of the few past studies (Jamali et al., 2008; Arora & Dharwadkar, 2011; Harjoto & Jo, 2011; Jo & Harjoto, 2011, 2012).

Insert Table 4 about here

Second, and to ascertain whether the ownership and board characteristics affect CSR, we re-estimate equation (1) by replacing the *CG index* with the six alternative CG mechanisms. Generally, we find in Model 2 of Table 4 that all our six alternative CG mechanisms are predictive of CSR practices. Specifically, *Government ownership* is positively associated with the *CSR index* (0.183, $t = 3.859$, $p < 0.001$), strongly providing empirical support for *Hypothesis 2*. Economically, our evidence is significant because it suggests that a one-standard deviation increase (decrease) in *Government ownership* will be associated with about a 1.8% (9.65×0.183) increase (decrease) in the *CSR index*. Theoretically, and at the societal level, governments can pass laws to regulate (i.e., the coercive power of the State) the behaviour of the lower members of society. Therefore, demonstrating greater commitment to CSR can win the support of government as an influential stakeholder, which may not only help in legitimising corporate operations (Aguilera et al., 2007), but also in enhancing efficiency by facilitating access to extra resources, such as subsidies/tax holidays (Pfeffer & Salancik, 1978). Further, and even without the regulative power of the State, neo-institutional theory indicates that voluntarily adopting and/or mimicking good CSR practices can enhance efficiency and CFP by reducing agency problems between managers and government (as a powerful shareholder). Empirically, the positive *Government ownership-CSR index* link contradicts the evidence of negative effect by Dam and Scholtens (2012), but provides support for similar findings by Eng and Mak (2003), Tagesson et al. (2009), and Khan et al. (2012).

Block ownership exerts a strong negative pressure on the *CSR index* (-0.170 , $t = 3.783$, $p < 0.001$); thus *Hypothesis 3* is empirically supported. The economic implication of this evidence is that a one-

standard deviation increase (decrease) in *Block ownership* will be associated with about a 3.7% (21.50 x 0.170) decrease (increase) in the *CSR index*. Theoretically, the need for public accountability and legitimacy is less of a concern in firms with concentrated ownership structures because of limited outsider interests. Therefore, firms with concentrated ownership have greater capacity to avoid regulative, cognitive and normative institutional demands to adopt new CSR practices than their counterparts with disperse ownership structure. Also, block ownership is associated with greater managerial monitoring, which can minimise agency costs, and hence, less demand for CSR disclosures from powerful stakeholders. As such, it seems economically efficient for managers of closely held firms to invest less in CSR activities because the costs of investing in such activities may be higher than their benefits (Khan et al., 2012). Empirically, our evidence is in line with the results of past studies that suggest that ownership concentration leads to less CSR disclosures (Brammer & Pavelin, 2008; Reverte, 2009; Jo & Harjoto, 2011, 2012).

Institutional ownership shows a weak negative association with the *CSR index* (-0.115, $t = 1.920$, $p < 0.100$), and therefore *Hypothesis 4* is rejected. Empirically, the negative link between the *CSR index* and *Institutional ownership* supports the findings of Barnea and Rubin (2010), but is inconsistent with past evidence as to the absence of a relationship (Dam & Scholtens, 2012) or a positive one (Aguilera et al., 2006; Harjoto & Jo, 2011; Jo & Harjoto, 2011, 2012; Oh et al., 2011). These results might be explained by the peculiarities of institutional ownership in South Africa. Given the pervasiveness of pyramidal structures/cross-shareholdings within the South African corporate context (Ntim et al., 2012b), this finding appears to indicate that institutional shareholders are more likely to be block-owners, who can directly monitor managers instead of relying on CSR disclosures. The significant positive connection between *Block ownership* and *Institutional ownership* in Table 3 seems to support this interpretation. Theoretically, the negative effect of *Institutional ownership* on the *CSR index* also means that our neo-institutional theoretical prediction that due to their substantial ownership stakes, large institutional shareholders can be expected to put coercive, cognitive and normative pressures on corporate executives to engage in increased CSR disclosures, which can legitimise corporate operations and enhance efficiency,

may not be applicable within corporate contexts, such as South Africa, where institutional shareholders are also more likely to be block-owners.

With respect to our board variables, *Board size* is discernibly positive, but weakly associated with the *CSR index* (0.108, $t = 1.908$, $p < 0.100$), and thereby providing empirical support for *Hypothesis 5*. The positive effect of *Board size* on the *CSR index* provides support for similar findings by Mackenzie (2007), but contradicts the results of Lindgreen et al. (2010). The evidence is also consistent with predictions of our overarching neo-institutional theoretical framework. From a legitimation view, larger boards are associated with greater diversity in terms of stakeholder representation, which can enhance corporate reputation and image. The presence of diverse stakeholders on larger boards can, therefore, lead to greater demand for different CSR activities. Additionally, larger boards are associated with higher managerial monitoring, which can improve efficiency and CFP for shareholders by ensuring conformance to corporate regulations and norms, including international CSR practices.

Observably, *Independent directors* is positively related to the *CSR index* (0.126, $t = 2.046$, $p < 0.050$); thus *Hypothesis 6* is empirically supported. Economically, our evidence implies that a one-standard deviation increase (decrease) in the percentage of *Independent directors* will be associated with about a 2.2% (17.85×0.126) increase (decrease) in the *CSR index*. Theoretically, the appointment of independent directors constitutes a way of enhancing legitimacy by serving as a sign of congruence between corporate practices and societal expectations. Similarly, the presence of independent directors can help to improve efficiency and CFP for shareholders by reducing agency problems between executives and owners, as well as advance the interests of other stakeholders. Thus, independent directors may be more motivated to put pressure on managers to engage in good CSR practices. Empirically, our evidence provides support for the findings of past studies that suggest that the presence of independent directors impacts positively on CSR practices (Hillman et al., 2001; Haniffa & Cooke, 2005; Lattermann et al., 2009; Harjoto & Jo, 2011; Jo & Harjoto, 2011, 2012; Michelon & Parbonetti, 2012).

Finally, *Board diversity* displays a strong positive relationship with the *CSR index* (0.156, $t = 3.539$, $p < 0.001$); thus implying that *Hypothesis 6* is supported by our data. Our finding means that a one-

standard deviation increase (decrease) in *Board diversity* will be associated with about a 2.7% (17.35 x 1.56) increase (decrease) in the *CSR index* – implying that our evidence is economically significant. Empirically, our finding is consistent with that of Haniffa and Cooke (2005), and Barako and Brown (2008) who report that diverse boards make more CSR disclosures. The evidence is also in line with our theoretical framework, which suggests that boards of diverse gender and ethnic backgrounds can help improve efficiency by connecting a firm to its external environment and attracting resources, as well as enhancing corporate legitimacy. Similarly, boards of diverse ethnic and gender origins can increase board independence and decision-making, which can improve efficiency by enhancing managerial monitoring and performance. Additionally, we include the *CG index* together with the six alternative CG mechanisms in Model 3 of Table 4, but the central tenor of our findings for all six hypotheses remains largely unchanged. In sum, all our CG variables are able to predict a firm's CSR practices, with the findings providing empirical support for an overarching neo-institutional framework that puts greater emphasis on legitimation and efficiency motives to explain corporate engagement in CSR activities – whether such a commitment is driven by coercive/regulative, cognitive/mimetic and normative pressures.

Third, our findings suggest that differences in the *CSR index* can largely be explained by the CG mechanisms, but since it consists of CSR disclosures from six different themes, it is possible for the effect of CG on each category to differ, with some potentially having strong connections with the CG variables and others having weak associations. Thus, to examine the association between each CSR theme and the CG variables, we again re-estimate equation (1) by replacing the *CSR index* with the *BEE sub-index*, *Environment sub-index*, *Ethics sub-index*, *HIV sub-index*, *Health and safety sub-index*, or *Social investment sub-index* at a time, and the findings are, respectively, presented in Models 4 to 9 of Table 4. With limited exceptions (such as the insignificant *CG index-Health and safety sub-index*, *Board size-Ethics sub-index*, *Board diversity-Environment sub-index*, *Block ownership-Ethics sub-index*, *Block ownership-Health and safety sub-index*, *Government ownership-Ethics sub-index*, and *Institutional ownership-Ethics sub-index* links), the findings are largely consistent with our previous evidence that corporations with good governance, high government ownership, larger boards, diverse boards, and

independent boards are more predisposed to be socially responsible than those with high block shareholding, and high institutional shareholding. The apparent sensitivity of our findings presented in Table 4 also suggests that the CG-CSR nexus may vary depending on the type of CSR practices. For example, the link between *BEE sub-index* and the CG mechanisms is generally strong, whilst the *Ethics sub-index*-CG nexus is relatively weak.

Additionally, the coefficients on the control variables in Models 1 to 9 of Table 4 generally show the predicted signs. For instance, *Audit firm size*, *The presence of a CG committee*, *Cross-listing*, *The presence of a CSR committee*, and *Firm size* are positively associated with the *CSR index*, as well as with all its six sub-categories, as expected. Consistent with the results of prior studies (Gray et al., 1995a; Hackston & Milne, 1996; Branco & Rodrigues, 2008; Young & Marais, 2012), CSR disclosure significantly varies across different industries and years (for brevity, we do not report these in Table 4, but available on request). Noticeably, our results suggest that CSR disclosure is significantly less in 2002 and in the technology industry, but significantly more in 2009 and in the basic materials industry (highest significant coefficient) compared with the other years and industries, respectively.

Finally, and to investigate whether CSR influences CFP, we estimate a basic fixed-effects regression model specified as follows:

$$CFP_{it} = \alpha_0 + \beta_1 CSR_{it} + \sum_{i=1}^n \beta_i CONTROLS_{it} + \gamma_i + \varepsilon_{it} \quad (2)$$

whereby *CFP* refers to our financial performance proxies (*Tobin's Q*, *Return on assets*, and *Total share return*), and *CSR* is either our quality (*CSR index*) or quantity (*CSR word count*) proxy for CSR disclosures, whilst the rest remain the same as defined in equation (1).

Table 5 reports fixed-effects regression results of the effects of CSR on CFP. Since existing studies have predominantly simply regressed CSR on CFP, we begin our analysis by similarly regressing the *CSR index* with the control variables on *Tobin's Q*. Positive, but insignificant coefficient on the *CSR index* (0.033, $t = 1.360$, $p > 0.100$) is discernible in Model 1 of Table 5. To ascertain whether this evidence may be due to the use of the quality CSR measure, we replace the *CSR index* with its quantity alternative (*CSR word count*) in equation (2). Noticeably, the result in Model 2 of Table 5 depicts a positive

coefficient on the *CSR word count* (0.028, $t = 1.325$, $p > 0.100$), but equally insignificant and thereby providing support for the findings of a large number of studies that suggest that there is a positive, but weak direct link between CFP and CSR (McGuire et al., 1988; Orlitzky et al., 2003; Bird et al., 2007; Lo & Sheu, 2007; Cai et al., 2012).

Whilst our evidence is largely consistent with the findings of prior studies that similarly include extensive number of controls, such as risk (McWilliams & Siegel, 2000; Nelling & Webb, 2009), we contend that the CFP-CSR connection can possibly be enhanced by CG. Our conjecture is based on the extensive evidence, which suggests that CG influences CFP (Gompers et al., 2003; Renders et al., 2010, Bozec & Bozec, 2012), as well as emerging theoretical and empirical evidence (Jamali et al., 2008; Stark, 2009; Arora & Dharwadkar, 2011; Ntim et al., 2012a), which indicates that the positive effect of CG on CFP is stronger than that of CSR. Therefore, to ascertain whether CG positively moderates the CFP-CSR link, we re-estimate equation (2) by including the *CSR*CG index*, which is a variable created by interacting the *CSR index* (*CSR word count*) and *CG index*. We also include the *CG index* on its own to control for potential upward bias (over-estimating) in the coefficients. Observably, the respective coefficient of *Tobin's Q* on the *CSR index* (0.136, $t = 3.420$, $p < 0.001$) and *CSR word count* (0.122, $t = 2.960$, $p < 0.050$) in Models 3 and 4 of Table 5 is positive, and thereby providing new evidence, which supports *Hypothesis 8* that the CFP-CSR connection is significantly and positively enhanced by CG. The economic significance of our evidence is that a one-standard deviation increase (decrease) in the *CSR index*, for example, will be associated with about a 2.2% (16.19×0.136) increase (decrease) in the *Tobin's Q*. Theoretically, our evidence is consistent with the predictions of our overarching neo-institutional framework that places special emphasis on the efficiency and legitimation effects of CSR engagement. Our evidence implies that in better-governed firms (i.e., firms depicting high levels of accountability, responsibility, and transparency), managers are more likely to undertake positive CSR practices that can help legitimise corporate operations by ensuring congruence with stewardship interests and higher-order values (i.e., moral imperative) (Aguilera et al., 2007). From an efficiency perspective, our evidence implies better-governed firms have greater propensity to engage in good CSR practices,

which can enhance corporate efficiency, and meet instrumental and relational imperatives. Thus, good CG can act as a positive catalyst on the CFP-CSR nexus by helping to reduce conflict of interests among the various stakeholders (Harjoto & Jo, 2011; Jo & Harjoto, 2011, 2012).

Further, to ascertain whether the board and ownership characteristics can positively heighten the CFP-CSR nexus, we include interaction variables for the six alternative CG variables using both the quality (*CSR index*) and quantity (*CSR word count*) CSR proxies in Models 5 and 6 of Table 5, respectively, with the coefficient on the *CSR index* (0.138, $t = 3.459$, $p < 0.001$) and *CSR word count* (0.133, $t = 3.442$, $p < 0.001$) remaining positive. The positive coefficient on *CSR*Government ownership* (*Model 5*: 0.186, $t = 3.863$, $p < 0.001$)(*Model 6*: 0.172, $t = 3.789$, $p < 0.001$), *CSR*Board diversity* (*Model 5*: 0.182, $t = 3.865$, $p < 0.001$)(*Model 6*: 0.178, $t = 3.795$, $p < 0.001$) and *CSR*Independent directors* (*Model 5*: 0.121, $t = 3.527$, $p < 0.001$)(*Model 6*: 0.113, $t = 2.784$, $p < 0.050$) also provides new evidence, which suggests that the CFP-CSR nexus is further significantly and positively strengthened by the presence of government ownership, diverse boards, and independent boards. To check whether the ability of the *CG index* to positively intensify the CFP-CSR nexus will be affected by the presence of the alternative CG structures, we include interaction variables for the six alternative CG variables, as well as all seven CG mechanisms in Models 7 to 9 of Table 5, with the results remaining qualitatively the same as those reported in Models 3 and 4 of Table 5.

Insert Table 5 about here

Additional Analyses

We conduct a number of additional analyses to ascertain the robustness of our evidence. First, as a robustness check, we replicate our results in Table 4 by replacing our quality CSR measure (*CSR index*) with its quantity alternative (*CSR word count*), and the results are reported in Table 6. Apart from a few sensitivities (such as the insignificant *CG index-Ethics word count*, *Block ownership-Ethics word count*, and *Block ownership-Health and safety word count* links), the results in Models 1 to 9 of Table 6 are essentially similar to those reported in Table 4, implying that our evidence is fairly robust to the use of a quantitative (word counts) or qualitative (disclosure indices) measure of CSR practices.

Insert Table 6 about here

Second, several studies suggest that the effect of some CG mechanisms, such as *Block ownership*, *Board size*, and *Institutional ownership* on CFP is non-linear (McConnell & Servaes, 1990; Chen et al., 2008). For example, *Block ownership*, *Board size*, and *Institutional ownership* have been found to be non-monotonically related to CFP by Morck et al. (1988), Andre (2008), and Coles et al. (2008), respectively. To ascertain the presence of non-linear links among these three CG structures, CFP, and CSR, we re-estimate equations 1 and 2 by including squared transformations of *Block ownership*, *Board size*, and *Institutional ownership*. Models 1 and 2 of Table 7 contain the findings for the CG-CSR nexus and CFP-CSR link, respectively. Observably, the coefficients on *Block ownership*² (*Model 1*: -0.023, $t = 0.345$, $p > 0.100$)(*Model 2*: -0.013, $t = 0.320$, $p > 0.100$), *Board size*² (*Model 1*: 0.032, $t = 0.526$, $p > 0.100$)(*Model 2*: 0.036, $t = 0.552$, $p > 0.100$) and *Institutional ownership*² (*Model 1*: -0.034, $t = 0.545$, $p < 0.100$)(*Model 2*: -0.029, $t = 0.353$, $p > 0.100$) in Models 1 and 2 of Table 7 are insignificant, with the rest of the results remaining largely the same as our previous findings contained in Tables 4 and 5, respectively. Thus, our evidence does not provide support for the existence of curvilinear (including other transformation, such as cubic) links among CFP, CG, and CSR.

Insert Table 7 about here

Third, a number of studies suggest that investments in advertising, and research & development (R&D) impact positively on CFP (McWilliams & Siegel, 2000; Jo & Harjoto, 2011, 2012). Thus, failing to control for advertising and R&D expenditure could result in misspecified equation with the coefficient on the *CSR index* being biased upwards. To account for such potential equation misspecification, we include *Advertising expenditure* and *R&D expenditure*, as additional control variables in Model 3 of Table 7. The coefficient on *Advertising expenditure* is positive (0.165, $t = 3.647$, $p < 0.001$), whilst the coefficient on *R&D expenditure* is negative (-0.048, $t = 0.780$, $p > 0.100$), but insignificant. The coefficient on the *CSR index* remains positive (0.135, $t = 3.463$, $p < 0.001$), but slightly sensitive – decreasing from 0.140 in Model 7 of Table 5 to 0.135 in Model 3 of Table 7.

Fourth, following Larcker and Rusticus (2010), we additionally address potential endogeneities by estimating: a lagged CSR-CFP structure and two-stage least squares (2SLS). To address simultaneity problems that may arise due to the presence of a lagged CSR-CFP connection, we follow past research (McGuire et al., 1988) to re-estimate equation (2) as a lagged structure specified as:

$$CFP_{it} = \alpha_0 + \beta_1 CSR_{it-1} + \sum_{i=1}^n \beta_i CONTROLS_{it-1} + \gamma_i + \varepsilon_{it-1} \quad (3)$$

where everything remains the same as defined in equation (2) except that we include a one year lag between *CFP* and *CSR* in which current year's *CFP* depends on previous year's *CSR*. The positive coefficient of *Tobin's Q* on the *CSR index* (0.130, $t = 3.406$, $p < 0.001$) is noticeable in Model 4 of Table 7, with the results being generally similar to those presented in Models 3 to 9 of Table 5. This suggests that our evidence is largely robust to estimating a lagged CFP-CSR structure.⁸

To account for potential endogeneities that may be caused by omitted variable bias, we rely on the widely used two-stage least squares (2SLS) methodology (Beiner et al., 2006; Henry, 2008). However, to ensure that the 2SLS methodology is ideal, and following Beiner et al. (2006), we first implement Durbin-Wu-Hausman exogeneity test (Beiner et al., 2006: 267) to test for the existence of an endogenous connection between *Tobin's Q* and the *CSR index*. Applied to equation (2), the test rejects the null hypothesis of no endogeneity, and hence, we conclude that the 2SLS methodology may be appropriate and that our fixed-effects results may be misleading. This implies that we need to replace the *CSR index* with an instrument, which is highly correlated with the *CSR index* (relevant), but lowly or uncorrelated with the regression structural errors (valid). Obtaining a 'relevant' and 'valid' instrument is generally difficult (Gujarati, 2003; Wooldridge, 2010). As a result, we follow the widely used two-stage procedure (Beiner et al., 2006; Larcker & Rusticus, 2010; Jo & Harjoto, 2011, 2012). In the first stage, based on extensive theoretical and empirical literature (Gray et al., 1995; Adams, 2002; Deegan, 2002; Fifka, 2013), we conjecture that the *CSR index* will be influenced by all our CG and control variables, including *Advertising expenditure* and *R&D expenditure*. In the second stage, we employ the predicted part of the *CSR index* (*Predicted CSR index*) as an instrument⁹ for the *CSR index* and re-run equation (2) as follows:

$$CFP_{it} = \alpha_0 + \hat{\beta}_1 CSR_{it} + \sum_{i=1}^n \beta_i CONTROLS_{it} + \gamma_i + \varepsilon_{it} \quad (4)$$

where everything remains unchanged as specified in equation (2) except that we use the predicted *CSR index* (*Predicted CSR index*) from the first-stage estimation as an instrument for the *CSR index*. The coefficients on the *Predicted CSR index* (0.175, $t = 3.790$, $p < 0.001$) and *CSR*CG index* (0.190, $t = 3.863$, $p < 0.001$) in Model 6 of Table 7 are positive, and thereby implying that our evidence of a positive impact of the *CSR index* on Q is significantly heightened by CG is robust to potential endogeneities that may arise from omitted variables.

Fifth, we examine the robustness of our findings to two alternative CFP measures: return on assets (*Return on assets* – an accounting based proxy) and total share returns (*Total share return* – a market based measure). Models 7 and 8 of Table 7 report results based on applying *Return on assets* and *Total share return*, respectively, instead of *Tobin's Q*. The positive impact of the *CSR index* on the *Return on assets* (0.158, $t = 3.620$, $p < 0.001$) and *Total share return* (0.125, $t = 3.453$, $p < 0.001$) in models 7 and 8 of Table 7, respectively, is observable, and thereby indicating that our results remain unchanged when an accounting (*Return on assets*) or a market (*Total share return*) based measure of CFP is employed instead of Q . Overall, the additional analyses indicate that our results are fairly robust to different types of endogeneities and CFP measures.

Finally, several studies report that CG has a positive effect on CFP (Gompers et al., 2003; Renders et al., 2010; Bozec & Bozec, 2012; Ntim et al., 2012a). Therefore, we examine the effect of the CG variables alone on CFP in Models 9 and 10 of Table 7. The positive effect of the *CG index* on the *Tobin's Q* in Models 9 (0.128, $t = 3.465$, $p < 0.001$) and 10 (0.125, $t = 3.453$, $p < 0.001$) of Table 7 is discernible, and thereby providing further support for the findings of past studies (Gompers et al., 2003; Bozec & Bozec, 2012; Ntim et al., 2012a). However, the relatively smaller coefficient on the *CG index* compared with when it is interacted with the *CSR index* (see for example Models 3 and 4 of Table 5), suggests that the interaction also enhances the positive effect of the *CG index* on *Tobin's Q*. Thus, the

main implication is that whereas CG on its own can have a significant positive effect on CFP, CSR alone has a positive, but weak effect on CFP, which can be strengthened by interacting it with CG.

SUMMARY AND CONCLUSIONS

Although a considerable number of studies have investigated the determinants, motivations and consequences of corporate social responsibility (CSR) and corporate governance (CG) practices separately, studies examining how and why a firm's internal CG might influence its CSR strategies are rare. Therefore, this paper examines the link between corporate governance (CG) and corporate social responsibility (CSR), and consequently, investigates whether CG can positively moderate the association between corporate financial performance (CFP) and CSR. The empirical findings are based on a sample of large South African listed corporations from 2002 to 2009. This period coincided with a period during which the South African authorities pursued a joint CG and CSR policy reforms that explicitly required corporations to engage in good CG and CSR practices for the benefit of a broader constituency of corporate stakeholders.

More specifically, we articulate an overarching neo-institutional framework to study the antecedents and consequences of CSR practices at the organisational level of analysis for the first time, by relying on insights gained from a neo-institutional model put forward by DiMaggio and Powell (1983, 1991), and Scott (2001), as well as Aguilera et al.'s (2007) multilevel theory for interpreting CSR practices. This framework was also informed by empirical insights obtained from the extant institutional theory-led studies grounded in the CSR/CG literature by Aguilera and Cuervo-Cazurra (2004), Zattani and Cuomo (2008), and Judge et al. (2008, 2010). Our findings make a number of new contributions to the literature. First, using one of the most extensive CSR and CG data to-date, we provide new evidence that suggests that, on average, better-governed corporations are more predisposed to pursue a more socially responsible agenda than their poorly-governed counterparts.

Second, our results indicate that CSR practices are low in corporations with high block ownership and institutional ownership, but high in corporations with high government ownership, larger boards, diverse boards, and more independent boards. These findings are largely consistent with the predictions of

our generalised neo-institutional framework, which emphasises the efficiency and legitimation effects of CSR practices. This dualism of efficiency/legitimation characterisation is also reflected in Aguilera et al.'s (2007) conceptualisation of organisational level motives (i.e., instrumental, moral and relational) for CSR practices, albeit with the relational motive providing the 'middle ground', where efficiency and legitimation might be seen to co-exist or be reflective of the multi-faceted relationships between the firm and its stakeholders. In our view, therefore, an overarching institutional framework allows for an examination of CG and CSR by recognising not only the different economic-led incentives underpinning the relationship between CSR and CG, but also the social and political realities, which can then shape how governance arrangements operate and how social responsibility is practiced.

Third, and whilst the findings of a considerable number of studies that have investigated direct links between CFP and CSR are conflicting, there are limited attempts at explaining how and why this might be so. Thus, our findings distinctively contribute to the literature by providing new evidence that indicates that a combination of CSR and CG practices has a strong positive effect on CFP, implying that CG positively moderates the CSR-CFP connection. This sheds new crucial insights on and extends our understanding of the mixed findings of past studies that have examined direct associations between CFP and CSR. Our findings are generally robust across a number of econometric models that sufficiently address different types of endogeneities, as well as alternative CFP, CG and CSR proxies.

Fourth, the theoretical implication of this study is that we explicitly bring to the fore the role of CG-related structures, actors and policies at the organisational level of analysis of the antecedents of CSR practices developed by Aguilera et al. (2007). The scholars (2007: 845) refer to the pressures of insider groups (mainly shareholders and managers) and outsider groups (primarily consumers), as well as the role of top management teams in influencing firms to engage in CSR actions. However, Aguilera et al. (2007) do not consider more specifically the role of the board and the firm's ownership characteristics, which to a large extent reflects a *combination* of insider and outsider groups and a *blend* of relational/moral (legitimation) and instrumental (efficiency) motives. Our study, therefore, fills this gap within the existing literature by showing that CG-related actors (e.g., boards and independent directors) and ownership

structures (e.g., ownership by institutions and governments) may well pressure the firm to engage in CSR practices for both legitimation (relational/moral) and efficiency (instrumental) reasons. Furthermore, our analysis of the relationship among CG, CSR and CFP suggests that corporations do not necessarily pursue legitimation and efficiency motives in isolation; instead there are significant interaction effects among them, which can help strengthen their relationships, including the association between CSR and CFP.

Finally, our findings have crucial practical implications for regulators, policy-makers, practitioners, companies, and governments in other countries that are currently pursuing CG and CSR policy reforms. With respect to governments and regulatory authorities, since our evidence suggests that better-governed corporations are more likely to be more socially responsible, it provides them with a strong motivation to pursue CG reforms formally and jointly with CSR ones. Specifically, efforts at enhancing boardroom practices, accounting transparency, and disclosure for shareholders should be pursued alongside attempts at addressing the concerns of stakeholders, such as employees, customers and communities regarding the environment, ethics, and health and safety, amongst others. With regard to corporations, since our evidence suggests that CG and CSR practices jointly impacts positively on CFP, it empowers corporate managers to incorporate CSR as a strategic component of the firm's broader CG strategy by paying serious attention to stakeholder and sustainability concerns. Further, and as our South African data may or may not be relevant to other countries, future studies can adopt our overarching neo-institutional theoretical framework within a cross-country context, which may arguably enhance generalisability of their findings. Similarly, it should be noted that our structural proxies may or may not reflect the actual behaviour of corporate boards and owners.

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NOTES

1. It is a 'generalised and/or an 'overarching' neo-institutional theory because it draws from the neo-institutional framework proposed by DiMaggio and Powell (1983, 1991), and Scott (2001), as well as Aguilera et al.'s (2007) multilevel theory for explaining CSR practices. It is also informed by insights from neo-institutional theory-led empirical studies by Aguilera and Cuervo-Cazurra (2004), Zattoni and Cuomo (2008), and Judge et al. (2008, 2010) that explicitly acknowledge and incorporate both 'efficiency' and 'legitimation' motives of economic actors operating within an institutional environment instead of directly testing for the presence of specific institutional isomorphism (e.g., coercive, mimetic, and/or normative institutional forces).
2. One new insight that may be gained ('takeaway') from focusing on the South African context is that since 1994, listed companies have been formally required (as part of the listing rules) to report on a number of clearly defined CSR areas. By contrast, CSR reporting remains largely voluntary and undefined in most Anglo-American countries. For example, the London Stock Exchange (LSE) has resisted making CSR reporting a formal requirement for its listed firms. The LSE has argued that what constitutes CSR is not only vague, but also such a requirement will place 'excessive cost burden' on listed firms (LSE, 2007: 99). Thus, this differentiates CG reforms pursued in South Africa from its counterparts. In fact, the King Reports have gained international recognition and received several endorsements from leading academics and policy-makers as an example of a good CG model in the world. Mallin (2007: 248), for example, states that "*South Africa has a well-developed corporate governance code. In fact, its revised Code published in 2002 is the most comprehensive in the world, and leading edge in terms of its outlook and recommendations*". Indeed, the relative success of the CG/CSR reforms in South Africa led to its main champion, a retired Supreme Court judge, Professor Mervyn King, being appointed as the chair of the United Nations committee on CG to lead global reforms on CG with particular focus on enhancing CG standards in developing countries.
3. Although not the focus of our study, it should be noted that King II has been revised and replaced with a third King report (King III) in March 2010. This was mainly necessitated by general developments and changes within the international governance environment, including the 2007 to 2009 global financial crisis (the so-called 'credit crunch') since King II was released. King III is largely similar to King II. A major difference is that King III requires corporations to formally prepare an annual 'integrated report' consisting of statutory financial and sustainability (CSR) information, implying that CSR reporting is mandatory as with financial reporting. Further King III is in its infancy in terms of implementation, compliance and enforcement, which will require time for adequate data to be available regarding its impact on CG and CSR practices to be assessed. Hence, the current study focuses on King II instead of King III.
4. BEE is a form of socio-economic affirmative action championed by the African National Congress led government to address historical imbalances in business participation and ownership in South Africa. Specifically, the BEE policy encourages South African corporations to account on an annual basis their contributions in a number of clearly defined CSR areas: corporate social investment; equity ownership; employment equity; enterprise development; management control; preferential procurement; and skills development.
5. For example, the six largest pyramidal groups (namely, the Anglo American-De Beers, Rembrandt, Sanlam, Old Mutual, Liberty Life Insurance and Anglovaal Groups) control over 70% of the value of all shares listed on the Johannesburg Stock Exchange, with the Anglo American-De Beers Group controlling 17 of the 20 largest quoted firms (Ntim et al., 2012a, b).
6. Given the well articulated limitations of quantity measures, such as word counts (Unerman, 2000; Deegan, 2002; Branco & Rodrigues, 2008; Hooks & Van Staden, 2011) and qualitative proxies, such as disclosure indices (Gray et al., 1995; Parker, 2005; Hackston & Milne, 1996; Gompers et al., 2003), we use both in order to enhance the robustness of our findings.
7. We note that our choice is between fixed- and random-effects, but Hausman specification test conducted rejected random-effects in favour of fixed-effects. Intuitively, this is consistent with the use of non-random/stratified instead of random sampling procedure. We also follow Guest (2009) and Ntim et al. (2012a) in implementing the mean-difference technique, which is more robust in the presence of heteroscedasticity (Gujarati, 2003; Wooldridge, 2010). However, we get essentially similar results if we run our fixed-effects models by employing the year dummy alternative instead of the mean-difference method.
8. According to the theory of the firm (McGuire et al., 1988; McWilliams & Siegel, 2001), CG can be considered as part of a firm's CSR strategy, implying that higher CFP may also lead to higher CSR and CG quality, and not only vice versa. Therefore, we re-estimate equation (2) by interchanging the positions of the CSR index and CFP (i.e., by making CSR index the main dependent variable and the CFP the main independent variable in addition to the control variables). We find that the coefficient on CFP is positive (0.024, $t = 0.376$, $p > 0.100$), but insignificant. Further, and to ascertain whether there is a lagged structure between CSR and CFP such that better performing firms are also more likely to maintain higher CSR and CG standards in the future, we introduce a one year lag between CSR and CFP such that the current year's CSR (CSR_t) depends on the previous year's CFP (CFP_{t-1}). We find that the coefficient on the lagged CFP (CFP_{t-1}) is positive (0.028, $t = 0.394$, $p > 0.100$), but similarly insignificant. Thus, the evidence suggests that our finding is not sensitive to this specification, and that the direction of causality appears to be from the CSR index to the CFP rather than the other way round.
9. To be reliable, the predicted CSR index has to be highly correlated with the actual CSR index (relevant), but lowly or uncorrelated with the regression residuals. The correlation between the predicted CSR index and the actual CSR index contained in Table 3 appears to be relatively high (i.e., 0.816 and 0.834, respectively, for the Pearson parametric and the Spearman non-parametric coefficients), whilst the correlation between the predicted CSR index and regression residuals seems to be comparatively low (i.e., 0.116 and 0.134, respectively, for the Pearson parametric and the Spearman non-parametric coefficients). By contrast, the correlation between the actual CSR index and regression residuals is relatively high (i.e., 0.574 and 0.610 for the Pearson parametric and the Spearman non-parametric coefficients). Thus, the evidence appears to suggest that the predicted CSR index is largely a good and appropriate instrument for the actual CSR index. This is also supported by the relatively good regression diagnostics (i.e., relatively high R^2 of 0.479 and F -value of 8.895) from the first stage regression results presented in Model 5 of Table 7. To be more certain, however, we additionally conducted the Hausman exogeneity test, but we could not reject the null hypothesis that the predicted CSR index is exogenous at any reasonable statistical significance level. Overall, our analyses make us reasonable confident that the predicted CSR index is relevant and valid instrument for the actual CSR index.

APPENDIX

| CSR Practice Disclosure Index | | | |
|---|---|------------------------|------------------------------|
| CSR Theme | CSR Item: Information On or Reference To | Range of Scores | Total Score Per Theme |
| (i). Ethics | 1. Fair business practices (excluding equal opportunity theme for employees covered under BEE). | 0-4 | 16 |
| | 2. Policies and practices in relation to fraud and corruption. | 0-4 | |
| | 3. Code of ethics (adoption, implementation and/or enforcement). | 0-4 | |
| | 4. Policies and practices relating to the treatment of labour, union and human rights. | 0-4 | |
| (ii). Health and safety, except HIV/Aids initiatives | 5. Legal requirements and health & safety policies. | 0-2 | 14 |
| | 6. Product and customer safety. | 0-4 | |
| | 7. Safety in the workplace, excluding HIV/Aids related disclosures. | 0-4 | |
| | 8. Health programmes for employees, excluding HIV/Aids related disclosures. | 0-4 | |
| (iii). HIV/Aids , including projects in the community | 9. Good governance. | 0-2 | 13 |
| | 10. Measurement, monitoring and evaluation. | 0-4 | |
| | 11. Workplace conditions and management. | 0-3 | |
| | 12. Depth, quality and sustainability of programmes. | 0-4 | |
| (iv). Environment | 13. Overall company policy recognising environmental issues, standards and achievements (including awards). | 0-4 | 14 |
| | 14. Detailed management policy or strategy in place to address environmental issues. | 0-2 | |
| | 15. Detailed environmental themes (e.g., materials, water, and energy), related actions and impacts. | 0-4 | |
| | 16. Other activities relating to conservation, aesthetics, and sustainability, amongst others. | 0-4 | |
| (v). Black economic empowerment (BEE), except social investment | 17. Equity ownership. | 0-4 | 24 |
| | 18. Management control. | 0-4 | |
| | 19. Employment equity. | 0-4 | |
| | 20. Skills development. | 0-4 | |
| | 21. Preferential procurement. | 0-4 | |
| | 22. Enterprise development. | 0-4 | |
| (vi). Social, including BEE social investment | 23. Education. | 0-4 | 16 |
| | 24. Health, excluding HIV/Aids initiatives. | 0-4 | |
| | 25. Arts and heritage. | 0-4 | |
| | 26. Other community support and poverty alleviation projects. | 0-4 | |
| Total | 26 CSR Items | | 97 |
| Scoring Procedure | | | |
| 0: | No disclosure. | | |
| 1: | General or rhetorical (including instances of ritualistic and repeated) statements: deemed to be purely symbolic with no evidence of actual actions/activities on the ground. | | |
| 2: | Narrative explanation of what has actually been done or implemented: deemed to be a message of commitment (beyond symbolic). | | |
| 3: | Information provided in (2) above supported by quantitative/monetary data: deemed to be substantive by providing evidence of the scale of activities or actions. | | |
| 4: | Information provided in (3) above supported by explicit assessments of performance (relative to last period) or events (even if they are 'bad' news), and which allows comparison between companies using external reporting models/benchmarks/assurance: deemed to be comprehensive. | | |

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Table 1
Summary of Measures and Variables

| Corporate Social Responsibility (CSR) Variables – Quantity Measures (Word Counts) | |
|---|--|
| Total CSR count | is the total <i>CSR</i> proxy covering six broad areas, incorporating both SA context-specific: black economic empowerment; and HIV/Aids, and traditional: environment; ethics; health and safety; and social investment <i>CSR</i> disclosures. It measures the extent (in terms of word count) and nature (in terms of the six specified headings) of <i>CSR</i> disclosures in both corporate annual and sustainability reports, which is normalised by taking a natural log. The Appendix contains the detailed items and the scoring procedure. |
| BEE count | is the total word count of black economic empowerment (<i>BEE</i>) disclosures covering six broad areas demonstrating corporate commitment to affirmative action and <i>CSR</i> , including: equity ownership; employment equity; enterprise development; management control; preferential procurement; and skills development, which is normalised by taking a natural log. The Appendix contains the detailed items and the scoring procedure. |
| OTHERS | Is the total word count of <i>CSR</i> disclosures relating to the environment, ethics, HIV/Aids, health and safety, and social investment, which are normalised by taking natural logs. The Appendix contains the detailed 26 items and the scoring procedure. |
| Corporate Social Responsibility (CSR) Variables – Qualitative Measures (Disclosure Indices) | |
| CSR index score | A <i>CSR</i> practice disclosure index containing 26 items based six main themes, including: six BEE items, four items each on the environment, ethics, HIV/Aids, health and safety, and social investment. All 26 items (except four, of which three are scored from 0 to 2 and a fourth one is scored 0 to 3) have a score ranging from 0 to 4, resulting in a total potential score of 97; scaled to a value between 0% and 100%. The Appendix contains the detailed 26 items and the scoring procedure. |
| Corporate Financial Performance (CFP) Variables | |
| Tobin's Q | Ratio of total assets minus book value of equity plus market value of equity to total assets. |
| Return on assets | Percentage of operating profit to total assets. |
| Total share return | Percentage of total share returns made up of share price and dividends. |
| Corporate Governance (CG)/Alternative CG Variables | |
| CG index | CG index containing 41 provisions from King II that takes a value of 1 if each of the 41 CG provisions is disclosed in the annual report, 0 otherwise; scaled to a value between 0% and 100%. These CG provisions are presented in Sections 1 to 4 of the Appendix in Ntım et al. (2012a: 102). |
| Board diversity | Percentage of male and female non-white directors (blacks, Asians and mixed race) to the total number of directors on the board of a company. |
| Board size | Natural log of the total number of directors on the board of a company. |
| Block ownership | Percentage of ordinary shares held by shareholders with at least 5% of the total company ordinary shareholdings. |
| Govt. ownership | Percentage of government ownership to total company ordinary shareholdings. |
| Indep. directors | Percentage of independent non-executive directors to the total number of directors on the board of a firm. |
| Inst. ownership | Percentage of ordinary shares held by institutional shareholders. |
| Interaction and Instrumented Variables | |
| Inter. variables | Interaction variable between CG index and total CSR count/index. We also create similar interaction terms for the six alternative (board diversity, block ownership, board size, government ownership, independent non-executive directors, and institutional ownership) CG variables as part of our sensitivity analysis. |
| Pred. CSR index | Predicted variable used as an instrumental variable for the CSR index as part of our sensitivity analysis. |
| Reg. residuals | Predicted regression errors, used in testing the validity of the instrument as part of our sensitivity analysis |
| Control Variables | |
| Advertising exp. | Percentage of total advertising expenditure/expense to total assets. |
| Audit firm size | 1, if a firm is audited by a big four audit firm (PricewaterhouseCoopers, Deloitte & Touche, Ernst & Young, and KPMG), 0 otherwise. |
| Capital expenditure | Percentage of total capital expenditure/expense to total assets. |
| CG committee | 1, if a company has set up a corporate governance committee, 0 otherwise |
| Cross-listing | 1, if a company is listed on a foreign stock market, 0 otherwise. |
| CSR committee | 1, if a company has set up a corporate social responsibility committee, 0 otherwise. |
| Leverage | Percentage of total debt to total assets. |
| Firm size | Natural log of total assets. |
| Risk | Standard deviation of the CFP measure (i.e., Tobin'Q/return on assets/total share return). |
| R&D expenditure | Percentage of research and development expenditure/expense to total assets. |
| Sales growth | Percentage of current year's sales minus previous year's sales to previous year's sales. |
| Industry | Dummies for each of the five main industries: basic material + oil gas; consumer goods, consumer services + health care; industrials; and technology + telecoms firms. |
| Year | Dummies for each of the eight years from 2002 to 2009 inclusive. |

Table 2
Summary Descriptive Statistics of all Variables for all 600 Firm Years

| Variable | Mean | Median | STD | Maxi | Mini | VIF | High CSR index – Low CSR index | |
|--|----------|----------|----------|-----------|--------|------|--------------------------------|-------------------|
| | | | | | | | Mean Diff. | Median Diff. |
| Panel A: Corporate Social Responsibility (CSR) Variables – Quantity Measures (Word Counts) | | | | | | | | |
| Total CSR count | 4,080.85 | 2,734.00 | 4,019.19 | 23,371.00 | 186.00 | - | - | - |
| BEE count | 1,334.43 | 918.00 | 1,332.78 | 8,347.00 | 50.00 | - | - | - |
| Env. count | 936.94 | 403.50 | 1,336.88 | 8,225.00 | 9.00 | - | - | - |
| Ethics count | 222.41 | 150.00 | 209.80 | 1,722.00 | 10.00 | - | - | - |
| HIV count | 358.17 | 200.00 | 593.06 | 8,211.00 | 10.00 | - | - | - |
| Hea. & saf. | 524.43 | 200.00 | 838.15 | 5,827.00 | 10.00 | - | - | - |
| Social invest. | 704.46 | 426.50 | 731.03 | 4,482.00 | 11.00 | - | - | - |
| Panel B: Corporate Social Responsibility (CSR) Variables – Quality Measures (Disclosure Indices) | | | | | | | | |
| CSR index (%) | 56.42 | 54.64 | 16.19 | 77.32 | 6.19 | - | - | - |
| BEE index (%) | 63.25 | 58.33 | 17.38 | 83.33 | 4.17 | - | - | - |
| Env. index (%) | 59.68 | 57.14 | 16.71 | 78.57 | 7.14 | - | - | - |
| Ethics index (%) | 44.69 | 43.75 | 15.88 | 75.00 | 6.25 | - | - | - |
| HIV index (%) | 53.65 | 53.84 | 14.97 | 76.92 | 7.69 | - | - | - |
| Hea. & Saf. (%) | 55.13 | 50.00 | 15.60 | 71.43 | 7.14 | - | - | - |
| Social invest. (%) | 57.86 | 56.25 | 19.78 | 87.50 | 6.25 | - | - | - |
| Panel C: Corporate Governance (CG)/Alternative CG Variables | | | | | | | | |
| CG index (%) | 71.33 | 73.17 | 16.30 | 100.00 | 4.88 | 2.30 | 8.75*** | 9.34*** |
| Board diversity (%) | 30.48 | 25.00 | 17.35 | 85.71 | 6.67 | 3.25 | 6.48*** | 5.20*** |
| Board size | 11.35 | 11.00 | 3.46 | 21.00 | 4.00 | 1.68 | 1.85 [†] | 1.93 [†] |
| Block ownership (%) | 53.14 | 52.06 | 21.50 | 97.86 | 5.94 | 3.79 | -4.76*** | -3.80** |
| Govt. ownership (%) | 7.94 | 6.59 | 9.65 | 71.94 | 0.00 | 3.85 | 2.39** | 2.46** |
| Indep. directors (%) | 45.28 | 43.81 | 17.85 | 92.31 | 5.88 | 2.97 | 2.30* | 1.98 [†] |
| Inst. ownership (%) | 77.96 | 89.70 | 24.12 | 98.69 | 5.94 | 3.76 | -4.96*** | -3.74** |
| Panel D: Corporate Financial Performance (CFP)/Alternative CFP Variables | | | | | | | | |
| Tobin's Q | 1.75 | 1.56 | 0.79 | 6.56 | 0.70 | - | - | - |
| Return on assets (%) | 13.82 | 12.82 | 11.49 | 71.12 | -19.96 | - | - | - |
| Total share return (%) | 37.18 | 32.66 | 47.77 | 268.57 | -75.58 | - | - | - |
| Panel E: Control Variables | | | | | | | | |
| Advertising exp. (%) | 1.05 | 0.96 | 2.80 | 19.42 | 0.00 | 2.40 | 1.88 [†] | 1.90 [†] |
| Audit firm size (%) | 85.50 | 100.00 | 35.24 | 100.00 | 0.00 | 3.52 | 6.50*** | 5.85*** |
| Capital exp. (%) | 7.20 | 5.90 | 5.59 | 60.86 | 0.00 | 2.60 | -0.96 | -0.84 |
| CG committee (%) | 50.00 | 50.00 | 50.00 | 100.00 | 0.00 | 3.75 | 5.32*** | 6.37*** |
| Cross-listing (%) | 38.33 | 0.00 | 48.66 | 100.00 | 0.00 | 3.88 | 7.85*** | 8.14*** |
| CSR committee (%) | 36.67 | 0.00 | 53.79 | 100.00 | 0.00 | 2.73 | 8.39*** | 7.83*** |
| Leverage (%) | 48.99 | 50.17 | 18.83 | 93.61 | 1.14 | 2.40 | -1.08 | -0.90 |
| Firm size | 3.74 | 3.79 | 0.85 | 5.93 | 0.70 | 1.06 | 2.59* | 2.63* |
| Risk (%) | 33.98 | 19.87 | 44.87 | 400.10 | 1.78 | 3.82 | 0.47 | 0.38 |
| R&D exp. (%) | 3.56 | 3.24 | 3.93 | 36.48 | 0.00 | 2.65 | -1.65 | -1.52 |
| Sales growth (%) | 3.28 | 9.42 | 27.82 | 93.51 | -99.96 | 3.97 | 0.38 | 0.33 |

Notes: The table reports summary descriptive statistics, variance inflation factor (VIF) values, and mean/median differences for sub-samples of firms with high and low corporate social responsibility (CSR) scores, respectively. ***, **, *, and [†] denote mean/median difference between firms with high CSR index score (i.e., firms with CSR index score above the overall mean/median mark) and firms with low CSR index score (i.e., firms with CSR index score below the overall mean/median marks, respectively) is significant at the .1%, 1%, 5%, and 10% level, respectively. Table 1 fully defines all the variables used.

Table 3

Pearson's and Spearman's Correlation Matrices of the Variables for all 600 Firm Years

| Variable | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. |
|--------------------------|-------------------|----------|--------------------|--------------------|--------------------|-------------------|-------------------|---------|--------------------|---------|--------------------|-------------------|---------|--------------------|--------------------|----------|---------|-------------------|
| 1. CSR index | | .441*** | .123** | -.186*** | .120** | .193*** | .196*** | -.114** | .079 [†] | .315*** | -.040 | .390*** | .478*** | .416*** | -.035 | .238*** | .834*** | .610*** |
| 2. CG index | .480*** | | .122** | -.187*** | .141*** | .145*** | .093* | -.034 | .259*** | .323*** | -.033 | .589*** | .190*** | .210*** | -.040 | .166*** | .453*** | .094* |
| 3. Board diversity | .118** | .109* | | -.049 | .425*** | .124** | .133** | .049 | -.104** | .103** | .079 [†] | .008 | -.045 | -.046 | .014 | .363*** | .116** | .123** |
| 4. Block ownership | -.130** | -.156*** | -.031 | | -.021 | -.257*** | -.163*** | .238*** | -.049 | .034 | .109** | .010 | -.061 | -.071 [†] | .088* | -.042 | -.125** | -.095* |
| 5. Board size | .122** | .131** | .344*** | -.002 | | .315*** | .033 | .139** | -.067 [†] | .048 | .125** | -.094* | .098* | .001 | -.152*** | .644*** | .132** | .038 |
| 6. Government ownership | .165*** | .185*** | .071 [†] | -.200*** | .204*** | | .239*** | .264*** | .009 | .005 | .074 [†] | .106** | .186*** | .199*** | -.300*** | .521*** | .206*** | .060 |
| 7. Indep. directors | .187*** | .187*** | .130** | -.145*** | .004 | .109** | | .056 | .048 | -.066 | -.023 | .098* | .099* | .027 | -.203*** | .214*** | .187*** | .076 [†] |
| 8. Inst. ownership | -.162*** | -.044 | .009 | .367*** | .129** | .198*** | .061 | | -.190*** | -.055 | .128** | -.021 | -.042 | -.061 | .011 | .193*** | -.120** | -.053 |
| 9. Tobin's Q | .080 [†] | .224*** | -.074 [†] | -.101** | -.068 [†] | .010 | .073 [†] | .282*** | | .051 | -.075 [†] | .220*** | .138** | .221*** | -.016 | .026 | .088* | .025 |
| 10. Audit firm size | .336*** | .353*** | .106** | .047 | .070 [†] | .046 | -.062 | -.008 | .093* | | .070 [†] | .251*** | .227*** | .054 | -.079 [†] | .008 | .362*** | .148*** |
| 11. Capital expenditure | -.010 | -.040 | .095* | .099* | .103* | .098* | -.043 | .111** | -.058 | .090* | | .036 | -.008 | .025 | -.124** | .299*** | -.043 | .037 |
| 12. CG committee | .384*** | .557*** | .018 | .015 | -.059 | .069 [†] | .098* | -.027 | .197*** | .251*** | .047 | | .267*** | .161*** | -.195*** | .041 | .424*** | .115** |
| 13. Cross-listing | .469*** | .214*** | -.053 | -.048 | .079 [†] | .157*** | .100* | .008 | .114** | .227*** | .009 | .267*** | | .315*** | -.042 | .201*** | .482*** | .052 |
| 14. CSR committee | .391*** | .216*** | -.067 [†] | -.063 | .008 | .131** | .036 | -.085* | .216*** | .052 | .071 [†] | .161*** | .310*** | | .002 | .187*** | .421*** | .041 |
| 15. Leverage | -.038 | -.033 | .021 | .077 [†] | -.090* | -.131** | -.212*** | -.011 | -.009 | -.063 | -.145*** | -.206*** | .027 | .015 | | -.236*** | -.044 | -.028 |
| 16. Firm size | .212*** | .171*** | .248** | -.069 [†] | .602*** | .407*** | .230*** | .164*** | .008 | .022 | -.265*** | .070 [†] | .184*** | .254*** | -.219*** | | .239*** | .170*** |
| 17. Predicted CSR index | .816*** | .448** | .113** | -.120** | .126** | .194*** | .169*** | -.116** | .104** | .358*** | -.049 | .435*** | .468*** | .410*** | -.037 | -.235*** | | .134*** |
| 18. Regression residuals | .574*** | .087* | .120** | -.089* | .034 | .058 | .070 [†] | -.044 | .020 | .133** | .030 | .112*** | .043 | .036 | -.023 | .168*** | .116** | |

Notes: The bottom left half of the table contains Pearson's parametric correlation coefficients, whereas the upper right half of the table shows Spearman's non-parametric correlation coefficients. ***, **, *, and [†] denote correlation is significant at the .1%, 1%, 5%, and 10% level, respectively (two-tailed tests). Table 1 fully defines all the variables used.

Table 4
Effects of Corporate Governance on Corporate Social Responsibility Disclosures Based on Disclosure Indices

| Indep. Variables (Model) | Dependent Variables | | | | | | | | |
|-----------------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|----------------------|-------------------------------|----------------------|-------------------------------|----------------------|
| | CSR index (1) | CSR ind. (2) | CSR ind. (3) | BEE ind. (4) | Env. ind. (5) | Ethics ind. (6) | HIV ind. (7) | H&S ind. (8) | Social ind. (9) |
| <i>Governance Index:</i> | | | | | | | | | |
| CG index | 0.203*** (0.000) | - | 0.180*** (0.000) | 0.173*** (0.000) | 0.154*** (0.000) | 0.148*** (0.000) | 0.139*** (0.000) | 0.065 (0.240) | 0.120* (0.019) |
| <i>Ownership Variables:</i> | | | | | | | | | |
| Block ownership | - | -0.170*** (0.000) | -0.162*** (0.000) | -0.151*** (0.000) | -0.146*** (0.000) | -0.064 (0.357) | -0.158*** (0.000) | -0.073 (0.235) | -0.142*** (0.000) |
| Govt. ownership | - | 0.183*** (0.000) | 0.175*** (0.000) | 0.150*** (0.000) | 0.160*** (0.000) | 0.064 (0.203) | 0.166*** (0.000) | 0.138*** (0.000) | 0.145*** (0.000) |
| Inst. ownership | - | -0.115 [†] (0.057) | -0.110 [†] (0.064) | -0.174*** (0.000) | -0.120* (0.028) | -0.059 (0.210) | -0.125* (0.033) | -0.136** (0.007) | -0.169*** (0.000) |
| <i>Board Variables:</i> | | | | | | | | | |
| Board diversity | - | 0.156*** (0.000) | 0.140*** (0.000) | 0.151*** (0.000) | 0.064 (0.219) | 0.159*** (0.000) | 0.162*** (0.000) | 0.148*** (0.000) | 0.150*** (0.000) |
| Board size | - | 0.108 [†] (0.059) | 0.103 [†] (0.065) | 0.137*** (0.000) | 0.158*** (0.000) | 0.045 (0.360) | 0.132*** (0.006) | 0.161*** (0.000) | 0.129** (0.006) |
| Indep. directors | - | 0.126* (0.040) | 0.098 [†] (0.069) | 0.094 [†] (0.072) | 0.129* (0.038) | 0.110 [†] (0.054) | 0.122* (0.045) | 0.105 [†] (0.060) | 0.120* (0.049) |
| <i>Control Variables:</i> | | | | | | | | | |
| Audit fir. size | 0.260*** (0.000) | 0.302*** (0.000) | 0.198*** (0.000) | 0.137*** (0.000) | 0.118* (0.040) | 0.215*** (0.000) | 0.196*** (0.000) | 0.298*** (0.000) | 0.269*** (0.000) |
| Cap. exp. | -0.042 (0.308) | -0.050 (0.285) | -0.029 (0.458) | -0.036 (0.447) | -0.040 (0.281) | -0.033 (0.492) | -0.025 (0.640) | -0.050 (0.174) | -0.039 (0.427) |
| CG comtte. | 0.171*** (0.000) | 0.310*** (0.000) | 0.196*** (0.000) | 0.219*** (0.000) | 0.460*** (0.000) | 0.116* (0.048) | 0.265*** (0.000) | 0.320*** (0.000) | 0.149* (0.036) |
| Cross-listing | 0.432*** (0.000) | 0.426*** (0.000) | 0.430*** (0.000) | 0.568*** (0.000) | 0.240*** (0.000) | 0.190*** (0.000) | 0.347*** (0.000) | 0.158* (0.041) | 0.489*** (0.000) |
| CSR comtte. | 0.285*** (0.000) | 0.349*** (0.000) | 0.310*** (0.000) | 0.573*** (0.002) | 0.218*** (0.000) | 0.286*** (0.000) | 0.219*** (0.000) | 0.480*** (0.000) | 0.394*** (0.000) |
| Leverage | -0.030 (0.659) | -0.041 (0.387) | -0.032 (0.475) | -0.056 (0.181) | -0.063 (0.139) | -0.018 (0.795) | -0.047 (0.296) | -0.069 (0.192) | -0.070 (0.164) |
| Firm size | 0.210*** (0.000) | 0.243*** (0.000) | 0.239*** (0.000) | 0.150* (0.026) | 0.237*** (0.000) | 0.244*** (0.000) | 0.218*** (0.000) | 0.275*** (0.000) | 0.263*** (0.000) |
| Risk | 0.038 (0.470) | 0.050 (0.354) | 0.042 (0.376) | 0.029 (0.503) | 0.065 (0.178) | 0.027 (0.529) | 0.020 (0.692) | 0.067 (0.174) | 0.046 (0.380) |
| Sales growth | 0.018 (0.740) | 0.037 (0.459) | 0.025 (0.510) | 0.023 (0.520) | 0.031 (0.462) | 0.050 (0.241) | 0.049 (0.363) | 0.057 (0.219) | 0.045 (0.296) |
| Industry | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Year | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Constant | 2.975*** (0.000) | 3.984*** (0.000) | 3.913*** (0.000) | 2.750*** (0.000) | 2.368*** (0.000) | 2.637*** (0.000) | 2.526*** (0.000) | 2.402*** (0.000) | 2.619*** (0.000) |
| Durbin-W. | 2.072 | 2.191 | 2.206 | 2.183 | 1.895 | 1.827 | 1.960 | 2.054 | 1.998 |
| F-value | 8.316*** | 9.780*** | 9.998*** | 9.640*** | 6.670*** | 5.509*** | 7.473*** | 8.140*** | 7.871*** |
| Adj. R ² | 0.475 | 0.490 | 0.496 | 0.482 | 0.357 | 0.249 | 0.378 | 0.433 | 0.384 |
| N | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |

Notes: P-values are in parentheses. Following Peterson (2009), the coefficients are estimated by using the robust double clustered standard errors technique along both industry and year dimensions. ***, **, *, and † denote correlation is significant at the .1%, 1%, 5%, and 10% level, respectively. Table 1 fully defines all the variables used.

Table 5
Regression Analyses of the Effects of Corporate Social Responsibility Disclosures on Corporate Financial Performance
Dependent Variables

| Indep. Variables (Model) | Tobin's Q (1) | Tobin's Q (2) | Tobin's Q (3) | Tobin's Q (4) | Tobin's Q (5) | Tobin's Q (6) | Tobin's Q (7) | Tobin's Q (8) | Tobin's Q (9) |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <i>CSR Variables:</i> | | | | | | | | | |
| CSR index | 0.033 (0.180) | - | 0.136*** (0.000) | - | 0.138*** (0.000) | - | 0.140*** (0.000) | - | 0.134*** (0.000) |
| CSR count | - | 0.028 (0.195) | - | 0.122* (0.013) | - | 0.133*** (0.000) | - | 0.137*** (0.000) | - |
| <i>Interaction Variables:</i> | | | | | | | | | |
| <i>Governance Index:</i> | | | | | | | | | |
| CSR*CG indices | - | - | 0.190*** (0.000) | 0.184*** (0.000) | - | - | 0.195*** (0.000) | 0.191*** (0.000) | 0.186*** (0.000) |
| <i>Ownership Variables:</i> | | | | | | | | | |
| CSR*Block own. | - | - | - | - | -0.036 (0.374) | -0.020 (0.463) | -0.038 (0.367) | -0.029 (0.408) | -0.032 (0.380) |
| CSR*Govt. own. | - | - | - | - | 0.186*** (0.000) | 0.172*** (0.000) | 0.188*** (0.000) | 0.176*** (0.000) | 0.179*** (0.000) |
| CSR*Inst. own. | - | - | - | - | -0.035 (0.363) | -0.030 (0.454) | -0.040 (0.352) | -0.034 (0.436) | -0.037 (0.351) |
| <i>Board Variables:</i> | | | | | | | | | |
| CSR*Board div. | - | - | - | - | 0.182*** (0.000) | 0.178*** (0.000) | 0.185*** (0.000) | 0.182*** (0.000) | - |
| CSR*Board size | - | - | - | - | 0.045 (0.252) | 0.036 (0.335) | 0.050 (0.239) | 0.045 (0.314) | - |
| CSR*Ind. dtors. | - | - | - | - | 0.121*** (0.000) | 0.113* (0.014) | 0.125*** (0.000) | 0.120*** (0.000) | - |
| <i>Control Variables:</i> | | | | | | | | | |
| Audit fir. size | 0.182*** (0.000) | 0.176*** (0.000) | 0.173*** (0.000) | 0.160*** (0.000) | 0.175*** (0.000) | 0.164*** (0.000) | 0.180*** (0.000) | 0.171*** (0.000) | 0.168*** (0.000) |
| Cap. exp. | -0.036 (0.200) | -0.030 (0.258) | -0.044 (0.195) | -0.040 (0.223) | -0.045 (0.192) | -0.042 (0.220) | -0.050 (0.186) | -0.044 (0.213) | -0.042 (0.198) |
| CG comtte. | 0.040 (0.234) | 0.037 (0.253) | 0.046 (0.225) | 0.040 (0.242) | 0.050 (0.210) | 0.043 (0.220) | 0.054 (0.198) | 0.047 (0.216) | 0.050 (0.203) |
| Cross-listing | 0.150*** (0.000) | 0.144*** (0.000) | 0.156*** (0.000) | 0.149*** (0.000) | 0.163*** (0.000) | 0.155*** (0.000) | 0.167*** (0.000) | 0.160*** (0.295) | 0.162*** (0.000) |
| Leverage | -0.035 (0.324) | -0.030 (0.336) | -0.038 (0.316) | -0.032 (0.330) | -0.041 (0.310) | -0.036 (0.325) | -0.049 (0.298) | -0.040 (0.319) | -0.043 (0.305) |
| Firm size | -0.165*** (0.000) | -0.160*** (0.000) | -0.171*** (0.000) | -0.166*** (0.000) | -0.175*** (0.000) | -0.169*** (0.000) | -0.178*** (0.000) | -0.173*** (0.000) | -0.170*** (0.000) |
| Risk | 0.154*** (0.000) | 0.146*** (0.000) | 0.160*** (0.000) | 0.152*** (0.000) | 0.164*** (0.000) | 0.156*** (0.000) | 0.168*** (0.000) | 0.160*** (0.000) | 0.163*** (0.000) |
| Sales growth | 0.220*** (0.000) | 0.214*** (0.000) | 0.226*** (0.000) | 0.218*** (0.000) | 0.229*** (0.000) | 0.224*** (0.000) | 0.233*** (0.000) | 0.220*** (0.000) | 0.216*** (0.000) |
| Industry | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Year | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| <i>Governance Index, Ownership and Board Variables:</i> | | | | | | | | | |
| CG Variables | - | - | CGI | CGI | Board/Own. | Board/Own. | Included | Included | CGI/Own. |
| Constant | 0.785*** (0.000) | 0.780*** (0.000) | 0.794*** (0.000) | 0.786** (0.002) | 0.803*** (0.000) | 0.790*** (0.000) | 0.814*** (0.000) | 0.802*** (0.000) | 0.789*** (0.000) |
| Durbin-W. | 2.084 | 2.036 | 2.110 | 2.105 | 2.185 | 2.193 | 2.246 | 2.216 | 2.205 |
| F-value | 8.546*** | 8.496*** | 8.787*** | 8.669*** | 9.510*** | 9.498*** | 9.986*** | 9.884*** | 9.730*** |
| Adj. R ² | 0.467 | 0.463 | 0.475 | 0.470 | 0.490 | 0.486 | 0.543 | 0.539 | 0.528 |
| N | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |

Notes: P-values are in parentheses. Following Peterson (2009), the coefficients are estimated by using the robust double clustered standard errors technique along both industry and year dimensions. ***, **, *, and † denote correlation is significant at the .1%, 1%, 5%, and 10% level, respectively. Table 1 fully defines all the variables used.

Table 6
Effects of Corporate Governance on Corporate Social Responsibility Disclosures Based on Word Counts

| Indep. Variables (Model) | Dependent Variables | | | | | | | | |
|-----------------------------|---------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | CSR count (1) | CSR cou. (2) | CSR cou. (3) | BEE cou. (4) | Env. cou. (5) | Ethics cou. (6) | HIV cou. (7) | H&S cou. (8) | Social cou. (9) |
| <i>Governance Index:</i> | | | | | | | | | |
| CG index | 0.196*** (0.000) | - | 0.172*** (0.000) | 0.146*** (0.000) | 0.142*** (0.000) | 0.062 (0.225) | 0.125*** (0.000) | 0.119* (0.020) | 0.116* (0.024) |
| <i>Ownership Variables:</i> | | | | | | | | | |
| Block ownership | - | -0.164*** (0.000) | -0.153*** (0.000) | -0.118 [†] (0.054) | -0.143*** (0.000) | -0.037 (0.401) | -0.024 (0.593) | -0.135*** (0.000) | -0.121* (0.048) |
| Govt. ownership | - | 0.176*** (0.000) | 0.164*** (0.000) | 0.149*** (0.000) | 0.085* (0.024) | 0.076 [†] (0.091) | 0.152*** (0.000) | 0.089* (0.025) | 0.136*** (0.000) |
| Inst. ownership | - | -0.133* (0.023) | -0.122** (0.034) | -0.118* (0.046) | -0.173*** (0.000) | -0.116* (0.048) | -0.164*** (0.000) | -0.147*** (0.000) | -0.110* (0.049) |
| <i>Board Variables:</i> | | | | | | | | | |
| Board diversity | - | 0.149*** (0.000) | 0.133*** (0.000) | 0.137*** (0.000) | 0.155*** (0.000) | 0.198*** (0.000) | 0.120* (0.024) | 0.106* (0.030) | 0.076 [†] (0.073) |
| Board size | - | 0.091* (0.015) | 0.090* (0.017) | 0.113** (0.006) | 0.102* (0.019) | 0.096* (0.012) | 0.078 [†] (0.088) | 0.111** (0.010) | 0.160*** (0.000) |
| Indep. directors | - | 0.053 [†] (0.085) | 0.050 [†] (0.094) | 0.047 [†] (0.098) | 0.141*** (0.000) | 0.056 [†] (0.090) | 0.125** (0.001) | 0.060 [†] (0.073) | 0.065 [†] (0.059) |
| <i>Control Variables:</i> | | | | | | | | | |
| Audit fir. size | 0.253** (0.002) | 0.290*** (0.000) | 0.180* (0.019) | 0.115* (0.046) | 0.073 [†] (0.058) | 0.202*** (0.000) | 0.143* (0.020) | 0.338*** (0.000) | 0.224*** (0.000) |
| Cap. exp. | -0.034 (0.293) | -0.032 (0.274) | -0.022 (0.449) | -0.024 (0.436) | -0.038 (0.270) | -0.028 (0.480) | -0.017 (0.637) | -0.047 (0.189) | -0.031 (0.416) |
| CG comttee. | 0.166* (0.009) | 0.293*** (0.000) | 0.184* (0.003) | 0.204*** (0.000) | 0.451*** (0.000) | 0.084 [†] (0.077) | 0.254*** (0.000) | 0.311*** (0.000) | 0.138* (0.040) |
| Cross-listing | 0.456*** (0.000) | 0.453*** (0.000) | 0.446*** (0.000) | 0.581*** (0.000) | 0.262*** (0.000) | 0.164* (0.018) | 0.323*** (0.000) | 0.067 [†] (0.072) | 0.478*** (0.000) |
| CSR comttee. | 0.272*** (0.000) | 0.338*** (0.000) | 0.307*** (0.000) | 0.200** (0.003) | 0.560*** (0.000) | 0.274*** (0.000) | 0.224*** (0.000) | 0.478*** (0.000) | 0.385*** (0.000) |
| Leverage | -0.011 (0.725) | -0.025 (0.410) | -0.020 (0.499) | -0.040 (0.190) | -0.054 (0.173) | -0.006 (0.891) | -0.036 (0.324) | -0.045 (0.211) | -0.052 (0.181) |
| Firm size | 0.201*** (0.000) | 0.237*** (0.000) | 0.234*** (0.000) | 0.132* (0.043) | 0.223*** (0.000) | 0.231*** (0.000) | 0.206*** (0.000) | 0.262*** (0.000) | 0.252*** (0.000) |
| Risk | 0.025 (0.453) | 0.029 (0.384) | 0.027 (0.399) | 0.020 (0.560) | 0.052 (0.289) | 0.021 (0.600) | 0.014 (0.713) | 0.058 (0.249) | 0.033 (0.371) |
| Sales growth | 0.009 (0.769) | 0.023 (0.483) | 0.020 (0.525) | 0.018 (0.542) | 0.024 (0.477) | 0.046 (0.257) | 0.031 (0.392) | 0.040 (0.243) | 0.038 (0.322) |
| Industry | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Year | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Constant | 1.890*** (0.000) | 1.973*** (0.000) | 1.907*** (0.000) | 1.686*** (0.000) | 1.464*** (0.000) | 1.545*** (0.000) | 1.431*** (0.000) | 1.380*** (0.000) | 1.507*** (0.000) |
| Durbin-W. | 2.065 | 2.176 | 2.195 | 2.163 | 1.904 | 1.792 | 1.895 | 1.997 | 1.972 |
| F-value | 8.259*** | 9.698*** | 9.924*** | 9.539*** | 6.541*** | 5.360*** | 6.986*** | 8.070*** | 7.683*** |
| Adj. R ² | 0.466 | 0.482 | 0.485 | 0.473 | 0.342 | 0.223 | 0.361 | 0.429 | 0.376 |
| N | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |

Notes: P-values are in parentheses. Following Peterson (2009), the coefficients are estimated by using the robust double clustered standard errors technique along both industry and year dimensions. ***, **, *, and [†] denote correlation is significant at the .1%, 1%, 5%, and 10% level, respectively. Table 1 fully defines all the variables used.

Table 7

Sensitivity Analyses of the Relationships among Corporate Financial Performance, Governance and Social Responsibility

| Indep. Variables (Model) | Dependent Variables | | | | | | | | | |
|--------------------------------------|----------------------|---------------------|---------------------|---------------------|----------------------|---------------------|----------------------|---------------------|---------------------|---------------------|
| | CSR index (1) | Q (2) | Q (3) | Lagged(Q) (4) | Stage 1(CSR) (5) | Stage 2(Q) (6) | ROA (7) | TSR (8) | Q (9) | Q (10) |
| <i>CSR Variables:</i> | | | | | | | | | | |
| CSR index | - | 0.138*** (0.000) | 0.135*** (0.000) | 0.130*** (0.000) | - | - | 0.158*** (0.000) | 0.125*** (0.000) | - | - |
| Pred. CSR index | - | - | - | - | - | 0.175*** (0.000) | - | - | - | - |
| <i>Governance Index</i> | | | | | | | | | | |
| CG index | 0.178*** (0.000) | 0.185*** (0.000) | 0.180*** (0.000) | 0.176*** (0.000) | 0.182*** (0.000) | 0.190*** (0.000) | 0.189*** (0.000) | 0.130*** (0.000) | 0.128*** (0.000) | 0.125*** (0.000) |
| <i>Ownership Variables:</i> | | | | | | | | | | |
| Block ownership | -0.169*** (0.000) | -0.030 (0.390) | -0.026 (0.397) | -0.034 (0.382) | -0.168*** (0.000) | - | -0.060 (0.125) | -0.024 (0.385) | - | -0.016 (0.539) |
| Block ownership ² | -0.023 (0.465) | -0.013 (0.596) | - | - | - | - | - | - | - | - |
| Govt. ownership | 0.171*** (0.000) | 0.173*** (0.000) | 0.182*** (0.000) | 0.178*** (0.000) | 0.182*** (0.000) | - | 0.127*** (0.000) | 0.116** (0.008) | - | 0.095† (0.064) |
| Inst. ownership | -0.119* (0.050) | -0.035 (0.378) | -0.032 (0.383) | -0.030 (0.389) | -0.114* (0.020) | - | -0.046 (0.229) | -0.025 (0.390) | - | -0.030 (0.385) |
| Inst. ownership ² | -0.034 (0.376) | -0.029 (0.394) | - | - | - | - | - | - | - | - |
| <i>Board Variables:</i> | | | | | | | | | | |
| Board diversity | 0.143*** (0.000) | 0.170*** (0.000) | 0.165*** (0.000) | 0.162*** (0.000) | 0.195*** (0.000) | - | 0.173*** (0.000) | 0.140*** (0.000) | - | 0.132*** (0.000) |
| Board size | 0.110* (0.048) | 0.043 (0.247) | 0.040 (0.253) | 0.036 (0.264) | 0.108† (0.056) | - | 0.050 (0.216) | 0.023 (0.410) | - | 0.029 (0.423) |
| Board size ² | 0.032 (0.474) | 0.036 (0.260) | - | - | - | - | - | - | - | - |
| Indep. directors | 0.109† (0.054) | 0.115* (0.049) | 0.110† (0.054) | 0.103† (0.061) | 0.103† (0.060) | - | 0.159*** (0.000) | 0.145*** (0.000) | - | 0.116* (0.044) |
| <i>Additional Control Variables:</i> | | | | | | | | | | |
| Advertising exp. | - | - | 0.165*** (0.000) | - | -0.040 (0.396) | - | 0.128*** (0.000) | 0.163*** (0.000) | - | - |
| R&D exp. | - | - | -0.048 (0.249) | - | 0.190*** (0.000) | - | -0.146*** (0.000) | -0.040 (0.256) | - | - |
| Interactions | - | Included | Included | Included | - | CSR*CGI | Included | Included | - | - |
| Controls | Included | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Constant | 3.643*** (0.000) | 0.820*** (0.000) | 0.835*** (0.000) | 0.746*** (0.000) | 3.753*** (0.000) | 0.745*** (0.000) | 4.620*** (0.000) | -0.095 (0.947) | 0.489*** (0.000) | 0.495*** (0.000) |
| Durbin-W. | 2.135 | 2.254 | 2.267 | 2.183 | 2.148 | 2.029 | 2.269 | 2.010 | 1.853 | 1.936 |
| F-value | 9.584*** | 9.975*** | 9.997*** | 9.624*** | 8.895*** | 8.786*** | 9.968*** | 8.687*** | 4.950*** | 5.359*** |
| Adj. R ² | 0.469 | 0.539 | 0.546 | 0.520 | 0.479 | 0.475 | 0.553 | 0.460 | 0.296 | 0.378 |
| N | 600 | 600 | 600 | 525 | 600 | 600 | 600 | 600 | 600 | 600 |

Notes: P-values are in parentheses. Following Peterson (2009), the coefficients are estimated by using the robust double clustered standard errors technique along both industry and year dimensions. ***, **, *, and † denote correlation is significant at the .1%, 1%, 5%, and 10% level, respectively. Table 1 fully defines all the variables used.