## ABSTRACT

**Purpose:** The objective of this study was to investigate the influence of corporate social responsibility on corporate sustainability with the moderating role of top management.

**Theoretical Framework:** Even though studies have been done within an emerging market context, there has been calls to explore CSR constraints in other geographical areas. This study explores how lack of top management commitment moderates the relationship between CSR and Corporate Sustainability.

**Design/Methodology/Approach:** We used non-probability sampling technique by employing convenience sampling for data collection. By employing a survey questionnaire, data were collected from 397 employees of SMEs in Ghana. The IBM Statistical Package for Social Science (SPSS) version 25.0 and IBM's Analysis of Moments of Structures (AMOS) version 24 softwares packages were employed as analytical tools in this investigation.

**Findings:** Board composition, the board size, institutional ownership, and CEO-Chair duality had varying influences on economic, environmental, and social dimensions of corporate social responsibility. The moderating role of top management commitment was confirmed for the relationship between the environmental dimension of corporate social responsibility and corporate sustainability.

**Research, Practical & Social Implications:** Future studies can consider other indicators of corporate governance and assess their influence on the various dimensions of CSR as well as their linkage with Corporate Sustainability.

**Implications/Originality/Value:** It’s concluded that corporate governance systems exhibit varying interactions with corporate social responsibility dimensions which may be due to changes in the national and institutional framework as well as economic conditions and the type of industry.

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GOVERNANÇA CORPORATIVA, RESPONSABILIDADE SOCIAL CORPORATIVA E SUSTENTABILIDADE CORPORATIVA: O PAPEL MODERADOR DO COMPROMISSO DE ALTA GESTÃO

RESUMO

Objetivo: O objetivo deste estudo foi investigar a influência da responsabilidade social corporativa na sustentabilidade corporativa com o papel moderador da alta gestão.

Estrutura Teórica: Embora estudos tenham sido feitos dentro de um contexto de mercado emergente, houve apelos para explorar restrições de RSE em outras áreas geográficas. Este estudo explora como a falta de comprometimento de alta gestão modera a relação entre RSE e Sustentabilidade Corporativa.

Design/Metodologia/Abordagem: Utilizamos técnica de amostragem sem probabilidade, utilizando amostragem de conveniência para coleta de dados. Por meio da utilização de um questionário de pesquisa, foram coletados dados de 397 funcionários de ESM em Gana. Os pacotes de softwares 25.0 da IBM Statistical Package for Social Science (SPSS) e a análise de momentos de estruturas (AMOS) da IBM foram empregados como ferramentas analíticas nesta investigação.

Achados: A composição do conselho, o tamanho do conselho, a propriedade institucional e a dualidade ceo-chair tiveram influências variadas nas dimensões econômica, ambiental e social da responsabilidade social corporativa. O papel moderador do compromisso de alta gestão foi confirmado para a relação entre a dimensão ambiental da responsabilidade social corporativa e a sustentabilidade corporativa.

Pesquisa, Implicações Práticas & Sociais: Estudos futuros podem considerar outros indicadores de governança corporativa e avaliar sua influência nas diversas dimensões da RSE, bem como sua ligação com a Sustentabilidade Corporativa.

Implicações/Originalidade/Valor: Conclui-se que os sistemas de governança corporativa apresentam interações variadas com dimensões de responsabilidade social corporativa que podem ser devido a mudanças no quadro nacional institucional, bem como nos condições econômicas e no tipo de indústria.

Palavras chave: Governança Corporativa; Responsabilidade Social Corporativa; Sustentabilidade Corporativa; Compromisso de Gestão.

GOBIERNO CORPORATIVO, RESPONSABILIDAD SOCIAL CORPORATIVA Y SOSTENIBILIDAD CORPORATIVA: EL PAPEL MODERADOR DEL COMPROMISO DE LA ALTA DIRECCIÓN

RESUMEN

Propósito: El objetivo de este estudio fue investigar la influencia de la responsabilidad social corporativa en la sostenibilidad corporativa con el papel moderador de la alta dirección.

Marco teórico: A pesar de que los estudios se han realizado dentro de un contexto de mercado emergente, ha habido llamados a explorar las limitaciones de la RSE en otras áreas geográficas. Este estudio explora cómo la falta de compromiso de la alta dirección modera la relación entre la RSE y la Sostenibilidad Corporativa.

Diseño/Metodología/Enfoque: Se utilizó la técnica de muestreo no probabilístico empleando el muestreo de conveniencia para la recolección de datos. Mediante el empleo de un cuestionario de encuesta, se recopilaron datos de 397 empleados de PYME en Ghana. Los paquetes de software IBM Statistical Package for Social Science (SPSS) versión 25.0 y Analysis of Moments of Structures (AMOS) versión 24 de IBM se emplearon como herramientas analíticas en esta investigación.

Hallazgos: La composición de la junta, el tamaño de la junta, la propiedad institucional y la dualidad CEO-Presidente tuvieron diversas influencias en las dimensiones económicas, ambientales y sociales de la responsabilidad social corporativa. Se confirmó el papel moderador del compromiso de la alta dirección para la relación entre la dimensión ambiental de la responsabilidad social corporativa y la sostenibilidad corporativa.

Investigación, implicaciones prácticas y sociales: Los estudios futuros pueden considerar otros indicadores de gobierno corporativo y evaluar su influencia en las diversas dimensiones de la RSE, así como su vinculación con la sostenibilidad corporativa.

Implicaciones/Originalidad/Valor: Se concluye que los sistemas de gobierno corporativo exhiben interacciones variables con las dimensiones de responsabilidad social corporativa que pueden deberse a cambios en el marco nacional e institucional, así como a las condiciones económicas y el tipo de industria.

Palabras clave: Gobierno Corporativo; Responsabilidad Social Corporativa; Sostenibilidad Corporativa; Compromiso de gestión.
INTRODUCTION

Today's businesses have moved beyond the traditional view of profit maximization and have restructured their operations to place a greater emphasis on the impact of their operations on society and the environment (Ashrafi et al., 2020). As a result, organizations are identifying ways to implement strategies that will result in a positive and sustainable relationship with stakeholders (Lozano, 2015). This shift in emphasis away from profit objectives and toward organizations' contributions to society and the environment has resulted in the emergence of corporate social responsibility and corporate sustainability (Ashrafi et al., 2020). Corporate social responsibility (CSR) has been described as a way of showing a corporation’s concern and commitment towards society (Ashrafi et al., 2018) and emphasizes on responsibilities of corporations beyond what the law or legislation requires them to do (Pintea, 2015). CSR aims to maximize the shared value of both shareholders and stakeholders (Carroll et al., 2015). CSR is important for the growth and development of organizations, empowerment, and improvement of the living standards of the community, as well as contributing to the development of inhabitants in the community (Amoako, 2017). Ghanaian executives seem to have positive attitudes toward CSR, which are heavily influenced by both individual and societal ethical values (Ofori, 2008). Managers and executives in Ghana, on the other hand, participate in CSR initiatives first to improve their company image among their consumers and, moreover, for the well-being of society. According to Ofori (2008), Ghanaian managers prioritize social needs above corporate rewards as the most significant influencers of CSR concerns. He also stated that in his study, 61 percent of managers stated that the most important benefit they derive from CSR activities is an improvement in their company's image, compared to only 15 percent and 4 percent who stated that the most important benefits they derive from CSR activities are an increase in sales of goods and financial rewards.

The literature is replete with studies of CSR, examining its activities and typologies. CSR has been found to be achieved through various practices, such as ensuring good corporate citizenship, maintaining strong corporate governance, reporting on corporate performance, making socially responsible investments, and behaving ethically in a general sense (Ratnasari et al., 2021; Ashrafi et al., 2018). Ashrafi et al. (2018) called for additional research to examine how the concepts of CSR and CS are
connected to corporate activities to ensure consistency and accuracy when addressing various issues. The implementation of CSR as well as sustainable practices have been found to be fraught with several challenges such as lack of top management commitment (Goyal & Kumar, 2017); lack of CSR knowledge (Goyal & Kumar, 2017; Raut, 2018); lack of resources (Bux et al., 2020; Zou et al., 2021); complexity of CSR issues (Goyal & Kumar, 2017); lack of regulations (Bux et al., 2020; Zou et al., 2021)), high cost of CSR initiatives (Zhang et al., 2018) and indifference on the part of customers (Bux et al., 2020; Zou et al., 2021). This study explores how lack of top management commitment moderates the relationship between CSR and CS. The study attempts to fill the paucity of the empirical literature on the linkage between CSR and CS within a developing economy such as Ghana. The study contributes to the extension of the literature on CSR and CS. For practitioners, the examination of the various aspects of CSR and its influence on CS is crucial for the development of an effective corporate as this study highlights the key factors that drive CS.

The present study introduction contains background to the research, research problem, the objective of the study, and highlights significance of CSR to management. This is followed by theories and a review of empirical literature that have characteristically underpinned CSR and CS research. The research strategy employed, sampling method and procedure, questionnaire development and the scales used to measure the various constructs were elaborated. Finally, the study presents a discussion on the findings, the theoretical and practical implications, as well as limitations of the study, and potential areas for future research.

LITERATURE REVIEW

The Concept of CSR

The concept of corporate social responsibility dates all the way back to the 1920s, when it was incorporated into the concepts of corporate philanthropy, social give-back, codes of conduct, community service, and business executives as public trustees (Frederick, 2006). However, the notion of CSR did not gain traction among large firms until the 1950s, owing to the Great Depression of the 1930s and World War II in the 1940s (Carroll & Shabana, 2010). Nonetheless, CSR came to prominence in 1951, when Frank W. Abrams, a former executive for Standard Oil Company of New Jersey, proposed that enterprises be held accountable for their activities to society and that business managers should manage the enterprise in their care in such a way that an
equitable and workable balance is maintained between the claims of the many interested
groups: investors, employees, customers, and the general public. (Ashrafi et al., 2020).
CSR has moved from more of a social/philanthropic focus to a more holistic view of
social, environmental, and economic responsibilities (Ashrafi et al., 2018; Sarkar &
Searcy, 2016). This is an important concept for both academics and practitioners as
CSR has been found to have a significant impact on business image revalorization with
employees and customers and creates an internal dynamic to the company's internal
image as well as makes it possible to provide a positive image towards the customers'
external image (Arrive et al., 2019). CSR has been widely adopted as a business
strategy to enhance corporate image and reputation (Arrive et al., 2019).

THEORETICAL REVIEW AND HYPOTHESES DEVELOPMENT

Agency Theory

The agency theory is one of the dominant theories that has dominated research
about boards of directors (García-Meca & Palacio, 2018). According to the agency
theory, a manager will behave in his or her own best interest, not the best interest of the
shareholders, and that manager may be motivated to take activities that benefit the
manager but are costly to the shareholders (Kyere & Ausloos, 2021). The agency theory
details the relationship between the managers (agents) and the shareholders (principals)
(Donaldson & Davis, 1991). According to the agency theory, the board of directors can
monitor effectively if they are independent from the management (Beasley, 1996;
Christensen et al., 2010) and that the absence of controls could have dire consequences
that could lead to market failures, non-existence of the markets, moral hazards,
asymmetric information, incomplete contracts, and moral selection (Kyere & Ausloos,
2021). The argument is that incentives exist for outside directors to protect their
reputations, which motivate them to exercise decisional control (Christensen et al.,
2010). Therefore, this theory argues that corporations have a chance to increase
financial performance if costs are minimized (Kyere & Ausloos, 2021). The theory
argues that the strong relationship between managers and shareholders enhances the
resolution of divergent interests between the management of the organization and the
owners, prescribing ways of resolving such conflicts, like delegating decision-making
authority to the agents who manage a project (Kyere & Ausloos, 2021; Dewi et al.,
2021). Based on Agency Theory, it is argued that the separation of board chair and CEO
eroles can enhance the independence of the board of directors from management
(Michelon & Parbonetti, 2012), as this will ensure proper check and balances between the CEO and the chairperson. Jo and Harjoto (2012) conducted a comparison of the applicability of stakeholder and agency theories to the causal consequences of corporate governance and CSR participation. From a stakeholder perspective, corporate financial performance is a function of CSR participation rather than agency. While Jo and Harjoto (2012) study confirmed the stakeholders' perspective, it can be broadened by including the corporate governance idea.

**Corporate Governance (CG) and Corporate Social Responsibility (CSR)**

Literature is replete with studies that have examined the link between corporate governance and CSR. Jo and Harjoto (2012) revealed that the lag of corporate governance variables positively affects firms' CSR engagement. Previous studies have shown how the various components of corporate governance influence CSR performance. For instance, a study by Stuebs and Sun (2015) found that corporate governance (which was assessed using board structure and composition; audit issues; charter and bylaw provisions; laws of the state of incorporation; executive and director compensation; qualitative factors; director and officer stock ownership; and director education) had a positive influence on CSR. Empirical studies involving the CSR characteristics that are being considered for this study and CSR are discussed below.

**Board Composition and Corporate Social Responsibility (CSR)**

Previous studies on the influence of board composition and CSR have produced mixed results with most of these studies being conducted in developed countries than emerging markets (Karim et al., 2020). Karim et al.(2020) found that there is weak linkage between board composition and CSR practices. Furthermore, board composition can have a negative influence on CSR performance as board ideological diversity have been found to have a negative relationship with CSR performance, indicating that a high level of ideological diversity leads to a lower performance in CSR (Olthuis & van den Oever, 2020). However, a study by Lau et al.( 2016) found that the relationship between board composition and CSR was not significant. Nevertheless, based on the stakeholder theory, this study expects that board composition will have a positive influence on all the dimension of CSR. It is therefore hypothesized that: **H1a: Board Composition is positively and significantly related to economic CSR**
H1b: Board Composition is positively and significantly related to environmental CSR
H1c: Board Composition is positively and significantly related to social CSR

Board Size and Corporate Social Responsibility (CSR)

Previous studies have churned out contradictory findings regarding the relationship between board size and CSR (Rouf & Hossan, 2021). A study of 91 public listed companies from Bursa Malaysia by Alabdullah et al. (2019) revealed that board size had a significant and positive relationship with CSR disclosure. Another study by Zhuang et al. (2018) revealed that board composition, which was measured with aspects such as political experience, academic experience, overseas background, and gender diversity, has a positive relationship with firms’ CSR performance. Abu Qa’dan & Suwaidan (2019) found board size to be significantly and positively associated with CSR disclosure levels. Yet in another study, board size was found to have no significant relationship with CSR disclosure (Rouf & Hossan, 2021). Based on the stakeholder theory, this study argues that board size will have a positive relationship with all the dimensions of CSR. It is therefore hypothesized that:

H2a: Board size is positively and significantly related to economic CSR
H2b: Board size is positively and significantly related to environmental CSR
H2c: Board size is positively and significantly related to social CSR

Institutional Ownership and Corporate Social Responsibility (CSR)

Empirical evidence pointing to the relationship between institutional ownership and CSR has been mixed (Erhemjamts & Huang, 2019). Some researchers have argued that high level of institutional ownership will have a negative influence CSR (e.g. Brickley et al. (1988), Dalton et al. (2003), Hoskisson et al. (2002) while others have argued for a positive influence of institutional ownership on CSR (e.g., Jensen & Meckling, 1976). However, some other authors have found that institutional ownership exhibits non-linear effects on CSR (Oh et al., 2017). Erhemjamts and Huang (2019) found that institutions with shorter investment horizons CSR at the firm level and that the higher the proportion of long-term investors, the higher the effect of CSR on long-term buy-and-hold returns. And yet another study, Nurleni et al. (2018) found that there is a positive and significant relationship between institutional ownership on CSR
disclosure. Based on the above discussion, this study posits that institutional ownership will have a positive influence on CSR. It is therefore hypothesized that:

- **H3a**: Institutional ownership is positively and significantly related to economic CSR
- **H3b**: Institutional ownership is positively and significantly related to environmental CSR
- **H3c**: Institutional ownership is positively and significantly related to social CSR

**CEO-Chair and Corporate Social Responsibility (CSR)**

Al-Baddullah et al. (2018) found that CEO-Chair duality has been found to have a negative relationship with CSR disclosure. Another study by Abu Qa’dan and Suwaidan (2019) found that duality of CEO and chairman positions had negative influence on CSR disclosure level. CEO-Chair duality has been shown to have a detrimental effect on CSR activities, since CEOs have been shown to be more profit-driven and to pursue profits more aggressively at the expense of CSR efforts (Zhang, 2012). Based on previous studies, it is therefore hypothesized that:

- **H4a**: CEO-Chair Duality is negatively and significantly related to economic CSR
- **H4b**: CEO-Chair Duality is negatively and significantly related to environmental CSR
- **H4c**: CEO-Chair Duality is negatively and significantly related to social CSR

**Corporate Social Responsibility (CSR) and Corporate Sustainability (CS)**

CSR and CS are both "voluntary business activities" that aim to contribute to the better performance of corporations in social, environmental, and economic spheres (Lo, 2010). A study by Sharma and Khanna (2014) found that there was a positive low and insignificant correlation between corporate governance and sustainability. According to Ashrafi et al. (2018), CSR acts as a transitional stage is when a corporation moves through the spectrum towards sustainable development, so that it might go beyond what laws and regulations require them to do, yet not necessarily encompasses comprehensive sustainable activities. It is therefore hypothesized that the existence of CSR activities would contribute positively to corporate sustainability goals. It is therefore hypothesized that:
H5a: Economic CSR is positively and significantly related to corporate sustainability

H5b: Environmental CSR is positively and significantly related to corporate sustainability

H5c: Social CSR is positively and significantly related to corporate sustainability

Moderating Role of Top Management Commitment

The successful realisation of any goal of an organisation is dependent upon the commitment of its top management (Williams et al., 2014). Therefore, the promotion of sustainability, which can lead to competitive advantage, lies within the commitment of managers towards these sustainable practices (Yang Spencer et al., 2013). A study by Yusliza et al. (2019) found that CSR has a significant positive relationship with top management commitment and CS. According to Goyal and Kumar (2017), commitment from top executive of the organization is critical for successful implementation of CSR initiatives. The authors argued that the lack of top management commitment is one of the factors that hinders a successful implementation of CSR as the CEOs’ political ideologies will influence their firms’ CSR. In addition, commitment from top management may also motivate others to ensure the effective implementation of CSR in the organization. It can therefore be argued that the commitment of top management may moderate the relationship between CSR and CS. It is therefore hypothesised that:

H6a: Top management will moderate the relationship between Economic CSR and corporate sustainability such that the higher the level of commitment, the stronger the relationship between CSR and CS

H6b: Top management will moderate the relationship between Environmental CSR and corporate sustainability such that the higher the level of commitment, the stronger the relationship between CSR and CS

H6c: Top management will moderate the relationship between Social CSR and corporate sustainability such that the higher the level of commitment, the stronger the relationship between CSR and CS

**Conceptual Model**

![Conceptual Model Diagram]

**Figure 1: Conceptual Model**
Source: Researchers own construction

**METHODOLOGY**

Participants, Procedure and Measurement

Quantitative research approach or methodology gives emphasis to quantification in both data collection and analysis (Bryman, 2008). In the current study, the quantitative research approach is adopted based on the study’s objectives and the paradigm of choice which requires such an approach. The current study adopted a cross-sectional research design. Cross-sectional research is the most frequently used type of descriptive design (Churchill and Iacobucci, 2002; Malhorta and Birks, 2007). This study adopted the survey strategy in as a primary tool for data collection as this strategy is relatively inexpensive and has the ability of describing large population characteristics and eliminating observer subjectivity by presenting all study subjects with standardized stimulus which helps in turn in obtaining higher reliability (Palmquist, 2011). The target population for this study consists of employees and management of SMEs in Accra. The present study adopted non-probability sampling technique by employing convenience sampling. For this study, primary data for testing the hypothesis were collected via self-administered questionnaires staff of these SME’s and the secondary data included information retrieved from databases and publications to guide the researcher in the primary data collection (Webb, 2000). The IBM Statistical Package for Social Science (SPSS) version 25.0 and IBM's Analysis of Moments of
Tandoh, I. ., Duffour, K. A., Essandoh, M. ., & Amoako, R. N. . (2022). Corporate Governance, Corporate Social Responsibility, and Corporate Sustainability: The Moderating Role of Top Management Commitment. Structures (AMOS) version 24 software packages were employed as analytical tools in this investigation.

Consistent with prior studies (e.g., (Appelbaum et al., 2000; Jiang et al., 2012; Lepak et al., 2006), CSR measures adopted in the present study were divided into three dimensions. In all fourteen items were used to measure employee comprehension of CSR dimension. These items were drawn from previous studies. Corporate governance was measured was measured with items adapted from Brown & Caylor (2006). The various dimensions of CSR were measured based on the items adapted from studies from Alvarado-herrera et al. (2017) proposed by Turker (2009) and Jizi et al. (2013). Corporate sustainability was measured with a five-item scale adapted from Chow & Chen (2012). Top management commitment was measured on a three-item scale that was adopted from Erdogan et al. (2015). These items were anchored on a Likert scale from 1 to 5, where 1 corresponded to "strongly disagree" (1) and 5 corresponded to "strongly agree" (5).

DATA ANALYSIS
Demographic Description

The majority of the respondents in Ghana are females (51.1%, n= 203) whilst the males were 48.8% (n= 194). As regards the educational qualifications of the respondents, the majority of the respondents possessed a bachelor’s degree, 76.8% (n = 305), whereas 17.1 % (n = 114) were master’s degree holders, with 6% (n = 24) having a high school certificate or its equivalent. With respect of the respondents' area of work experience, 30% (n=119) indicated that they have experience in general management while a similar number, that 104 (26.2%) had experience in finance. Other areas of experience include accounting (n= 68, 17.1%), risk management (n= 12, 3%) and other units or departments within the various organizations (n= 70, 17.6%). Majority of the respondents (n= 231, 58.2%) belong to firms other than Energy, Oil and Gas and Mining, Finance, Banking, Insurance, Government, Education, Non-profit, Lumber, Furniture, Paper and Packaging, Manufacturing which includes all other telecom industry, fashion, etc. Most of the firms (n=144, 36.6%) had their annual revenue falling between GHS 250,000,000 and GHS500,000,00. The researcher did not skew any of the above profiles to suit a particular parameter. All respondents were contacted and only
partook in the exercise as a result of their availability and willingness to participate. In total, 397 valid responds were analysed.

**Confirmatory Factor Analysis**

To validate the scales used and test for convergent and discriminant validity, all independent and dependent latent variables were included in one multifactorial confirmatory model (CFA) with a robust maximum likelihood estimation method (MLR). To estimate the multifactorial CFA model, each item was specified to be loaded into its specific factor, and the error terms were independent, hence the measurements were unidimensional. The chi-square test statistic, comparative fit index (CFI), the Tucker–Lewis’s index (TLI), and the root mean square error of approximation (RMSEA) served as the indices to assess the CFA model’s goodness-of-fit (GOF). Values above the threshold of 0.90 for CFI and TLI and below 0.08 for RMSEA indicate a good fit of the model to the data (Kline, 2011). The results of the CFA indicate that the nine-factor model had an excellent fit with the data. The GOF values were as follows: $\chi^2/df = 731.16/428$; CFI = 0.94, TLI = 0.94, and RMSEA = 0.04 [90% confidence interval (CI): 0.03–0.04]. The standardized RMR was 0.052.

**Hypothesis Testing**

To test the directional hypotheses, all the latent variables were included in a single structural model. The maximum likelihood estimator was used. The results of the path analysis indicate that the eight-factor structural model had a good fit to the data. The GOF values were as follows: $x^2 (df) = 731.16 (428)$; CFI = 0.96, TLI = 0.95, and RMSEA = 0.04 (90% CI: 0.04–0.05). The Standardized RMR = 0.05.

The results obtained reveal that board composition has a positive and significant influence on the economic dimension of CSR ($= 0.412; t$-value $= 0.48; p$-value $= 0.63$), leading to the acceptance of H1a. However, board composition did not have any influence or significant influence on the environmental dimension of CSR. Therefore, hypothesis H1b ($= 0.001; t$-value $= 0.006; p$-value $= 0.99$), was also rejected. Similarly, board composition did not exhibit any significant influence on the social dimension of corporate social responsibility, which led to the rejection of hypotheses H1c ($= 0.057; t$-value $=-0.041; p$-value $= 0.69$).
The findings of this study further reveal that board size had no significant relationship with the economic dimension of CSR, leading to the rejection of H2a ($= 0.07$; $t$-value $= 0.32$; $p$-value $= 0.751$). Nonetheless, board size had positive and significance influence on environmental dimension of CSR as well as social dimension of CSR, leading to the acceptance hypothesis H2b ($\beta = 2.76$; $t$-value $= 2.69$; $p$ value $= 0.007$) and H2c ($\beta = 1.96$; $t$-value $= 3.29$; $p$ value $= 0.001$) and respectively.

Institutional ownership showed no significant influence on economic dimension of CSR, therefore H3a was rejected ($\beta = -0.15$; $t$-value $= -0.85$; $p$ value $= 0.40$). However, institutional ownership showed a positive relationship with environmental dimension and social dimensions of CSR leading to the acceptance of H3b ($\beta = 1.47$; $t$-value $= 2.04$; $p$ value $= 0.04$) and H3c ($\beta = 1.19$; $t$-value $= 2.65$; $p$ value $= 0.008$).

CEO- Chair Duality showed no influence on the economic dimension of CSR and this resulted in a rejection of H4a ($\beta = 0$; $t$-value $= -0.897$; $p$ value $= 0.37$). The results, however, indicated that CEO-Chair Duality had a negative influence on the environmental and social dimensions of CSR. Therefore, hypothesis H4b ($\beta = 1.46$; $t$-value $= 2.012$ $p$ value $= 0.004$) and H4c ($\beta = 1.2$; $t$-value $= 2.7$; $p$ value $= 0.007$) were confirmed.

The economic dimension of CSR had no significant influence on corporate sustainability, therefore H5a was rejected ($= 0.23$; $t$-value $= -1.184$; $p$ value $= 0.236$). The environmental dimension of CSR had a positive relationship with corporate CSR, leading to the acceptance of H5b ($= 0.19$; $t$-value $= 2.638$; $p$ value $= 0.008$). Similarly, the social dimension of CSR had a positive and significant influence on corporate sustainability, thus H5c ($= 0.23$; $t$-value $= 3.186$; $p$ value $= 0.001$) was confirmed. Presented in Table 1 is a summary of the computations relating to the tests of the hypotheses in this study.

Table 1.: Path Analysis using SEM

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Beta</th>
<th>t-values</th>
<th>p-values</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>BC → CSR_EC</td>
<td>0.41</td>
<td>5.53</td>
<td>0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H1b</td>
<td>BC → CSR_EN</td>
<td>0.001</td>
<td>-0.02</td>
<td>0.99</td>
<td>Rejected</td>
</tr>
<tr>
<td>H1a</td>
<td>BC → CSR_S</td>
<td>-0.06</td>
<td>-0.41</td>
<td>0.69</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2a</td>
<td>BZ → CSR_EC</td>
<td>0.08</td>
<td>0.327</td>
<td>0.74</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2b</td>
<td>BZ → CSR_EN</td>
<td>2.76</td>
<td>2.69</td>
<td>0.007</td>
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<td>3.29</td>
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<td>H3a</td>
<td>INO → CSR_EC</td>
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<td>-0.897</td>
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<td>2.04</td>
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<td>H5a</td>
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Source: Field Data, 2021

Notes: CSR_S = Corporate Social Responsibility (Social Dimension); CSR_EN = Corporate Social Responsibility (Environmental Dimension); CSR_EC = Corporate Social Responsibility (Economic Dimension); BC = Board composition; BZ = Board Size; INO = Institutional Ownership; CCD = CEO- Chair Duality; TP= Top Management Commitment; CSU= Corporate sustainability

Moderation Analysis

To test for the moderation effects, Amos 24 with 2,000 bootstrap samples was used. Since no significant relationship was found between the relationships that exist between the economic dimension of CSR and corporate sustainability, and the moderating effect of top management commitment on these relationships, they were not tested. Therefore, H6a is rejected as top management commitment was found to not moderate the relationship between the economic dimension of CSR and corporate sustainability. However, the interactive effect of top management commitment on the relationship between the environmental dimension of CSR and corporate sustainability was found to be significant (γ (S.E) = 0.026, p = 0.01). The significant interactive effect indicated that top management commitment is a moderator within the environmental dimension of CSR and corporate sustainability. Hence, H6b was confirmed. The moderating role of top management commitment was not tested in the relationship between the social dimension and corporate sustainability, as the result further indicates that there was no significant interaction between the social dimension and corporate sustainability. Therefore, hypothesis H6c is rejected. Following Aiken and West’s (1991) recommendation to probe these interactions, this research drew an interaction plot and the unstandardized estimates are plotted onto the ‘2-Way Interaction

Tab in the Statistical Tools Package in MS Excel (Gaskin, 2012), which has been illustrated graphically in Figure 2. This was to illustrate the change in slopes across varying levels of the moderator. The graph indicates that top management commitment strengthens the positive relationship between the environmental dimension of CSR and corporate sustainability.

![Figure 2: Change in slopes across varying levels of the moderator](source: Field Data, 2021)

DISCUSSION
Relationship between Corporate Governance and Corporate social Responsibility

The findings of this study indicate mixed relationships between the various corporate governance indices and the dimensions of corporate social responsibility. The findings agree with the assertion by Young and Thyil (2014) that governance systems and their interactions with CSR are fluid in accordance with changes in the national and institutional framework, economic conditions, and industry impact. As indicated by Karim et al. (2020), there have been mixed results regarding the relationship between board composition and CSR. Results indicate that board composition positively influenced the economic dimension of CSR. However, board composition did not influence the social and environmental dimensions. This partly confirms the findings of
Lau et al. (2016), where board composition was found to have no significant influence on CSR. Cultural and economic differences could account for these differences as national cultural dimensions have been found to both positively and negatively impact CSR performance depending on a given dimension of CSR (Thanetsunthorn, 2015). These results imply that board composition plays an influential role in impacting on how firms work to increase profitability, ensure sustainability and, at the same time, strategically position firms to compete favourably against competitors and maintain market value.

In addition, board size exerted varying influence on the various dimensions of CSR. The findings of this study found that board size had no significant relationship with the economic dimension of CSR, but board size showed a positive and significant influence on the environmental dimension of CSR as well as the social dimension of CSR. These findings confirm the assertion by Rouf and Hossan (2021) that there are contradictory findings regarding the relationship between board size and CSR. Similar to the results obtained for board size, institutional ownership showed no significant influence on economic dimension of CSR, but had a positive relationship with environmental dimension and social dimensions of CSR. The differences observed from these findings indicate that board size and institutional ownership have impact on how firms churn out their environmental and social dimensions of CSR.

Furthermore, as expected, CEO-Chair Duality had a negative influence on the environmental and social dimensions of CSR but failed to have any influence on the economic dimension of CSR. It can therefore be said that CEO-Chair Duality impacts how firms perform their social and environmental responsibilities, as CEO-Duality concentrates power and major decision-making on only one person. Therefore, for effective implementation of the environmental and social dimensions of CSR, firms must ensure that the roles of CEO and board chair are separated. Contrary to expectations, the economic dimension of CSR had no significant influence on corporate sustainability. However, the positive relationship between the environmental and social dimensions of CSR and corporate sustainability was confirmed.

**Moderating Role of Top Management Commitment**

The study failed to find any moderating effect of top management commitment on the relationship between the economic dimension of CSR and corporate
Similarly, the moderating role of top management commitment was not tested in the relationship between the social dimension and corporate sustainability, as the result further indicates that there was no significant interaction between the social dimension and corporate sustainability. However, the moderating role of top management commitment was confirmed for the relationship between the environmental dimension of CSR and corporate sustainability. These findings imply that top management commitment plays a partial role in influencing the CSR activities that could lead to the achievement of corporate sustainability goals.

**THEORETICAL IMPLICATIONS**

The findings of this study have some theoretical implications. The presented study has tried to link how corporate governance measures contribute to the promotion of corporate social responsibility in the context of manufacturing firms in Ghana. The study has tried to bring forward the inter-linkages between three different research streams, i.e., corporate governance, corporate social responsibility, and corporate sustainability. Even though previous studies have highlighted the link between these constructs, the examination of these linkages within a single study is sparse. Therefore, this study contributes to the extension of the understanding of how corporate governance fosters CSR activities, which in turn impacts firms’ corporate sustainability achievement. Furthermore, the findings of the study point out the differences in how the various indicators of corporate governance relate to the various dimensions of CSR. Thus, the theoretical understanding of these linkages is expanded. In addition, this study adds to the existing body of literature on the linkage between CSR and corporate sustainability by examining the moderating effect of top management commitment on the link between CSR and corporate sustainability. The findings extend the theoretical understanding of the conditions under which certain various dimensions of CSR can promote corporate sustainability. Further, the study findings advance the social exchange theory, which gives an explanation that employees would exhibit innovative behavior when they perceive that HR-practices that are directed at them are beneficial. Then they would reciprocate this gesture by displaying innovative behavior. Further contributions to this study come from the empirical evidence from a developing country context in sub-Saharan Africa. The distribution of literature in the current research strongly reveals that most of the extant works are concentrated in developing
economies, which are less represented regions, with a few studies from Africa. As a result, there is relatively scarce evidence from developing economic contexts.

MANAGERIAL IMPLICATIONS

The findings of this study have some managerial implications. First, the study findings suggest some characteristics of CSR can play an influential role in CSR, which would influence the achievement of firms’ sustainability goals, while others tend to negatively influence CSR activities. The results therefore highlight the crucial role played by these corporate governance characteristics in their contribution to the achievement of business sustainability. Therefore, all stakeholders must be involved to ensure that proper controls are put in place within firms, as these will foster the achievement of sustainability goals.

LIMITATION AND DIRECTIONS FOR FUTURE RESEARCH

There were several limitations to this study that need to be mentioned. First, this research was limited to the manufacturing industry. In addition, this study was limited to Ghana, an emerging economy with unique socio-cultural dynamics. Organizational culture and national culture were the results obtained for this study. As a result, the findings may not be reflective of the views of industries in other geographical locations. Secondly, only four indicators of governance were considered for this study. Therefore, caution should be taken when interpreting and generalizing the findings in respect to the other characteristics of corporate governance. Even though, the likelihood that the findings are influenced by common method bias was limited, data was collected at the same point-at the time. Because of its cross-sectional research design, this study cannot firmly establish causality among the study variables.

Based on the findings emanating from this research as well as the limitations outlined above, this suggests the need for further research in the area under study. First, future studies can be conducted in other industries and other countries to confirm the results obtained from this study, as different results may be obtained due to differences in organizational culture and national culture. In addition, it would also be interesting to conduct a comparable study to compare the results obtained here in this emerging economy with those of a developed economy. In addition, the influence of other moderators and mediators could be examined to understand their effect on the link...
between corporate governance, CSR, and corporate sustainability. Furthermore, future studies can consider other indicators of corporate governance and assess their influence on the various dimensions of CSR as well as their linkage with the three dimensions of corporate sustainability. Longitudinal studies may be conducted to establish causal relationships between the variables examined. In addition, a mixed-method approach could be conducted to explore and establish a deeper understanding of the results obtained.

REFERENCES


**Contribution of Authors**

Every author should account for at least one component of the work. Paper approved for publication need to specify the contribution of every single author.

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