

Corporate board characteristics and CSR budget of selected Bangladeshi banks: moderating role of corporate reputation

Asian Journal of Economics and Banking

Md Sajjad Hosain

Department of Business Administration, International Islamic University Chittagong,
Chittagong, Bangladesh

Received 27 August 2023

Revised 8 November 2023

19 April 2024

Accepted 27 May 2024

Abstract

Purpose – This study explores the relationships between corporate board characteristics (CBCs) and corporate social responsibility budget (CSRB) of selected Bangladeshi banks. CSRB was regarded as the sole dependent variable. In contrast, CBCs were separated into three independent constructs: board members' age (BMA), board members' educational level (BMEL) and the number of board meetings per year (NBMY). A single moderator, corporate reputation (CR), was used to assess the moderating impact on the direct relationships.

Design/methodology/approach – Annual reports from 2017 to 2021 (5 years) of 25 selectively listed Bangladeshi banks were used as study samples. Further, the researcher conducted informal interviews with 251 board members of those selected banks using a semi-structured questionnaire. The study used "multiple regression analysis" to evaluate the moderating effects on the three direct relationships and "Pearson's correlation coefficient" to assess the immediate impacts.

Findings – After analysis, the results revealed that all the three independent components, BMA, BMEL and NBMY, have substantial positive relationships with the dependent variable, CSRB. Moreover, it was identified that CR can moderate (strengthen) all the three direct relationships.

Originality/value – Corporate governance (CG) and CR are two hot topics both in academia and practice. This study highlighted the corporate board characteristics and CSR budget, two new dimensions of CG literature that are required to be paid more attention to. The researcher expects this study to enhance the literature focused on these newer dimensions of CG that might benefit both academics and practitioners.

Keywords Corporate board characteristics, Corporate social responsibility, Corporate social responsibility budget, Corporate reputation, Bangladeshi banks

Paper type Research paper

1. Introduction

The conventional, mostly uncontrolled path to profit maximization has given way to a socially accountable and ethical pursuit of profit as the primary goal of economic activity. After the long-term and dominant impact of the ongoing global financial crisis (GFC) in the significant Western developed and developing countries and the subsequent intense negative effect of the COVID-19 outbreak on the world economy, this development has called for a strong focus on the importance of "corporate governance (CG)" devices and the magnitude and merit of "corporate social responsibility disclosure (CSRD)" activities (Dias *et al.*, 2017). Corporate boards and



JEL Classification — C83, G21, G32, G38, G39

© Md Sajjad Hosain. Published in *Asian Journal of Economics and Banking*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

Conflict of interests: There is no conflict of interests.

Source of funding: The researcher did not receive any funding for conducting this study.

Asian Journal of Economics and Banking
Emerald Publishing Limited

e-ISSN: 2633-7991

p-ISSN: 2615-9821

DOI 10.1108/AJEB-08-2023-0083

corporate board characteristics (CBCs) have long been the focus of attention in academic circles since they are an integral part of CG (Umar *et al.*, 2023; Thuy *et al.*, 2022; Umar, 2022; Hosain, 2020; Rouf and Akhteruddin, 2019; Rouf, 2016, 2017). On the contrary, the board of directors (BoD) can represent the significant CBCs as the regulators and decision-makers of the firms. In general, a BoD consists of shareholder-nominated representatives and a “Chairman or President” elected by the BoD members. A firm’s BoD prepares and organizes systems to monitor and direct operations. It discloses information to ensure business accountability and transparency. Boards are accountable to several internal and external stakeholders. Few empirical studies have linked corporate transparency to governance arrangements (Umar *et al.*, 2023; Thuy *et al.*, 2022; Umar, 2022; Rouf and Akhteruddin, 2019; Rouf, 2016, 2017). Due to an absence of adequate research studies, board characteristics’ effects on corporate social responsibility budget (CSR) of a business firm are still being determined. Hence, board features’ effects on the CSR and CSRD must be examined (Hosain, 2020).

Corporate social responsibility (CSR) refers to a series of activities taken by a company to improve society at large (Le, 2022). Business for Social Responsibility (BSR) defines CSR as “creating business success in a manner that respects ethical ideals, people, society and the environment” (Toutsoura, 2004). Businesses can no longer consider CSR to be an unnecessary extra cost. CSR refers to a company’s conscious decision to invest financially, environmentally, morally and socially in its surrounding community. This makes the company responsible for its employees’ and shareholders’ decisions that impact consumers, communities and the planet (Chauhan and Amit, 2014). In the modern context, businesses can only survive for a short time if they fail to adapt to the needs of the communities where they operate and make profit. As a result, contemporary business firms face a set of expectations from society and the environment. The definition of a firm’s stakeholders has broadened beyond its traditional confines of stockholders, workers and consumers. The list also includes a wide range of additional factors, such as residents, environmental factors, businesses, customers, the general public and governments. Firms with foresight have devised various techniques to address the demands of society, the environment and the necessities of doing business about how thoroughly and effectively they adapt CSR initiatives into deliberate and everyday practices around the globe (Chauhan and Amit, 2014).

However, there will be costs associated with such obligations, most notably a cut of the company’s pre-tax profit (as in many countries, the CSR expenditure is not taxable). The CSRB is a company’s planned allocation of its pre-tax earnings toward charitable, social and environmental causes. All companies, especially the bigger ones, are now required by law to keep their own CSR budgets, which can be deducted from their taxable income. CSRB is a mandatory fund that Bangladesh’s financial institutions must maintain according to the guidelines of Bangladesh Bank, the central bank of Bangladesh. Charity, philanthropy and environmental protection are all appropriate uses of this endowment (Bangladesh Bank Guidelines, 2014, 2008). Organizational and non-organizational stakeholders may learn a lot from studies examining the intersection of CBCs and CSR (Jain and Jamali, 2016). Literature blends CG and CSR without mentioning ideology in the afterthought (Young and Thyil, 2014). One of the most essential yet ignored concerns defining CBCs-CSRB research is the direction of causation between the two concepts (whether CBCs can have an impact on CSRB or not). Readers may be left with more questions than answers after an innovative, multidimensional examination of the literature on the impact of CBCs on CSRB (Jain and Jamali, 2016).

CSR expenditure in the banking sector has been rapidly increasing in Bangladesh since 2009 (Masud *et al.*, 2022). The Ministry of Finance of the Government of Bangladesh (GoB) has selected 21 to 25 areas where the banking firms can spend their CSR budgets and are allowed to claim tax rebates on such expenditures (Uddin *et al.*, 2018; Masud *et al.*, 2017). Moreover, Bangladesh Bank (BB) established green reporting and CSR policies since 2012, which were in full-fledged effect in 2015 when voluntary guidelines directed to financial firms disclosing CSR

expenditures were established. Amid COVID-19, the BB directed all scheduled banks in Bangladesh to revise their CSR expenditures by allotting 60% on health, 30% on education and 10% on climate risk areas, respectively, in order to minimize the consequences of the pandemic ([Bangladesh Bank, 2021](#)). Currently, all banks in Bangladesh retain tax-deductible CSR funds as part of mandatory guidance provided by BB ([Hosain, 2020](#)). Concisely, banks all over the world were commended for their contributions toward decreasing the destructive effects of COVID-19 on society by spending CSR funds to their best ability ([Umar et al., 2023](#)).

This study aims to investigate the role of increasingly discussed “corporate reputation (CR)” as a moderator on the relationships between the components of CBCs and CSRB. A firm with a sustainable and long-term reputation can attract clients and employees who can contribute to the growth of that firm through required skills, experience, creativity and innovation. Such skills, in most cases, can amplify financial and brand reputation (for example, through inventing a new product or upgrading an existing product) in the industry, which in turn contributes to the CR of firms. Banks, as the most important financial institutions of an economy, should uphold an aggregated set of observations and beliefs by stakeholders that can be regarded as a long-term asset for competitiveness. The study proposes that CR can moderate the relationships between the CBCs’ constructs and CSRB; thereby, the researcher assumes that a higher CR can strengthen the relationships between the components of CBCs [board members’ age (BMA), board members’ educational level (BMEL) and the number of board meetings per year (NBMY)] and CSRB. The use of CR as a moderator is quite rare in academia so far since the variable has been either used an independent construct or as a mediator in the nexus between CG and CSRB ([Hosain, 2020](#)).

This empirical research was conducted to learn the relationships between the factors of CBCs and CSRB of Bangladeshi banking institutions. To further dissect CBCs, the researcher separated them into three factors: BMA, BMEL and NBMY. The study also tested if the connections between the CBCs’ constructs and CSRB might be moderated using a single moderator, CR. The following research questions are proposed to be answered in this empirical paper:

- RQ1. What are the relationships between the constructs of CBCs and CSRB in Bangladesh?
- RQ2. What is the role of CR as a moderator on the relationship between each component of CBCs and CSRB?

The study is expected to have several implications. First, it examined three unique constructs of CBCs that have not been done so far. Second, it used CR as a moderator, which is also a unique initiative. Third, as a fast emerging economy, banks in Bangladesh are gaining momentum and importance. Therefore, it is essential to examine the impact of various board characteristics on the CSRB as part of mandatory social obligation. Considering these reasons, the study can have theoretical as well as practical implications.

2. Literature review, development of research hypotheses and conceptual framework

In this part of the research study, the researcher conducted a systematic literature review of previous studies that examined the connections between CBCs and CSRB mediated by CR. The researcher also developed the research hypotheses and conceptual framework for this study.

2.1 CBCs and CSRB

Although little effort has been made thus far to explore the connection between board features and CSR, both have established themselves as distinct study fields ([Khan et al., 2013](#)). Those involved (board members) in policy decisions and the processes of CG have been found

to have a reciprocal relationship with CSR and its values, norms and choices (Khan *et al.*, 2013; Haniffa and Cooke, 2005). Research in this field has generally identified clear correlations between CG mechanisms such as an independent board and the chairman serving on numerous areas and CSR performance (Harjoto and Jo, 2011; Johnshon and Greening, 1999). As a bonus, several empirical studies have shown that CG and CSR benefit a company's market value (Beltratti, 2005). Sometimes, corporations will use the CG seal of approval to establish their credibility (Biggart, 1991). According to the literature, such disclosures are motivated to allay the fears that threaten the organization's credibility (Chen *et al.*, 2008; Rahaman *et al.*, 2004; Deegan *et al.*, 2002). Consequently, it is logical to anticipate that CG and CSR will have a strong relationship (Ali *et al.*, 2016).

According to cross-national research, whether or not a country's CG mechanisms are legitimate may be determined by factors like its amount of corruption and the efficiency of its law enforcement (Judge *et al.*, 2008). Uddin and Choudhury (2008) claim that Asian or eastern governance mechanisms are not conducive to Westernized CG models because of corruption, political intervention and family dominance (Ali *et al.*, 2016). Even with these concerns, many developing nations have embraced these models in response to pressure from international assistance organizations, despite widespread doubts about their efficacy (Siddiqui, 2010; West, 2006; Mukherjee and Reed, 2002). As a result, CG mechanisms' impact on CSRB may differ in developing nations. Scholars have already indicated that there is a shortage of studies investigating the connection between CG and CSRB in emerging nations (Hosain, 2020; Khan *et al.*, 2013).

Studies on CG have gradually broadened over the past few decades from their traditional concentration on agency difficulties to cover concerns in the broader spectrum, including visibility, accountability and exposure (Miroshnychenko, 2018). Conventional investing methods have recently begun to incorporate concerns about the environment, society and governance (Dam and Scholtens, 2012). To limit responsibility, publicly traded companies have instituted CG mechanisms such as CSR board committees, codes of conduct, ethical teams, environmental reporting, social reporting and so on (Miroshnychenko, 2018). Even though academics and practitioners have noted the connection between CG and CSR in Fortune Global 250 and FTSE 100 companies, some businesses are more particular by creating specialized corporate working groups (community, environmental, etc.) and potential external CSR consultation organizations (Boesso *et al.*, 2013). In addition, the expansion of the relationship between CG and CSR at the corporate level is a universal phenomenon (Verdantix, 2015; KPMG, 2013).

As per Ortiz-de-Mandojana *et al.* (2014), numerous academics have lately asked for a more complete study of CG and CSR expenditures, including mediating and moderating factors like causal mental models and institutional environments. Researchers in the field of CSR have been advised to take a balanced approach to their studies in order to better comprehend the goals of both CG and CSRB (Donaldson, 2012). Understanding CG and CSRB concepts might help the firms combine them for sustainable business success. This is crucial because CG and CSR ideas and concepts may significantly impact business theory and practice (Bogart, 2013). According to Jo and Harjoto (2012), community stakeholders working together may establish a narrative CG philosophy (Miroshnychenko, 2018). CSR is "an aspect of growing systems of stakeholders' governance" that increases shareholder value through cheaper stock, a better brand image, fewer possible liabilities and better economic prospects (Umar *et al.*, 2023).

This study analyzes and organizes the rapidly increasing sector at the convergence of CG and CSR, particularly focusing on CBCs and CSRB. This research suggests various conditions for establishing the relationship between CBCs and CSRB beliefs, which have received little attention in CG–CSR literature. The study fills a vacuum in the literature by contributing towards the expanding research stream that combines CBCs and CSRB to enhance the firms' performance of CG. It does so by emphasizing the necessity to understand

a society's economic philosophy (Jain and Jamali, 2016). It also directly tackles several studies that have challenged the status quo of corporate goals, structures, activities and behaviors by focusing on the CG-CSRB nexus.

This work contributes to promising research on CBCs and CSRB synergy by tracing the growth of CG-CSRB literature and showing different viewpoints on their connectivity. In particular, it offers a systematic analysis of the CG-CSRB combination in the context of the dominant theoretical frameworks in the business literature. In addition, this study presents a group of topics for future research on CG-CSR and examines gaps as well as underexposed issues in the current literature. This study's findings can serve as a springboard and guide for further exploration of the topic. New findings in CG-CSR research can also be helpful for managers, sustainability consultants and politicians to learn more about.

2.2 Board members' age (BMA)

Within the larger CG-CSR dimension, the effect of BMA in deciding CSRB is a much understudied subject. A few studies have looked at demographics (such as board members' gender, age range and degree of education) as a predictor of board performance (Hosain, 2020). For example, Chang *et al.* (2015) used panel data to investigate the connections between several board features (such as age and education level) and CSR for listed Korean firms and they found that these connections are nonlinear.

However, Oh *et al.* (2019) suggested that a board with diverse qualities, such as members of varying ages, educational backgrounds and competence, can boost CSR commitment. Finally, a comparatively new study conducted by Fernández-Temprano and Tejerina-Gaite (2020) has found that an age-diverse workforce benefits a company's bottom line and the environment. Most of the scholars have advocated for a more diverse board in terms of age to improve CSR performance, but this research suggests that having younger board members is beneficial.

H1. BMA has a positive relationship with CSRB.

2.3 Board members' educational level (BMEL)

Another aspect of CBCs that was taken into account in this research was BMEL. The scientific community needs to pay more attention to this aspect. However, a few more papers are out there than before that focused on board members' training. Using panel data, Chang *et al.* (2015) investigated whether or not board members' features like educational level were connected with CSR for listed Korean firms and found no such correlation.

In their study of 839 publicly listed Chinese firms, Zhuang *et al.* (2018) found that a company's CSR performance was positively related to the academic degree and experience of its board members. According to Oh *et al.* (2019), a more diverse board can increase a company's dedication to CSR activities. Hence, rare evidence in the literature suggests that higher levels of education and experience may achieve a greater CSRB.

H2. BMEL has a positive relationship with CSRB.

2.4 Number of board meetings in a year (NBMY)

Often, board meetings occur many times each year. Board meetings allow its members to interact physically, exchange ideas and opinions and engage in healthy debates. In general, frequent board meetings might boost the interactions among the board members, which are required to reach a consensus. Like the first two CBC components, this aspect also needs more expert attention. In a case study performed on Bharat Heavy Electrical Ltd., Oberoi (2012) suggested that the number of board meetings in Indian public sector organizations increases corporate efficiency. Matinheikki *et al.* (2017) stressed the need to hold frequent board

meetings to develop agreed visions and ideals for CSR activities and budgets. They developed a paradigm indicating that institutional transformation toward the development of shared value necessitates reforming existing processes to accommodate new community-based logic inside the sector. This study anticipates that the NBMY favors CSRB.

H3. NBMY has a positive relationship with CSRB.

2.5 CBCs, CR and CSRB

CSR expenditure is becoming a focal point of every company's image and brand (Garg and Gupta, 2020). Nonetheless, this phrase is especially applicable to financial business firms such as banks (Umar *et al.*, 2023; Umar, 2022; Hosain, 2020). Islam (2017) asserted that corporate companies, especially banks, may satisfy a significant portion of their social obligation by providing scholarships, donating to charities and providing monetary provision for social events. He argued that social responsibility should include economic growth, employment and eradicating poverty. He advised banks to prioritize environmental protection, employment creation and poverty reduction over polluting, child laboring and health-harming businesses.

Campbell (2007) suggested that weak financial performance and a somewhat unfavorable economic climate with limited near-term profitability make enterprises less inclined to engage in socially accountable activities. Moreover, he stated that in a monopolistic structure, corporations have tiny attention toward CSRB as an investment in the company's reputation and loyalty because these factors are unlikely to impact sales and earnings. Lastly, he projected that firms would be less motivated to operate in a socially responsible manner if there was excessive or insufficient competition.

However, various motivating viewpoints can spur a company's interest in devoting resources to CSR, boosting CR and firm value. These points of view include corporate reputational effects, such as risk mitigation or external expectations (Garg and Gupta, 2020), product innovation, business expansion and employee dedication (Margolis *et al.*, 2007). These factors all contribute to an increase in CR and firm value. The inverse is also true; if a company has a higher CR, it may be able to or desire to spend more on CSRB. The current analysis assumes that CR can moderate (strengthen) all three direct correlations.

H4. CR can moderate (strengthen) the positive relationship between BMA and CSRB.

H5. CR can moderate (strengthen) the positive relationship between BMEL and CSRB.

H6. CR can moderate (strengthen) the positive relationship between NBMY and CSRB.

2.6 Conceptual model

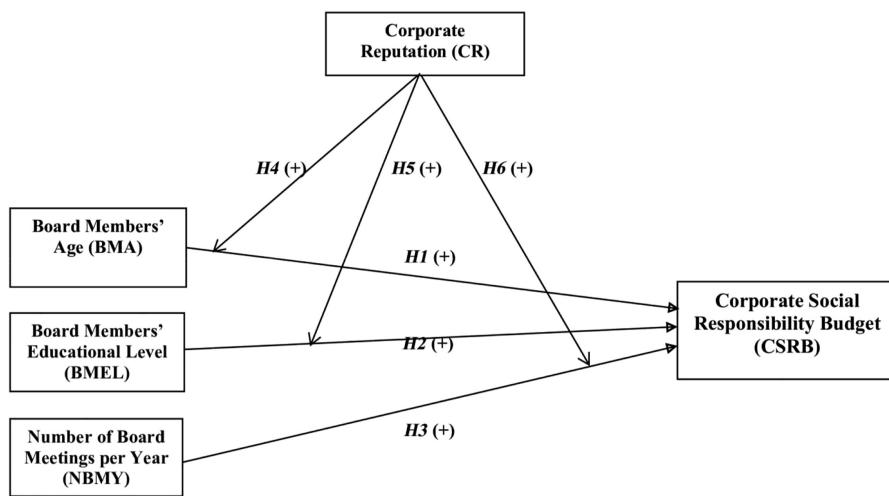
In this empirical research, the researcher considered CBCs as the independent variable, divided into three further factors: BMA, BMEL and NBMY. In contrast, CSRB was considered as the single dependent variable. The study added another variable, CR, as the moderator to test the moderating effects on the three direct relationships. The conceptual model of the study has been presented in Figure 1.

3. Research method

The purpose of this section is to describe the methodology of this study. The methodology has been consistently addressed across various sub-sections.

3.1 Sample selection

Annual reports of 25 public and private commercial, specialized and international banks operating in Bangladesh were used in the study as the valid sample size (*n*), which resulted in



Source(s): Researcher's elaboration

Figure 1.
Conceptual framework

125 annual reports between 2017 and 2021. The selected banks were listed in Dhaka and Chittagong Stock Exchanges, paid good dividends (and bonus shares), and were well-reputed in the Bangladeshi banking industry. In addition, the researcher conducted personal interviews (unstructured and informal) with 251 board members and top executives (such as CEO, CFO and COO) to collect personal and demographic information such as age, educational level and length of service on the studied banks. The study utilized Person's correlation coefficient to test the direct effects and multiple regression analysis to test the moderating effects with IBM SPSS 29. The sample distribution and demographic information have been presented in [Table 1](#) and [Table 2](#), respectively.

[Table 2](#) indicates that more than two-thirds (68.13%) of the board members were male. About 40% of the board members were aged below 50 years, whereas more than 60% had an age range of 50–60 years. In Bangladesh, 60 is the general retirement age, with some exceptions. The majority of the interviewees had a Master degree, whereas a few of them (around 15%) had a Ph.D. None of them was undergraduate. Regarding the length of service, it is evident that nearly two-thirds (60.96%) of them had job experience of 16 years or more at the same bank. None of the board members had experience of 5 years or less.

3.2 Regression model

The study created the following regression model in order to evaluate the previously mentioned hypotheses:

Category	Number of banks and annual reports
Public commercial	6 banks (5 reports each)
Private commercial	16 banks (5 reports each)
Specialized	1 bank (5 reports)
International	2 banks (5 reports each)
Total (n)	25 banks and 125 annual reports
Source(s): Annual reports collected	

Table 1.
Sample distribution

Demographic variables	Category	Arithmetic number	Percentage
Gender	Male	171	68.13
	Female	80	31.87
	<i>Total (n)</i>	251	100
Age range (in year)	30–39	49	19.52
	40–49	50	19.92
	50–60	152	60.56
	<i>Total (n)</i>	251	100
Educational level	Undergraduate	0	0
	Master	213	84.86
	PhD	38	15.14
	<i>Total (n)</i>	251	100
Length of service as a BoD member or top-level executive (in year)	5 or less	0	0
	6–10	32	12.75
	11–15	66	26.29
	16 or more	153	60.96
	<i>Total (n)</i>	251	100

Table 2.
Demographic information

Source(s): Informal interview

$$\text{CSRB} = \alpha + \beta^{1*\text{BMA}} + \beta^{2*\text{BMEL}} + \beta^{3*\text{NBMY}} + \beta^{4*\text{CR}} + \varepsilon$$

In this case, CSRB is the dependent variable, whereas BMA, BMEL and NBMY are the explanatory variables. Furthermore, CR acts as a moderating factor. In addition, ε indicates here an error term.

4. Analysis

This part of the study has highlighted the results of the data analysis with appropriate interpretations.

4.1 Descriptive statistics

All the model variables involved with this descriptive statistics have been highlighted in [Table 3](#).

[Table 3](#) shows that the average CSRB of the investigated banks was 0.37, which is somewhat higher than the median value (0.29) and suggests that most banks had more significant CSR budgets and expense ratios. Moreover, the minimum value of CSRB was 5.12 and the most outstanding value was 12.27, indicating a significant difference in the levels of CSRB. BMA's range between 10.78 and 16.09 shows that this variable has real-world implications for the

Variable	Average	Medium	Standard deviation	Full sample Minimum value	Maximum value
CSRB	0.37	0.29	0.63	5.12	12.27
BMA	3.26	3.22	0.35	10.78	16.09
BMEL	0.14	0.07	0.16	0.01	0.60
NBMY	0.24	0.00	0.43	0.00	1.00
CR	0.20	0.00	0.40	0.00	1.00

Table 3.
Variables/constructs involved in descriptive statistics

Source(s): Descriptive statistics (SPSS 29)

CSRB. The average ratio for BMEL was 14%, which is much higher than the median value of 7% and suggests that this element may have an impact on the CSRB of most of Bangladesh's listed banks. However, the percentage of BMEL among the listed Bangladeshi banks varies widely (from 1–60%). Finally, the maximum and lowest values for NBMY and CR, the independent and moderator variables, were 1 and 0, respectively, suggesting unequal CSRB across the itemized Bangladeshi financial institutions in this analysis.

4.2 Test of endogeneity

The study used the Wu Hausman test to check the existence of a correlation between independent variables and the error term in the model (Table 4). The researcher conducted the test using Stata 15.

The test revealed a p value slightly higher than 0.05, indicating a tiny presence of endogeneity in the model, according to Larcker and Rusticus (2007).

4.3 The 2SLS estimation

In addition, the researcher tested the impact of three independent constructs and one moderator (BMA, BMEL, NBMY and CR) on CSRB through a two-stage least squares (2SLS) model to predict the presence of significant endogeneity in the study's model.

$$\text{CSRB} = \pi_0 + \pi_1(\text{BMA}) \times \pi_4(\text{CR}) + \pi_0 + \pi_2(\text{BMEL}) \times \pi_4(\text{CR}) + \pi_0 \\ + \pi_3(\text{NBMY}) \times \pi_4(\text{CR}) / \pi_1(\text{BMA}) + \pi_2(\text{BMEL}) + \pi_3(\text{NBMY}) \quad (\text{i})$$

$$\pi_v = (\pi_0 + \pi_1 + \pi_2 + \pi_3 + \pi_4)^T \quad (\text{ii})$$

Where,

π_v is the vector of parameters and T is time.

The 2SLS indicates that CSRB increases (25.31) when BMA (6.11), BMEL (17.09) and NBMY (5.39) increase (Table 5) due to an increase in CR. The results on the model are satisfactory for 2SLS, as all the parameters were significant except BMEL, where the p value was found to be slightly higher than 0.05. All the t values were also positive, indicating significant positive correlations. Thus, the 2SLS model for this study proves to be almost free of endogeneity.

Test	df1	df2	Statistics	p value
Weak instrument	1	13	0.104	0.051
Wu Hausman	1	11	0.281	0.052
Source(s): Stata 15				

Table 4.
Wu Hausman test for
testing the endogeneity

Parameter	Estimate	Standard error	t -value	p -value
π_0 (constant)	25.31	147.017	0.322	0.043
π_1 (BMA)	6.11	11.731	0.211	0.001
π_2 (BMEL)	17.09	32.321	0.478	0.052
π_3 (NBMY)	5.39	6.119	0.115	0.032
Source(s): Stata 15				

Table 5.
2SLS estimation of
the model

4.4 Pearson's correlation coefficient

Before approaching further analysis, internal dependencies between the variables involved are required to be tested, as shown on the following table:

Table 6 reveals that Pearson's correlation coefficient of internal variables was less than 0.8, suggesting that this model's variables did not have multiple collinearities and thus the study may proceed.

CSRB was positively correlated with BMA, BMEL and NBMY (1%), with Pearson's correlation factors of 0.241, 0.243 and 0.051, respectively. These results supported the hypotheses **H1**, **H2** and **H3** by showing that all three independent factors have positive relationships with the dependent variable (CSRB). The results show that the factors were appropriate and can impact banking organizations' CSRB.

4.5 Common method bias (CMB)

If the superior fraction of the variance can be explained by a single factor, it can be assumed that CMB has taken place. The study used Harman's single factor model ([Rehman et al., 2022](#); [Aguirre-Urreta and Hu, 2019](#); [Podsakoff and Organ, 1986](#)) in order to identify if the model had any CMB.

As observed from [Table 7](#), it can be concluded that a particular factor in this model could explain only 17.746% of variance, which indicates that CMB did not occur in this analysis.

4.6 Linear regression analysis

Explanatory factors included in this study were BMA, BMEL and NBMY, while the dependent variable was CSRB, which provided the model with its interaction. The following regression analyses were performed ([Tables 8–10](#)) to investigate the effects of these three factors on CSRB.

[Table 8](#) reveals that the change in R^2 was 0.101, showing successful model fitting, and the sig. F value was altered to 0.019, less than 0.05, indicating that the model passed the F test and was statistically significant. The VIF value was employed in this study to examine variable

Variables	CSRB	BMA	BMEL	NBMY	CR
CSRB	1				
BMA	0.241**	1			
BMEL	0.027	0.243**	1		
NBMY	0.023	0.001	0.051**	1	
CR	0.020	0.034	0.201**	0.064*	1

Note(s): ** $p < 0.05$ at 2 tailed

* $p < 0.01$ at 2 tailed

Source(s): Collinearity statistics (SPSS 29)

Table 6.
Pearson's correlation coefficient

Component	Overall	Percentage of variance	Initial eigen values	Cumulative percentage	Total variance explained	
					Overall	Extraction sums of squared loadings
1	3.101	27.001	27.001	3.771	17.746	17.746

Table 7.
Pearson's correlation factor among the relationship between the variables
Source(s): SPSS 29

Variables	Model	CSRE	VIF
BMA	0.094*		1.072
CR	0.167**		1.833
CR*BMA*CSRB	0.421		1.056
R^2	0.102	Durbin-Watson	
F	19.318**		1.190
Change in R^2	0.101**		

Note(s): * $p < 0.01$ at 2 tailed

** $p < 0.05$ at 2 tailed

*** $p < 0.001$ at 2 tailed

Source(s): SPSS 29

Table 8.

CR, BMA and CSRB

Variable	Model	CSRE	VIF
BMEL	0.083*		1.010
CR	0.171**		1.211
CR*BMEL*CSRB	0.221		1.027
R^2	0.209	Durbin-Watson	
F	15.165***		1.003
Change in R^2	0.103***		

Note(s): * $p < 0.01$ at 2 tailed

** $p < 0.05$ at 2 tailed

*** $p < 0.001$ at 2 tailed

Source(s): SPSS 29

Table 9.

CR, BMEL and CSRB

Variable	Model	CSRE	VIF
NBMY	0.041*		1.001
CR	0.012**		1.009
CR*NBMY*CSRB	0.114		1.001
R^2	0.201	Durbin-Watson	
F	10.109***		0.311
Change in R^2	0.006***		

Note(s): * $p < 0.01$ at 2 tailed

** $p < 0.05$ at 2 tailed

*** $p < 0.001$ at 2 tailed

Source(s): SPSS 29

Table 10.

CR, NBMY and CSRB

collinearity. The table shows that all VIF values were below 5, suggesting no multiple collinearity across variables. CR's beta value was positive, and its coefficient with BMA was 0.421, indicating a strengthening effect of CR, confirming the fourth hypothesis (H4).

In Table 9, it can be seen that the R^2 changed by 0.103, showing that the model's fitting was satisfactory, while the sig. F value changed to 0.015, less than 0.05, demonstrating that the model passed the F test and was statistically significant. The VIF value was employed in this study to assess the collinearity issue between the variables, and every VIF value was

below 5, indicating no multiple collinearity. The beta value of CR was significantly positive, and its associated coefficient with BMEL was 0.221, indicating that it can strengthen the positive impact of BMEL on CSRB, supporting the fifth hypothesis (H5).

Finally, according to Table 10, the R^2 value changed to 0.006, showing that the model fits well, and the sig. F changed to 0.010, less than 0.05, indicating that the model passed the F test and was statistically significant. The table shows no multiple collinearity because all VIF values were below 5. CR's beta was considerably positive, and its coefficient with NBMY was 0.114, validating the sixth and final hypothesis that it (CR) can boost NBMY's favorable effect on CSRB (H6). Figure 2 shows the conceptual framework based on the statistical outcomes.

4.7 Test of validity of hypotheses

From the previous tables, it can be concluded that all independent constructs had positive F values, suggesting that all of those independent components had favorable correlations with the dependent variable, CSRB. The following table and figure (Table 11 and Figure 2) indicate the hypotheses' overall validity:

Table 11 indicates that all three independent factors of CBCs: BMA, BMEL and NBMY have significant positive relationships with the dependent variable, CSRB, due to having positive beta values as well as p values lower than 0.05. In addition, the statistical analyses

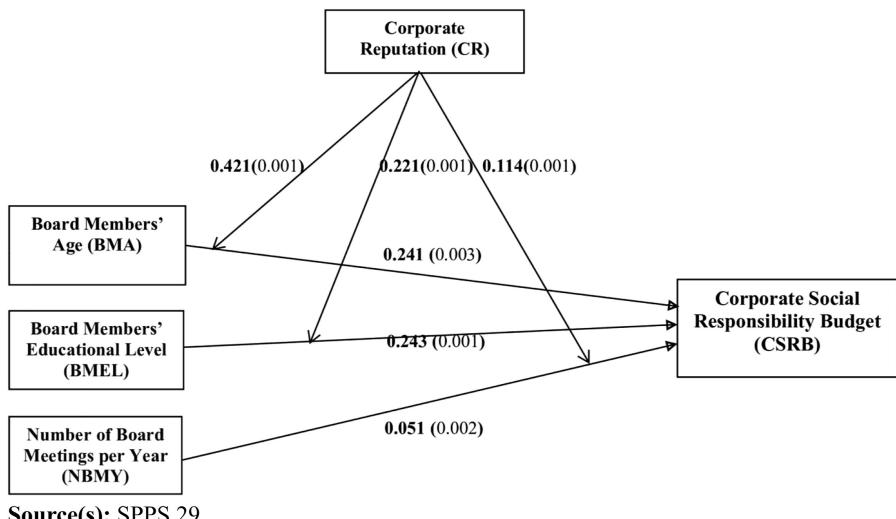


Figure 2.
Hypotheses testing
outcomes

Source(s): SPSS 29

Hypotheses	Path	Beta	p value	Verified or not	R^2 (%)
H1	BMA -> CSRB	0.241	0.003	Verified and supported	13.2
H2	BMEL -> CSRB	0.243	0.001	Verified and supported	18.6
H3	NBMY -> CSRB	0.051	0.002	Verified and supported	11.9
H4	CR-> (BMA -> CSRB)	0.421	0.001	Verified and supported	
H5	CR-> (BMEL -> CSRB)	0.221	0.001	Verified and supported	
H6	CR-> (NBMY -> CSRB)	0.114	0.001	Verified and supported	

Table 11.
Summary of the
validity of hypotheses

Source(s): SPSS 29

revealed that CR, as a moderator, has significant moderating (strengthening) effects on all three direct relationships of this study. In this case also, we can observe that all the beta values were positive at the intersecting point of CR, indicating that it has a moderating impact on the direct relationships. Furthermore, it can be observed that all the *p* values in these cases are also much lower than the threshold *p* value (0.05), indicating superior strengthening effects. Thus, all three hypotheses related to direct effects and all the three hypotheses related to moderating effects were validated based on the statistical analyses.

Table 11 also indicates that the three independent factors together can explain 43.7% variance of the dependent variable, CSRB. The percentage is quite significant compared to the similar research studies (Umar *et al.*, 2023; Umar, 2022; Garg and Gupta, 2020; Hosain, 2020). Such a higher *R*² value proves the superior explanatory power of the independent factors chosen by the researcher. Thus, the selected factors of CBCs were appropriate and justified.

5. Discussion

This study shows that corporate board features have positive relationships with corporate social responsibility budgets. These findings are similar to earlier research (Hosain, 2020; Fernández-Temprano and Tejerina-Gaite, 2020; Oh *et al.*, 2019; Miroshnychenko, 2018; Chang *et al.*, 2015; Matinheikki *et al.*, 2017; Ali *et al.*, 2016; Oberoi, 2012). However, corporate reputation moderated all the direct relationships between the components of CBCs and CSRB. These findings corroborate Garg and Gupta's (2020), Islam's (2017) and Campbell's (2007) claims, where they argued that a firm with a superior corporate reputation will be induced to spend more on CSR. So, such findings are crucial for future cross-cultural corporate governance studies, including board features.

However, although the young directors in Bangladesh are still underrepresented, their numbers are quickly rising (Umar *et al.*, 2023; Umar, 2022). This study found that age and education raise social and environmental consciousness, which boosts CSR spending. Nevertheless, regular board meetings (formal and informal) promote environmental engagement and positive outcomes like CSR fund allocation. Reputable organizations invest more in CSR spending to be socially and environmentally responsible. CSR budgets also assist the reputable banks in improving their reputation with clients, government agencies and national as well as international nongovernmental organizations (NGOs).

6. Implications for theory and practice

6.1 Theoretical implications

The study will likely to provide a theoretical contribution to this contemporary and engaging subject matter. Although many theoretical and empirical research papers so far have been published focusing on corporate governance, board characteristics, CSR expenditure and CSR disclosure, research studies on these particular topics (CBCs and CSRB moderated by CR) need to be conducted more within the corporate social responsibility dimension (Umar *et al.*, 2023; Thuy *et al.*, 2022; Umar, 2022). In addition, this work can draw the attention of a new aspect of CBCs known as NBMY, which the academic community has yet to pay the kind of attention that it warrants. As a result, this study has the potential to serve as a starting baseline for academics and decision-makers who are interested in exploring further on this uncharted area of the CG–CSR nexus.

6.2 Managerial implications

In addition, despite sufficient scientific data, the corporate social responsibility budget remains one of the most hotly debated topics in the business sector in the modern era. The researcher expects additional empirical studies like this to help BoDs, governing agencies and

independent organizations like NGOs implement, govern and regulate CSR-related policies and initiatives. Policymakers (such as regulatory agencies and central banks) can also benefit from the findings of this paper while monitoring the CSR budget spending of banks and other financial institutions.

7. Conclusions and study limitations

7.1 Conclusions

Spending on CSR plays essential responsibilities beyond only preventing damage to the natural environment. It can do much more than that, such as alleviating poverty or assisting those vulnerable to natural disasters, such as the ones we faced a couple of years back, the breakout of COVID-19. Because of the involvement of a wide variety of interested parties in an organization, the monetary gain cannot stand alone as the primary purpose of that entity. A system for effective corporate governance can assist in the formulation and execution of CSRB policy that is both helpful and timely. According to the findings of this study, each of the three aspects of CBCs has a good influence on the CSR budget of the selected Bangladeshi banks. In addition, the results of this study demonstrated that a bank's reputation could control the correlations between the different aspects of CBCs and CSRB. As a result, institutions of a medium and more significant scale, such as banks, should provide funding for and investigate more on such empirical efforts to properly and efficiently manage and distribute the CSR funds.

Companies, including financial institutions, have responsibilities as "corporate citizens" in the communities in which they operate. Under such circumstances, CSRB might be a suitable option for assisting environmental and social groups, eliminating poverty, defending against natural and economic calamities and doing much more. These kinds of initiatives ultimately lead to a rise in a company's performance, operational profit, firm value and reputation. Investing in CSR is not merely a kind of spending; it can also be an investment in advertising and reputational capital, both of which can return more money in the future.

7.2 Limitations and further scope for studies

This study, among the earliest to examine how corporate board qualities affect CSR spending, has some major shortcomings. This particular research, for instance, was carried out in a specific nation and focused only on one industry. More and more cross-cultural and cross-sectional analyses incorporating several countries and industries may have yielded more representative results. Using more samples (n) or yearly reports (ten or more) may have improvised such an inquiry.

Regarding methodology, an important limitation of this study is that it did not apply any non-frequentist method such as Bayesian analysis. In studies like this, a Bayesian analysis is quite necessary in order to prove the robustness of the results (Cheng *et al.*, 2002). The researcher expects that future studies will consider these limitations in order to ensure accuracy and robustness of study outcomes.

The researcher has high expectations that in the near future, researchers will step up to the plate to do more and more studies on these important issues and give some helpful insights for academics, managers and policymakers. These inquiries will not only unearth some necessary instructions for them but also direct and urge academics to study on these important and relatively new topics, such as CBCs, CSRB and CSRD.

References

- Aguirre-Urreta, M.I. and Hu, J. (2019), "Detecting common method bias: performance of the Harman's single-factor test", *The Database for Advances in Information Systems*, Vol. 50 No. 2, pp. 45-70, doi: [10.1145/3330472.3330477](https://doi.org/10.1145/3330472.3330477).

- Ali, W., Sandhu, M.A., Iqbal, J. and Tufail, M.S. (2016), "Corporate governance and CSR disclosure: evidence from a developing country", *Pakistan Journal of Social Sciences*, Vol. 36 No. 1, pp. 225-238.
- Bangladesh Bank (2021), "Policy measures of Bangladesh bank in response to the COVID-19 pandemic", available at: www.bb.org.bd/pub/special/covid19_policymeasures.pdf (accessed 27 October 2023).
- Bangladesh Bank Guidelines (2014 and 2008), "Indicative guidelines for CSR expenditure allocation and end use oversight", available at: <https://www.bb.org.bd/openpdf.php> (accessed 27 November 2022).
- Beltratti, A. (2005), "The complementarity between corporate governance and corporate social responsibility", *The Geneva Papers on Risk and Insurance-Issues and Practice*, Vol. 30 No. 3, pp. 373-386, doi: [10.1057/palgrave.gpp.2510035](https://doi.org/10.1057/palgrave.gpp.2510035).
- Biggart, N.W. (1991), "Explaining Asian economic organizations", *Theory and Society*, Vol. 20 No. 2, pp. 199-232, doi: [10.1007/bf00160183](https://doi.org/10.1007/bf00160183).
- Boesso, G., Kumar, K. and Michelon, G. (2013), "Descriptive, instrumental and strategic approaches to corporate social responsibility: do they drive the financial performance of companies differently?", *Auditing and Accounting Journal*, Vol. 26 No. 3, pp. 399-422, doi: [10.1108/09513571311311874](https://doi.org/10.1108/09513571311311874).
- Bogart, K.A.S. (2013), "Convergence of corporate governance and corporate social responsibility", *International Journal of Human Resource Development Management*, Vol. 13 No. 4, pp. 318-329, doi: [10.1504/ijhrdm.2013.064072](https://doi.org/10.1504/ijhrdm.2013.064072).
- Campbell, J. (2007), "Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility", *Academy of Management Review*, Vol. 32 No. 3, pp. 946-967, doi: [10.5465/amr.2007.25275684](https://doi.org/10.5465/amr.2007.25275684).
- Chang, Y.K., Oh, W.-Y., Park, J.H. and Jang, M.G. (2015), "Exploring the relationship between board characteristics and CSR: empirical evidence from Korea", *Journal of Business Ethics*, Vol. 140 No. 2, pp. 225-242, doi: [10.1007/s10551-015-2651-z](https://doi.org/10.1007/s10551-015-2651-z).
- Chauhan, S. and Amit (2014), "A relational study of firm's characteristics and CSR expenditure", *Procedia Economics and Finance*, Vol. 11, pp. 23-32, doi: [10.1016/s2212-5671\(14\)00172-5](https://doi.org/10.1016/s2212-5671(14)00172-5).
- Chen, J.C., Patten, D.M. and Roberts, R.W. (2008), "Corporate charitable contributions: a corporate social performance or legitimacy strategy?", *Journal of Business Ethics*, Vol. 82 No. 1, pp. 131-144, doi: [10.1007/s10551-007-9567-1](https://doi.org/10.1007/s10551-007-9567-1).
- Cheng, J., Greiner, R., Kelly, J., Bell, D. and Liu, W. (2002), "Learning Bayesian networks from data: an information theory based approach", *Artificial Intelligence*, Vol. 137 Nos 1-2, pp. 43-90, doi: [10.1016/s0004-3702\(02\)00191-1](https://doi.org/10.1016/s0004-3702(02)00191-1).
- Dam, L. and Scholtens, B. (2012), "Does ownership type matter for corporate social responsibility?", *Corporate Governance: An International Review*, Vol. 20 No. 3, pp. 233-252, doi: [10.1111/j.1467-8683.2011.00907.x](https://doi.org/10.1111/j.1467-8683.2011.00907.x).
- Deegan, C., Rankin, M. and Tobin, J. (2002), "An examination of the corporate social and environmental disclosures of BHP from 1983-1997: a test of legitimacy theory", *Accounting, Auditing & Accountability Journal*, Vol. 15 No. 3, pp. 312-343, doi: [10.1108/09513570210435861](https://doi.org/10.1108/09513570210435861).
- Dias, A., Rodrigues, L.L. and Craig, R. (2017), "Corporate governance effects on social responsibility disclosures", *Australasian Accounting, Business and Finance Journal*, Vol. 11 No. 2, pp. 1-22, doi: [10.14453/aabfj.v11i2.2](https://doi.org/10.14453/aabfj.v11i2.2).
- Donaldson, T. (2012), "The epistemic fault line in corporate governance", *Academy of Management Review*, Vol. 37 No. 2, pp. 256-271, doi: [10.5465/amr.2010.0407](https://doi.org/10.5465/amr.2010.0407).
- Fernández-Temprano, M.A. and Tejerina-Gaite, F. (2020), "Types of director, board diversity and firm performance", *Corporate Governance*, Vol. 20 No. 2, pp. 324-342, doi: [10.1108/cg-03-2019-0096](https://doi.org/10.1108/cg-03-2019-0096).
- Garg, A. and Gupta, P.K. (2020), "Mandatory CSR expenditure and firm performance: evidence from India", *South Asian Journal of Business Studies*, Vol. 9 No. 2, pp. 235-249, doi: [10.1108/sajbs-06-2019-0114](https://doi.org/10.1108/sajbs-06-2019-0114).

-
- Haniffa, R.M. and Cooke, T.E. (2005), "The impact of culture and governance on corporate social reporting", *Journal of Accounting and Public Policy*, Vol. 24 No. 5, pp. 391-430, doi: [10.1016/j.jaccpubpol.2005.06.001](https://doi.org/10.1016/j.jaccpubpol.2005.06.001).
- Harjoto, M.A. and Jo, H. (2011), "Corporate governance and CSR nexus", *Journal of Business Ethics*, Vol. 100 No. 1, pp. 45-67, doi: [10.1007/s10551-011-0772-6](https://doi.org/10.1007/s10551-011-0772-6).
- Hosain, M.S. (2020), "The relationship between corporate governance and corporate social responsibility expenditure in Bangladesh: moderating role of firm value", *Indian Journal of Corporate Governance*, Vol. 13 No. 2, pp. 190-209, doi: [10.1177/0974686220965330](https://doi.org/10.1177/0974686220965330).
- Islam, M.A. (2017), "CSR reporting and legitimacy theory: some thoughts on future research agenda", in Aluchna, M. and Idowu, S.O. (Eds), *The Dynamics of Corporate Social Responsibility: A Critical Approach to Theory and Practice*, Springer, Cham, pp. 323-339.
- Jain, T. and Jamali, D. (2016), "Looking inside the black box: the effect of corporate governance on corporate social responsibility", *Corporate Governance: An International Review*, Vol. 24 No. 3, pp. 253-273, doi: [10.1111/corg.12154](https://doi.org/10.1111/corg.12154).
- Jo, H. and Harjoto, M.A. (2012), "The causal effect of corporate governance on corporate social responsibility", *Journal of Business Ethics*, Vol. 106 No. 1, pp. 53-72, doi: [10.1007/s10551-011-1052-1](https://doi.org/10.1007/s10551-011-1052-1).
- Johnson, R.A. and Greening, D.W. (1999), "The effects of corporate governance and institutional ownership types on corporate social performance", *Academy of Management Journal*, Vol. 42 No. 5, pp. 564-576, doi: [10.2307/256977](https://doi.org/10.2307/256977).
- Judge, W.Q., Douglas, T.J. and Kutan, A.M. (2008), "Institutional antecedents of corporate governance legitimacy", *Journal of Management*, Vol. 34 No. 4, pp. 765-785, doi: [10.1177/0149206308318615](https://doi.org/10.1177/0149206308318615).
- Khan, A., Muttakin, M.B. and Siddiqui, J. (2013), "Corporate governance and corporate social responsibility disclosures: evidence from an emerging economy", *Journal of Business Ethics*, Vol. 114 No. 2, pp. 207-223, doi: [10.1007/s10551-012-1336-0](https://doi.org/10.1007/s10551-012-1336-0).
- KPMG (2013), *The KPMG Survey of Corporate Responsibility Reporting 2013*, KPMG International, available at: <https://assets.kpmg/content/dam/kpmg/pdf/2015/08/kpmg-survey-of-corporate-responsibility-reporting-2013.pdf> (accessed 12 December 2022).
- Larcker, D. and Rusticus, T. (2007), "Endogeneity and empirical accounting research", *European Accounting Review*, Vol. 16 No. 1, pp. 207-215, doi: [10.1080/09638180701269905](https://doi.org/10.1080/09638180701269905).
- Le, T.T. (2022), "Corporate social responsibility and SMEs' performance: mediating role of corporate image, corporate reputation and customer loyalty", *International Journal of Emerging Markets*, Vol. 18 No. 10, pp. 4565-4590, available at: <https://doi.org/10.1108/IJOEM-07-2021-1164> (accessed 28 October 2023).
- Margolis, J., Elfenbein, H. and Walsh, J. (2007), *Does it Pay to Be Good? A Meta-Analysis and Redirection of Research on the Relationship between Corporate Social and Financial Performance*, Working Paper No. 1116, Mimeo, Harvard Business School, Boston.
- Masud, M., Bae, S. and Kim, J. (2017), "Analysis of environmental accounting and reporting practices of listed banking companies in Bangladesh", *Sustainability*, Vol. 9 No. 10, p. 1717, doi: [10.3390/su9101717](https://doi.org/10.3390/su9101717).
- Masud, M.A.K., Rahman, M. and Rashid, M.H.U. (2022), "Anti-corruption disclosure, corporate social expenditure and political corporate social responsibility: empirical evidence from Bangladesh", *Sustainability*, Vol. 14 No. 10, p. 6140, doi: [10.3390/su14106140](https://doi.org/10.3390/su14106140).
- Matinheikki, J., Rajala, R. and Peltokorpi, A. (2017), "From the profit of one toward benefiting many—Crafting a vision of shared value creation", *Journal of Cleaner Production*, Vol. 162, pp. 583-591.
- Miroshnychenko, I. (2018), "Convergence of corporate governance and CSR: ideological perspectives", *Ethics, ESG and Sustainable Development*, Vol. 12, pp. 1-22.
- Mukherjee, A. and Reed, A.M. (2002), "Corporate governance reforms in India", *Journal of Business Ethics*, Vol. 37 No. 3, pp. 249-268, doi: [10.1023/a:1015260208546](https://doi.org/10.1023/a:1015260208546).

- Oberoi, R. (2012), "Corporate governance in central public sector enterprises- A case study of Bharat Heavy Electrical Limited", *Indian Journal of Public Administration*, Vol. 58 No. 1, pp. 49-68, doi: [10.1177/0019556120120104](https://doi.org/10.1177/0019556120120104).
- Oh, W.-Y., Chang, Y.K. and Jung, R. (2019), "Board characteristics and corporate social responsibility: does family involvement in management matter?", *Journal of Business Research*, Vol. 103, pp. 23-33, doi: [10.1016/j.jbusres.2019.05.028](https://doi.org/10.1016/j.jbusres.2019.05.028).
- Ortiz-de-Mandojana, N., Aguilera-Caracuel, J. and Morales-Raya, M. (2014), "Corporate governance and environmental sustainability: the moderating role of the national institutional context", *Corporate Social Responsibility Environment Management*, Vol. 23 No. 3, pp. 150-164, doi: [10.1002/csr.1367](https://doi.org/10.1002/csr.1367).
- Podsakoff, P.M. and Organ, D.W. (1986), "Self-reports in organizational research: problems and prospects", *Journal of Management*, Vol. 12 No. 4, pp. 69-82, doi: [10.1177/014920638601200408](https://doi.org/10.1177/014920638601200408).
- Rahaman, A.S., Lawrence, S. and Roper, J. (2004), "Social and environmental reporting at the VRA: institutionalized legitimacy or legitimization crisis?", *Critical Perspectives on Accounting*, Vol. 15 No. 1, pp. 35-56, doi: [10.1016/s1045-2354\(03\)00005-4](https://doi.org/10.1016/s1045-2354(03)00005-4).
- Rehman, S.U., Bresciani, S., Yahiaoui, D. and Giacosa, E. (2022), "Environmental sustainability orientation and corporate social responsibility influence on environmental performance of small and medium enterprises: the mediating effect of green capability", *Corporate Social Responsibility and Environmental Management*, Vol. 29 No. 6, pp. 1954-1967, doi: [10.1002/csr.2293](https://doi.org/10.1002/csr.2293).
- Rouf, M.A. (2016), "Board diversity and corporate voluntary disclosure in the annual reports of Bangladesh", *Risk Governance and Control: Financial Markets and Institutions*, Vol. 6 No. 4, pp. 48-55, doi: [10.22495/rcgv6i4art7](https://doi.org/10.22495/rcgv6i4art7).
- Rouf, M.A. (2017), "Firm-specific characteristics, corporate governance and voluntary disclosure in the annual reports of listed companies in Bangladesh", *International Journal of Managerial and Financial Accounting*, Vol. 9 No. 3, pp. 263-282, doi: [10.1504/ijmfa.2017.10007758](https://doi.org/10.1504/ijmfa.2017.10007758).
- Rouf, M.A. and Akhtaruddin, M. (2019), "Corporate governance reporting in Bangladesh", *International Journal of Ethics and Systems*, Vol. 36 No. 1, pp. 42-57, doi: [10.1108/ijoes-02-2019-0035](https://doi.org/10.1108/ijoes-02-2019-0035).
- Siddiqui, J. (2010), "Development of corporate governance regulations: the case of an emerging economy", *Journal of Business Ethics*, Vol. 91 No. 2, pp. 253-274, doi: [10.1007/s10551-009-0082-4](https://doi.org/10.1007/s10551-009-0082-4).
- Thuy, H.X., Khuong, N.V., Anh, L.H.T. and Quyen, P.N. (2022), "Effect of corporate governance on corporate social responsibility in Vietnam: state-ownership as the moderating role", *Journal of Financial Reporting and Accounting*, Vol. 22 No. 3, pp. 701-727, available at: <https://doi.org/10.1108/JFRA-10-2021-0367> (accessed 27 October 2023).
- Toutsoura, M. (2004), *Corporate Social Responsibility And Financial Performance*, Working Paper No. 26, University of California, Berkeley.
- Uddin, S. and Choudhury, J. (2008), "Rationality, traditionalism and the state of corporate governance mechanisms: illustrations from a less-developed country", *Accounting, Auditing & Accountability Journal*, Vol. 21 No. 7, pp. 1026-1051, doi: [10.1108/09513570810907465](https://doi.org/10.1108/09513570810907465).
- Uddin, S., Siddiqui, J. and Islam, M.A. (2018), "Corporate social responsibility disclosures, traditionalism and politics: a story from a traditional setting", *Journal of Business Ethics*, Vol. 151 No. 2, pp. 409-428, doi: [10.1007/s10551-016-3214-7](https://doi.org/10.1007/s10551-016-3214-7).
- Umar, U.H. (2022), "Relationship between board independence and CSR spending of Islamic banks in Bangladesh", *Journal of Islamic Monetary Economics and Finance*, Vol. 8 No. 2, pp. 201-218, doi: [10.21098/jimf.v8i2.1451](https://doi.org/10.21098/jimf.v8i2.1451).
- Umar, U.H., Jibril, A.I. and Musa, S. (2023), "Board attributes and CSR expenditure before and during COVID-19", *Journal of Financial Reporting and Accounting*, Vol. 21 No. 4, pp. 800-819, doi: [10.1108/jfra-05-2022-0197](https://doi.org/10.1108/jfra-05-2022-0197).

- Verdantix (2015), "Sustainability assurance: global market forecast 2015-2020", available at: http://research.verdantix.com/index.cfm/papers/Products.Details/product_id/800/sustainability-assurance-global-market-forecast-2015-2020/(accessed 23 November 2022).
- West, A. (2006), "Theorizing corporate governance in South Africa", *Journal of Business Ethics*, Vol. 68 No. 4, pp. 233-248.
- Young, S. and Thyil, V. (2014), "Corporate social responsibility and corporate Governance: role of context in international settings", *Journal of Business Ethics*, Vol. 122 No. 1, pp. 1-24, doi: [10.1007/s10551-013-1745-8](https://doi.org/10.1007/s10551-013-1745-8).
- Zhuang, Y., Chang, X. and Lee, Y. (2018), "Board composition and corporate social responsibility performance: evidence from Chinese public firms", *Sustainability*, Vol. 10 No. 8, pp. 27-52, doi: [10.3390/su10082752](https://doi.org/10.3390/su10082752).

Corresponding author

Md Sajjad Hosain can be contacted at: sajjad_hosain@yahoo.com