

# Corporate Governance and CSR Disclosures: Evidence from the Banking Sector in Bangladesh

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**Abstract:** *This paper focuses on the predictive effect of corporate governance (CG) on banks' CSR disclosures. In this predictive model, we use archival data of the Bangladeshi banking sector. In this analysis, we used 11 years of CSR, corporate governance and other financial data for 30 banks from Bangladesh. We used a checklist of 60 distinct CSR items to evaluate the CSR performance. We have used random-effect and fixed-effect regression models to examine the impact of different CG elements on CSR disclosures. The study demonstrates that managerial ownership, independent directors, and control variables such as bank size, leverage, age, and bank type significantly affect CSR disclosure. Conversely, board size, female directors, and control variable ROA have been found insignificant. Aligned with legitimacy and political cost theories, owner-managed banking businesses perform more CSR activities. Independent directors in Bangladeshi banks ensure good governance and a lower level of interference with the management. Large banks in Bangladesh are more capable of participating in diversified CSR activities. As a result, they report more CSR activities than smaller banks. Higher leveraged and conventional banks report more CSR to give confidence to their shareholders. Whereas newer banks disclose more CSR to attract new clients. The outcome of the paper adds to the CSR literature by investigating empirical information based on archival data on the influence of CG elements on the CSR activities of a transitional economy's banking sector.*

**Keywords:** Corporate Governance, CSR Disclosure, Legitimacy Theory, Agency Theory, Bangladesh

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## INTRODUCTION

Corporate Social Responsibility (CSR) is a business model in which companies interact with their stakeholders instead of only considering economic profits. For financial institutions, CSR is a process by which banks take responsibility for their actions and make a positive impact on society. It is grounded in broader responsibility systems, determined by the institutional, legal, and cultural settings within which business is practiced (Halme *et al.*, 2009). Responding to CSR activities and disclosing such items periodically have been recognized as a significant part of any institution to ensure its existence

on a long-term and regular basis. Besides, CSR disclosures become an essential aspect of the business and work as evidence of the business's commitment to society. CSR disclosure is a strategy to alleviate the blank between management and stakeholders through the board. Disclosing CSR items is essential for the profitability of banks. Banks like to respond to concerns about reverence and duties. This will make banks more connected by contributing to social activities, positively impacting their reputation. Prior researchers addressed the fact that evaluating CSR items has been linked to many principal items. For example, researchers studied the types of information and CSR disclosure reports (Deegan and Gordon, 1996; Guthrie and Parker, 1989; Harte and Owen, 1991; Newson and Deegan, 2002). Besides, the other research attempted in their study establishes the connection between companies' CSR initiatives and the quality of economic performance or factors such as size, risk, industry membership, the reaction of the market, external influences, reputation, country of origin, or intimacy of individual consumers have been expanding over time (Herremans *et al.*, 1993; Newson and Deegan, 2002; Roberts, 1992; Tilt, 1994). Whereas, other studies asserted that corporate governance plays a catalytic role in CSR activities (Adams *et al.*, 1998; Deegan *et al.*, 2000; Deegan and Gordon, 1996; Deegan and Rankin, 1997; Guthrie and Parker, 1989; Patten, 1992; Roberts, 1992). However, majority of researchers focused on a specific sector of CSR. Few papers mentioned that corporate governance positively impacts CSR activities. However, very few studies related to CSR contributed mainly to the financial sector in developed nations. Among them, a limited number of researchers has focused on developing nations' financial sector.

Our research aims to observe an empirical association between CG elements and the disclosure of CSR items for DSE-listed banks in Bangladesh. After controlling for all relevant factors, we concentrate on the ownership structure, board composition, and their impact on CSR activities for the DSE-listed banks.

An emerging economy like Bangladesh and the DSE-listed banks are ideal to study for several motivational aspects. First of all, there are insufficient studies on CSR disclosures in the banking sector using panel data, and there are more fields to explore in both developed and developing nations facing restricted regulatory requirements (Alsaed, 2006; Leung and Horwitz, 2004). This paper aims to minimize the research gap of CSR practice in emerging nations. Second, addressing CSR disclosure cultures for Bangladeshi banks for a specific period and evolving CG as an essential explanatory factor will make some authentic contribution to the literature. Consequently, the policymakers may shed light, particularly on developing CSR-led strategic decisions for the banking sector. Third, prior studies examining environmental information for CSR disclosure have not gained much attention in the financial sector of developing nations. This sector has not yet faced a significant straight ecological shock which is a significant, sudden change in the environment that can have a significant impact on people. Nonetheless, many papers have documented both internal and external factors for investigating the related environmental and ecological impact on the banking sector (Simpson and Kohers, 2002). Fourth, several CSR programs were initiated by private commercial banks in Bangladesh (Halabi and Samy, 2009). Finally, in the recent past, Bangladeshi people have been motivated by CSR activities in all sectors to adopt different initiatives.

The sections are arranged in the following order. Conceptual aspects are covered in Section 2 of the text. In section 3, a summary of the regulatory environment was provided. Literature and hypotheses are provided in Section 4. An overview of the data, variables measurement, and econometric model is portrayed in section 5. Section 6 presents the empirical outcome, and the conclusion portion is reported in section 7.

## Conceptual Discussion

### Corporate Governance (CG)

Corporate governance (CG) is a combined action by maintaining relations, leadership, and organizational framework for achieving organizational objectives through protecting the equality of all stakeholders of the organization. It aims to direct and control banks with compliance. It is described as how businesses are controlled and those responsible for the direction of companies are responsible to the stakeholders (Dahya *et al.*, 1996). Irrespective of their ownership, banks are public entities. To rescue an efficient economy, a well-capitalized and well-governed banking system can play a significant, potential, and impactful role. Many researchers considered the ownership structure and board composition to examine the various reporting issues for banks & non-banks, profit & non-profit organizations because these factors represent these organizations who directly influence making decisions regarding disclosure information by ensuring CG. Carter *et al.* (2003) illustrated on empirical evidence that there is a significant positive correlation between board diversity, defined as the percentage of women, African Americans, Asians, and Hispanics on the board of directors, and the value of the company. Companies disclose only 24% of items in CG (Khan and Hossain, 2006). It happens because there is a lack of board diversification, which results in a lack of board independence. Prior researchers explain that board diversity is related to a stronger orientation towards CSR disclosure and a higher intensity of social activities (Ibrahim and Angelidis, 1994; Siciliano, 1996). Carter *et al.* (2003) assert that board diversity increases board independence because the benefits of having a diversified board do not come from the directors having traditional backgrounds.

The CG of banking businesses is not typical of other business entities. By forming a board, banks have to maintain different acts, policies, and guidelines, the board can ensure the proper practice of compliance and rules so that the proper practice of compliance can be ensured by the board can ensure the appropriate practice of compliance. In Bangladesh, the Banking Company Act-1991, Company Act-1994, and BSEC Act-1993 must be complied with by all scheduled banks for the composition of the board. No scheduled banks are allowed to violate these laws and regulations for board diversification. Bangladesh Bank (BB), the central bank of Bangladesh, regulates and supervises all banks and financial institutions. BB has guided all scheduled banks regarding the formation of the board and external auditors by issuing different guidelines, circulars, and circular letters. BB also advised banks to improve their CG mechanisms to eliminate malpractice within the organizations.

### CSR

CSR deals with social responsibilities in businesses and actively interacts with the beneficiaries of our society. The initial terminology of CSR describes that business and society are considered the same entities. It is not just an optional activity nor an act of one-time charity maintenance but rather a continued commitment by banks to maintain the optimum level of ethics, equality, and responsibility (Ullah, 2021). It is an ongoing process of dealing with the betterment of society. The challenge for a business is to know how CSR is socially dealt with in a generic context and how to undertake it while formulating strategic decisions (Dahlsrud, 2008). Besides, enhancing social excellence beyond the interests of the business and the legal requirements is also referred to as CSR (McWilliams and Siegel, 2001). On top of that, contributing to economic development while improving the employees as stakeholders in society is a part of CSR (Ullah, 2021). Business organizations impact significantly communities by adopting various CSR strategies and undertaking various CSR activities.

In the era of Globalization exchanging of goods, services, technology, investment, people, and information across borders as common. Prior research addressed various CSR items since 1950.

Moreover, CSR is gaining more focus, especially in the era of globalization wherein exchanging of goods, services, technology, investment, people, and information across borders is common. Export, import, and investment have a significant impact on expanding the gross domestic product (GDP) in emerging countries like Bangladesh (Alam *et al.*, 2021). Exports increase a country's GDP by increasing the inflow of funds whereas imports decrease a country's GDP by decreasing the inflow of funds. Investment creates new opportunities for current businesses and entrepreneurs by making GDP more stronger. Therefore, banking business expands. As a consequence, banks become more capable of contributing as a citizen charter. For that, they do CSR and disclose CSR activities as an active citizen from self-responsibility. By ensuring the efficient use of limited resources, CSR strategies help businesses maintain a good balance between sustainability and economic growth.

Pressures and expectations of a business are accelerating from time to time to ensure that businesses should be accountable for the force of their response on the community and environment (Parker, 2020). Moreover, businesses have to ensure that their activities are aligned with broader societal interests and carried out ethically and responsibly (Belal and Momin, 2009; Bhattacharyya, 2015; Martinez *et al.*, 2017; Money and Schepers, 2007; Ullah, 2013). As a consequence, through admitting the significance of CSR, a majority of banks have undertaken various social and environmental programs to benefit both themselves and their stakeholders. Halabi and Samy (2009) conclude that banks do some CSR disclosure voluntarily, and user groups would like to see more CSR disclosure when needed. Directors perform an indispensable role in banks conducting CSR activities by ensuring the balance between actions and societal values or banks' legitimacy. Directors put more pressure on CSR disclosure as they think about the benefits of other stakeholders. Additionally, in recent years, CG literature has shown that the diversity of the board has become an essential weapon of CG (Fama and Jensen, 1983).

### **Regulatory Environment for Banks in Bangladesh**

CSR disclosure and CG are concerns not only in developed countries but also in developing countries (Belal, 2000). Bangladesh Securities and Exchange Commission (BSEC), Bangladesh Bank (BB), the Institute of Chartered Accountants of Bangladesh (ICAB), the Bangladesh Enterprise Institute (BEI), and the Institute of Cost and Management Accountants of Bangladesh (ICMAB) are the concerning bodies for CSR disclosure and to comply CG in Bangladesh (Ahmed, 2006). World Bank, Amnesty International, and the United Nations (UN) also provide voluntary CSR reporting guidelines on social and environmental issues (Bidari and Djajadikerta, 2020). CG should secure the rights of shareholders (Ahmed, 2006; Shliefer and Vishney, 1997). However, this may not always happen because of the principal-agent problem. Banks are not like other institutions because of higher leverage. Its major source of funds comes from depositors. The contribution of funds from shareholders is very insignificant. The risk of losing depositors' savings is also very high. As a result, the protection of depositors is a prime concern, and CG protects the interests and benefits of the overall suppliers of funds (Khan, 2010). Sometimes, the government needs direct or indirect intervention to keep the bank management under control and ensure the right approach for CG (Arun and Turner, 2003). To advocate for CG, these five institutions initiate different activities, including the publication of the code of CG in Bangladesh, organizing seminars, and enforcing various rules & regulations, such as the Bangladesh Accounting Standards (BAS), the Company Act 1994, the BSEC Act 1993, Bangladesh Auditing Standards (BSA) and other stock exchange listing requirements (Mir and Rahaman, 2005). All scheduled banks must comply with the acts, rules, regulations, and binding to ensure good CG practice for a fair return for shareholders and depositors.

Banking Company Act-1991, Company Act-1994, and BSEC Act-1993 must be complied with by all scheduled bank companies in Bangladesh for constructing the board. No scheduled banks are allowed

to violate these laws and regulations for board diversification. Besides, Bangladesh Bank (BB) has guided all scheduled banks regarding the formation of the board and external auditor by issuing different guidelines and circulars. BB also advised all scheduled banks to improve their CG mechanisms to eliminate malpractice within the organizations.

The quality disclosures of CSR items are vital for banks' financials through the assurance of disclosures. To do that, BB issued a new guideline as well as circulars on CSR activities to focus more on healthcare, environment, sustainable development, education, climate change, green banking, disaster management, sports & culture, agricultural financing, financial inclusion, employee benefits, and customer services. BB has also taken some praiseworthy initiatives in the emerging circumstances arising due to the pandemic by issuing different circulars for implementing special CSR activities. According to the guideline, BB allowed all scheduled banks increased by 10 percent to spend at least 30 percent of total CSR funds to facilitate healthcare support. During the pandemic, BB advised all banks to contribute more to health sectors by providing essential medical equipment and supplies to those who are involved in this health sector. Besides, BB asked all the banks in Bangladesh to allocate 60 percent of their CSR fund to the health sector during this crisis period. Bangladesh is a vulnerable country; it faces severe consequences of global warming and climate change. BB promoted green banking activities to all the scheduled banks in their new CSR guidelines. Spending as a part of CSR on the environment, climate change migration, and adaptation has been elevated by 10 percent. That means banks can spend 20 percent on the betterment of the environment. Banks are restricted to spending at most 30 percent of their total CSR funds on education, which has not changed. BB allowed spending on income-generating activities through CSR funds. BB guided all the scheduled banks to do CSR in disaster management, infrastructural development, and the sports & culture sector.

The pandemic has become a global crisis (George *et al.*, 2016). This global crisis has been changing the universe in terms of adversity, speed, variations, spread, and unprecedented impact on public health, living style, livelihoods, interactions in financial markets, and the global economy by preventing all kinds of predictions (Zhang *et al.*, 2020). A bank has a unique role in an economy that could unstable the entire economy in no time (Habib and Ullah, 2022). Like other forms of businesses, banks faced shock and stress heavily due to the Covid-19 global pandemic. Effective regulatory actions were taken globally, such as travel restrictions to reduce the impact of death from COVID-19 (Fourkan, 2021). Banks were open during the pandemic and strict lockdown because they had a compact role in the economy (Habib and Ullah, 2022). In this vital situation, the best CSR practices would adopt cost-effective business with innovations to cope with the new normal, avoiding layoffs for cost minimization and profit greediness, and taking care of the stakeholders through interactions (Ullah, 2021). In addition, banks (including central bank) need dynamic leadership and greater engagement with responsibility from the boards for making decisions in the new normal. BB guided financial institutions to facilitate employees by providing insurance, grants, and special allowances. Besides, banks have developed different policies for employee benefits. During the pandemic, unfortunately, a few banks laid off some of their employees and cut a certain percentage of employees' salaries. BB advised taking proper care of employees during the pandemic.

Lastly, BB advised banks to disclose CSR expenditure in a particular chapter of the annual report. Banks should monitor their annual reports of CSR expenditure annually before approving the allocation for the following years. All end-use monitoring observations have to be updated for BB supervision officials for internal and external audits to evaluate banks' management performance.



## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Prior literature focused on several theories to describe CSR disclosure practices, in particular agency theory, stakeholder theory, signaling theory, legitimacy theory, resource-dependence theory, institutional theory, political cost theory, and Triple-Bottom-Line (TBL) approach. In this study, we concentrate on the ownership structure and composition of the board (board size, independent directors and female directors on the board) for our research questions by considering legitimacy theory and agency theory.

First, legitimacy theory is a widely accepted theory for CSR practices (Adams *et al.*, 1998; Deegan and Gordon, 1996; Guthrie and Parker, 1989; Patten, 1992; Murthy and Abeysekera, 2008). The focus of legitimacy theory is society as a whole (Woodward *et al.*, 1996; Ullah *et al.*, 2019). Legitimacy theory asserts that the essential actions of an organization are necessary to continue its mandate to operate in society (Deegan, 2002). Although banking companies do not facilitate detrimental products or unsafe means, enhancing institutional legitimacy is a considerable factor in maintaining social worthiness (Oliver, 1991), social conscience and enlightened self-interest (O'Dwyer, 2002), and harmony with community concerns (Clarke and Gibson, 1999).

Second, focusing on the interests of general shareholders, agency theory states that companies disclose CSR activities to address information asymmetry between managers and shareholders (Friedman, 1970). This theory recognizes CSR disclosure as a tool to reduce the conflict between managers (agents) and shareholders (principal) and also between the company and its fund suppliers (Jensen and Meckling, 1976; Cooke, 1989; Ness and Mirza, 1991).

Prior researchers focused on volunteer disclosure of CSR activities of businesses in the annual report (Gray *et al.*, 1995b). Different CSR rating agencies partially think that CEOs and boards control CSR disclosure items (Barnea and Rubin, 2010; Bear *et al.*, 2010; Jo and Harjoto, 2011; Johnson and Greening, 1999). Compared with specific CSR reports, annual reports are widely available for readers among stakeholders or other parties.

The majority portion of the annual report is audited and more reliable. However, auditing CSR reports is not widely practiced (Perego and Kolk, 2012; Pflugrath *et al.*, 2011). Therefore, the study of annual reports for CSR reporting in banking businesses is more feasible and likely.

### Managerial Ownership

Managing a company by owners is a common practice in Bangladesh (Farooque *et al.*, 2007). Legitimacy theory emphasizes that management and board will respond to societal expectations and human resource management (Deegan *et al.*, 2002; Patten, 1992). This sort of managerial ownership dominates the company when disclosing CSR items. As a consequence, the chances are high that they will care more about society, the environment, or their country. So, the possibility cannot be avoided that owner-managed banking businesses may be more accountable to the stakeholders and perform more CSR activities. Aligned with that, Rashid and Hossain (2022) find a positive relationship between managerial ownership and CSR reporting. However, from the other point of view, public accountability may be less of an issue because outsiders' interests may be relatively small to those managers (Khan *et al.*, 2013). According to previous literature, there is a negative relationship between managerial ownership and the extent of voluntary disclosure (Chau and Gray, 2010; Eng and Mak, 2003; Khan *et al.*, 2013). However, a study found no significant impact of managerial ownership on the extent of CSR disclosure (Rouf and Hossain, 2021). Nevertheless, based on the legitimacy theory, we, therefore hypothesize:

*H1: The extent of CSR disclosures is higher for banks having a higher percentage of managerial ownership.*

### **Board Size**

As an important element of corporate governance, board size is a key factor that may influence the extent of voluntary disclosure, including CSR disclosure (Ntim and Soobaroyen, 2013; Rouf, 2017). Agency theory states that a greater board size may contribute to its monitoring effectiveness, as greater boards afford diversity in terms of expertise and more ability to observe management (Larmou and Vafeas, 2010; Sun *et al.*, 2010). In line with these opinions, the results of the different empirical research such as experienced that there is a positive relationship between board size and the level of CSR disclosure (Allegrini and Greco, 2013; Haji, 2013; Hidalgo *et al.*, 2011; Jizi *et al.*, 2014; Kathyayini *et al.*, 2012; Liao *et al.*, 2018; Matuszak *et al.*, 2019; Ntim and Soobaroyen, 2013; Rouf and Akhtaruddin, 2020; Samaha *et al.*, 2015; Sun *et al.*, 2010). Whereas, other empirical researches find a non-significant relationship between board size and voluntary disclosure (Amran *et al.*, 2014; Rouf and Hossan, 2021). We, therefore, construct the hypothesis as follows:

*H2: The extent of CSR disclosures is greater for banks having greater board size.*

### **Independent Directors**

The existence of independent directors on the board is considered a major corporate governance mechanism because they strengthen the board by monitoring the activities of the management and ensuring the protection of the interests of the investors (Petra, 2005). As per agency theory, a greater proportion of independent directors on the board increases the effectiveness of the board in monitoring and controlling management (Liao *et al.*, 2014; Jizi *et al.*, 2014). Thus, independent directors are less affiliated with management, so they can be seen as a balanced instrument to ensure good CG for the stakeholders (Jizi *et al.*, 2014; Sharif and Rashid, 2014; Khan, 2010). However, the independent directors in Bangladesh are not truly independent (Uddin and Choudhury, 2008). In most Bangladeshi companies, the major selection criteria for the selection of independent directors are that they are hired based on their name and personal connections rather than skill and expertise (Uddin and Choudhury, 2008). Sometimes, family members are hired as independent directors to fulfill the family's agenda. Hence, the nature of independent directors is doubtful. In line with these theoretical arguments, prior empirical findings indicate that there is a significant relationship between CSR disclosures and board independence (Allegrini and Greco, 2013; Cai *et al.*, 2014; Harjoto and Jo, 2011; Jahid *et al.*, 2020; Jizi *et al.*, 2014; Ntim *et al.*, 2013; Khan *et al.*, 2013; Liao *et al.*, 2014; Rashid and Hossain, 2022; Rouf, 2017; Rouf and Hossan, 2021; Sharif and Rashid, 2014). We, therefore, construct the hypothesis as follows:

*H3: The extent of CSR disclosures is higher for banks having a greater percentage of independent directors.*

### **Female Directors**

Gender diversity enhances the board's efficiency because of more monitoring roles (Adams and Ferreira, 2009). As women and men have habitually, ethnically, culturally, and socially different backgrounds, the female directors on the board can play an influential role in CSR disclosure (Ben-Amar and McIlkenny, 2015; Frias-Aceituno *et al.*, 2013; Liao *et al.*, 2014;) which is aligned with agency theory. Women could be involved in the board through alliance, preparing and involving themselves in board matters, and can make an active contribution to key decision-making (Huse and Solberg, 2006).

Female directors can lead better corporate governance (Bernardi *et al.*, 2013). They can participate, discuss activities, and make better decisions (Letendre, 2004). A study pointed out through empirical evidence that a significant positive relationship exists between board diversity, defined as the percentage of women, African Americans, Asians, and Hispanics on board, and the company's worth (Carter *et al.*, 2003). A prior study evidenced that boards with a higher proportion of female directors tend to arrange more board meetings than possible and have an effective attendance pattern at board meetings, which makes the board a successful one (Adams and Ferreira, 2009). In addition, female directors have an inherently more stabilized outlook than male directors (Adams and Ferreira, 2009). Boards of socially responsible businesses have significantly more females than boards of non-socially responsible businesses (Jahid *et al.*, 2020; Matuszak *et al.*, 2019; Rouf and Hossain, 2021; Webb, 2004). Besides, an increasing number of female directors on the board is positively related to the company's level of charity to the arts and community (Ben-Amar and McIlkenny, 2015; Barako and Brown, 2008; Fernandez-Feijoo *et al.*, 2014; Frias-Aceituno *et al.*, 2013; Liao *et al.*, 2014; Rouf, 2017; Williams, 2003). However, a study did not find a significant relationship between female directors and the extent of CSR disclosures (Khan, 2010; Muttakin and Ullah, 2012). By considering the theoretical views, we develop the following hypothesis:

**H4:** *The extent of CSR disclosures is higher for banks with a greater percentage of female directors.*

### Large Banks

The asset portion represents the size of a company. Thus, a bank having a bigger amount of assets is considered a larger bank. Large firms are more active and disclose more (Cooke, 1989). Few researchers have promoted a relationship between large banks and CSR disclosures, stating that large firms do more CSR activities and have a better impact on society (Trotman and Bradley, 1981). The previous studies find a positive significant relationship between bank size and the extent of the disclosure (Bidari and Djajadikerta, 2020; Eng and Mak, 2003; Fahad and Nidheesh, 2020; Hossain and Hammami, 2009; Hossain and Reaz, 2007; Kansal *et al.*, 2014; Lattemann *et al.*, 2009; Mia and Mamun, 2011). Furthermore, large banks have more pressure and affection from society than small banks to disclose more information (Alsaheed, 2006; Cowen *et al.*, 1987). The level of disclosure for large banks can be greater as the management of large banks knows the possible benefit of more disclosures, whereas smaller banks are concerned about higher disclosure of information that may unfavorably impact their businesses (Singhvi and Desai, 1971). We, therefore, develop the following hypothesis:

**H5:** *The extent of CSR disclosures is higher for larger banks.*

### Banks with Higher Leverage

Leverage is the debt amount that is the source of funding for banks. It describes financial structure by measuring the long-term risk of firms. On the basis of agency cost theory, leverage, and disclosure are linked in many earlier papers (Alsaheed, 2006; Hossain *et al.*, 1995; Watson *et al.*, 2002). In prior studies, leverage has been concluded to be an important explanatory variable (Malone *et al.*, 1993; Wallace *et al.*, 1994). Banks with high leverage have demands from creditors to disclose more information because they are associated with risk and expect to disclose more items related to risks (Fahad and Nidheesh, 2020; Watts and Zimmerman, 1978). Besides, they disclose more information to provide confidence to their creditors (sources of the fund) that the businesses are less likely to avoid their agreed claims or to pay lenders when in need (Myers, 1977; Schipper, 1981). Hossain *et al.* (1995) and Malone *et al.* (1993) find a significant positive relationship between them. Whereas other earlier researchers failed to find any significant relationship between leverage and disclosures (Alsaheed, 2006; Chau and Gray, 2002; Mia and Mamun, 2011; Eng and Mak, 2003). We, therefore, hypothesize:



**H6:** *The dimension of CSR disclosures is higher for higher-leveraged banks.*

### **Profitable Banks**

Banks do business operations by utilizing societal resources. As per legitimacy theory, a bank needs to respond like a worthy member of society. The profitable firm enjoys more autonomy and flexibility to be involved in diversified CSR activities with shareholders. Besides, banks disclose CSR activities to avoid cost and regulatory bindings (Watts and Zimmerman, 1978; Fields *et al.*, 2001; Healy and Palepu, 2001). Prior studies find a positive relationship between profitability and CSR disclosures (Bidari and Djajadikerta, 2020; Mangos and Lewis, 1995; Patten, 1992; Platonova *et al.*, 2018; Roberts, 1992; Waddock and Graves, 1997). Whereas others argue that there is a positive but not significant relationship between CSR disclosure and profitability measured by Return on Assets (ROA) (Matuszak and Róžańska, 2017; Patten, 1992). According to Jahid *et al.* (2020), older banks get more clients and gradually start to be profit-oriented rather than CSR disclosures. Based on theories and previous literature, we construct the following hypothesis:

**H7:** *Profitability has a negative impact on the CSR disclosures.*

### **Age**

Older banks are expected to be more involved with society with the motive of being good citizens, and they have a tendency to disclose more activities related to CSR. However, newer banks can participate in more CSR activities to attract new clients and investors as well as strengthen their reputation by disclosing more CSR activities, which is very common in developing nations like Bangladesh. A member of society attracts those who act responsibly for society. Hamid (2004) has linked CSR disclosures and age in a legitimacy theory that “The age of a firm is related to its reputation in the society and its history of involvement in CSR activities.” Prior studies have shown that age is related to the extent of voluntary disclosure (AL-Dhamari *et al.*, 2016; Alsaeed, 2006). Age has a positive association with disclosure, founded by some researchers (AL-Dhamari *et al.*, 2016; Fahad and Nidheesh, 2020; Ibrahim, 2014). On the contrary, few studies document an insignificant relationship between age and the extent of the disclosure (Alsaeed, 2006; Hossain and Reaz, 2007). However, a study has evidence of the partial impact of age on CSR disclosure (Bidari and Djajadikerta, 2020). We, therefore, hypothesize:

**H8:** *The extent of CSR disclosures is higher for newer banks.*

### **Islamic Shari’ah-Based Banks**

Bangladesh has around 150 million Muslim population, and, which makes the nation the fourth largest, most extensive Muslim population land on earth. Since 1983, after the foundation of the Islamic banking system in this country, we have seen a congruent expansion. Until 2022, there are ten full-fledged Islamic Shariah-based banks out of 61 scheduled banks in Bangladesh. Till 2020, there were eight full-fledged Islamic Shariah-based banks listed in DSE. Besides, there are more than 20 commercial banks that are offering products and services through Islamic banking branches or windows. As per legitimacy theory, Islamic banking institutions are expected to participate more in CSR activities. The items of CSR are not of major concern for most Islamic Shari’ah-based banks since they are already engaged in adhering to their Shari’ah principles (Hassan and Harahap, 2010). Islamic Financial Institutions tend to disclose more CSR activities than Conventional Financial Institutions (Aribi and Gao, 2010). Platonova *et al.* (2018) explain a positive relationship between CSR disclosure and the financial performance of

Islamic Shari'ah-based banks. However, another study found an insignificant amount of disclosure in the Islamic community (Belal and Momin, 2009). We, therefore, hypothesize:

**H9:** *The extent of CSR disclosures is lower for Islamic Shari'ah-based banks.*

## Research Design

### Sample

The paper used panel data from 2010 to 2020, with the sample consisting of 30 DSE-listed banks, where 22 are conventional banks (including 1 state-owned commercial bank), and 8 are Islamic Shari'ah-based banks. Table I depicts the list of samples of 30 DSE-listed banks.

**Table I: List of Sample Banks**

Serial No.	Banks
1	AB Bank PLC
2	Al-Arafah Islami Bank PLC
3	Bank Asia PLC
4	BRAC Bank PLC
5	City Bank PLC
6	Dhaka Bank PLC
7	Dutch Bangla Bank PLC
8	Eastern Bank PLC
9	EXIM Bank Ltd.
10	First Security Islami Bank PLC
11	ICB Islamic Bank Ltd.
12	IFIC Bank PLC
13	Islami Bank Bangladesh PLC
14	Jamuna Bank PLC
15	Mercantile Bank PLC
16	Mutual Trust Bank PLC
17	National Bank Ltd.
18	NCC Bank PLC
19	One Bank PLC
20	Premier Bank PLC
21	Prime Bank PLC
22	Pubali Bank PLC
23	Rupali Bank PLC
24	Shahjalal Islami Bank PLC
25	Social Islami Bank PLC
26	Southeast Bank PLC
27	Standard Bank PLC
28	Trust Bank PLC
29	United Commercial Bank PLC
30	Uttara Bank PLC

**Source(s):** Authors

The previous study explains that banks do not have separate CSR reports. Rather, they exercise different ways of exhibiting CSR disclosure through websites, newspapers, broadcasting, etc. This paper

concentrates on annual reports because an annual report is the most elaborated, widely accepted, and regularly reported by banking institutions to fulfill the compliance and regulatory bindings of Bangladesh Bank (BB). Besides, all bank companies update their annual reports at regular intervals on their websites, which plays a crucial part in communicating among stakeholders. The way of selecting for the study of annual reports is consistent with prior studies (Gray *et al.*, 1995b; Guthrie and Parker, 1990; Khan, 2010; Ullah *et al.*, 2019). The information relating to CSR is hand-picked from the CSR section, director's reports, statements of the chairman, CSR-related photos, different audit reports, etc., in the respective banks' annual reports.

### Model Specification

To test the hypotheses, a model was constructed to run the regression of the random effect model and fixed effect model as follows:

$$CSRDI = \alpha + \beta_1 MO + \beta_2 BOARD\_SIZE + \beta_3 IND + \beta_4 FEM + \beta_5 SIZE + \beta_6 LVG + \beta_7 ROA + \beta_8 AGE + \beta_9 TYPE + \beta_{10} Year + \varepsilon$$

Where CSRDI is corporate social responsibility disclosure index, MO is the percentage of shares owned by the directors, BOARD\_SIZE is the natural logarithm of the number of directors on the board, IND is the percentage of independent directors on the board, FEM is the percentage of female directors on the board, SIZE is the natural logarithm of total assets, LVG is the leverage ratio based on total debt to total assets, ROA is the profitability ratio on the basis of return on assets, TYPE is a dummy variable equals to 1 if a bank is Islamic Shariah based bank, 0 otherwise, AGE is the natural logarithm of age since the bank's starting, Year indicates year dummy,  $\varepsilon$  is disturbance term, and  $\beta_1 \dots \beta_{10}$  are beta coefficients.

We run R programming to make summary statistics, correlations, random & fixed effect models for our regression analyses. The constructions of dependent, and independent variables (including control variables) are given in Table II.

### Measurement of Variables

#### Dependent Variable (CSRDI)

In our random effect and fixed effect model, the CSR disclosure index (CSRDI) is considered as dependent variable. To measure CSRDI, we adopt a previously developed checklist of 60 distinctive CSR items by Khan (2010). The variety of CSR items is very impressive for banks in Bangladesh (Khan, 2010). The categories and items of the checklist were developed based on prior research in the area (Cowen *et al.*, 1987; Gray *et al.*, 1995a; Guthrie and Parker, 1989). These pre-developed 60 items were broadly categorized into 7 sectors for application in the Bangladeshi business environment, such as health, education, natural disasters, donations, employees, environmental issues, products/services/statements (Khan, 2010). 60 items in the pre-developed checklist are mutually exclusive as well as unequivocal to assess the extent of CSRDI. The previously developed checklist of CSR items is provided in *Appendix A*.

A bank is awarded 1 for disclosing a CSR item in their annual report and awarded 0 if a bank does not disclose a CSR item. To get the ultimate index of bank-specific CSR disclosure, we added all the scores of that bank. Following the prior research (Haniffa and Cooke, 2002; Khan, 2010; Ullah *et al.*, 2019), the CSRDI is as follows:

$$CSRDI_j = \frac{\sum_{i=0}^{60} d_{ij}}{n_j}$$

Where,  $CSRDI_j$  = CSR Disclosure Index for the  $j^{th}$  bank;  $d_{ij}$  = 1, if the  $i^{th}$  items are disclosed for the  $j^{th}$  bank, otherwise 0; and  $n_j$  = Maximum number of items disclosed for the  $j^{th}$  bank, where  $n_j = 60$ .

To calculate the  $CSRDI_j$  for the  $j^{th}$  Bank, we added the score of each bank, then we divided the sum by 60 and multiplied by 100 to get the ultimate index. For instance, the value of CSRDI will be 0 percent if a bank discloses no CSR items out of 60. Accordingly, the value of CSRDI will be 50 percent if a bank discloses 30 or half of the CSR items. Likewise, if a bank discloses all 60 CSR items, the CSRDI will be 100 percent. So,  $0\% \leq CSRDI_j \leq 100\%$ .

**Table II: Construction of Variables**

Variable	Measurement
<b>CSRDI</b>	CSR Disclosure Index
<b>MO</b>	Percentage of shares owned by the directors
<b>BOARD_SIZE</b>	Natural log of the number of directors on the board
<b>IND</b>	Percentage of independent directors on the board
<b>FEM</b>	Percentage of female directors on the board
<b>SIZE</b>	Natural log of total assets
<b>LVG</b>	Leverage ratio based on total debt to total assets
<b>ROA</b>	Profitability ratio based on return on assets (ROA = net income / total assets x 100)
<b>AGE</b>	Natural log of age since the bank's starting
<b>TYPE</b>	The dummy variable equals to 1 if a bank is an Islami Shari'ah-based bank, otherwise 0
<b>Year</b>	Year dummy

**Source(s):** Authors

### Independent Variables

We have constructed 9 independent variables, including 5 control variables. Table II demonstrates the measurement techniques of these 9 explanatory variables, including the dependent variable.

### Control Variables

Asset size (SIZE\_ASSET), leverage ratio (LVG), return on asset (ROA), bank type (BANK\_TYPE), and age (AGE) are the control variables in our study.

### EMPIRICAL FINDINGS

Table III represents the summary statistics for all the variables in our paper. The average CSRDI is 52.76 percent. It is noticeable that the board size is 13.18. This indicates that not all banks have a good number of directors on the board. The average MO is 26.55 percent. There is a bank with more than 50 percent managerial ownership (MO), whereas there are some managers with no ownership. In our study, the mean of independent directors (ID) is 16.58 percent. The average percentage of female directors

(FEM) is 11.38. Although some banks give priority to board diversification, some banks do not have any females on their boards as directors. The average asset size (natural log of the total assets) is 12.15. The average age (AGE) is 3.10, of which some banks have been doing their banking operation for more than 60 years.

**Table III: Summary Statistics**

Variable	Observation	Mean	SD	Min	Max	Range	SE
Year	330	2015.00	3.17	2010.00	2020.00	10.00	0.17
CSRDI	330	52.76	13.35	21.67	91.67	70.00	0.74
MO	330	26.55	14.29	0.00	52.76	52.76	0.79
BOARD_SIZE	330	13.18	4.14	5.00	22.00	17.00	0.23
IND	330	16.58	10.09	0.00	57.14	57.14	0.56
FEM	330	11.38	11.12	0.00	42.86	42.86	0.61
SIZE	330	12.15	0.75	9.33	14.25	4.92	0.04
LVG	330	0.95	0.16	0.10	2.04	1.94	0.01
ROA	330	0.91	1.26	-9.97	5.09	15.06	0.07
AGE	330	3.10	0.44	2.20	4.11	1.91	0.02
Type	330	0.27	0.44	0.00	1.00	1.00	0.02

Source(s): Authors

Table IV presents the correlation matrix for the variables (time dummies are intentionally excluded). The selected variables are correlated in the correlation matrix, barring a few exceptions where CSRDI and managerial ownership (MO) are negatively correlated ( $\rho = -0.117$ ). Whereas CSRDI is positively associated with board size (BOARD\_SIZE) ( $\rho = 0.015$ ), independent directors (IND) ( $\rho = 0.330$ ), female directors (FEM) ( $\rho = 0.127$ ), size of the bank (SIZE) ( $\rho = 0.551$ ) and profitability (ROA) ( $\rho = 0.236$ ). Nevertheless, CSRDI is negatively correlated with leverage (LVG) ( $\rho = -0.327$ ), age of banks (AGE) ( $\rho = -0.206$ ), and bank type (TYPE) ( $\rho = -0.211$ ).

**Table IV: Correlations of the Variables**

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
[1] CSRDI	1									
[2] MO	-0.117	1								
[3] BOARD_SIZE	0.015	0.423	1							
[4] IND	0.330	-0.173	-0.421	1						
[5] FEM	0.127	0.0452	-0.236	0.256	1					
[6] SIZE	0.474	-0.216	0.231	0.242	-0.039	1				
[7] LVG	-0.327	0.314	-0.295	0.050	0.178	-0.549	1			
[8] ROA	0.236	-0.252	0.297	-0.060	-0.070	0.316	-0.662	1		
[9] AGE	-0.206	-0.092	-0.084	0.032	-0.087	0.293	0.126	-0.189	1	
[10] TYPE	-0.211	0.500	0.254	-0.146	-0.097	-0.120	0.316	-0.254	-0.206	1

Source(s): Authors

**Hausman test:** To decide between the fixed effect model and the random effect model, we ran a Hausman test for Panel Models (phtest) in R programming. Hausman Test for Panel Models (phtest) computes the Hausman test based on comparing two sets of estimates. If the p-value is significant (for example  $<0.05$ ), then we can use the fixed effect model; if not, we have to use the random effect model.



In this case, if the p-value is somewhat larger than 0.05, using the fixed effect model may still be better. So, we ran a fixed effect model and saved and performed the estimates (p-value = 0.8305), then ran a random effect model and saved the estimates (p-value = 0.9083), and then performed the test. Our p-values are greater than 0.05 for both models, so we have to use the random effect model.

Table V represents the regression output of the random effect model. The study estimated all six models using this regression. The dependent variable is identical for all six models, the CSR disclosure index (CSRDI). The regression estimation of parameters follows an established statistical procedure. Following this estimation method, the study finds the coefficients for each independent variable of six equations.

In Model 1, the result finds a positive and significant coefficient ( $\beta = 0.091$ ,  $p < 0.05$ ) with managerial ownership (MO), thus supporting *H1*. This outcome reflects the legitimacy theory. It indicates that owner-managed banking businesses perform more CSR activities. A similar result has been found in Model 6. This finding is also consistent with Rashid and Hossain (2022). The result also finds a positive and significant coefficient ( $\beta = 12.760$ ,  $p < 0.01$ ) with the control variable bank size (size), thus supporting *H5*. This result is also consistent with our findings reported in Model 2-6. It indicates that large banks in Bangladesh are more capable, which helps them for responding to society in much better way. This outcome is also coherent with Bidari and Djajadikerta (2020), Eng and Mak (2003), Fahad and Nidheesh (2020), Hossain and Hammami (2009), Hossain and Reaz (2007), Kansal *et al.* (2014), Lattemann *et al.* (2009), Mia and Mamun (2011). The paper documents a positively significant coefficient ( $\beta = 16.034$ ,  $p < 0.01$ ) for the control variable leverage (LVG), thus supporting *H6*. The output is consistent with models 2-5. This suggests that banks in Bangladesh are associated with more risk. So, to give confidence to its shareholders, they are involved in more CSR activities. Besides, it helps banks to avoid agency cost. This outcome is also consistent with Fahad and Nidheesh (2020), Hossain *et al.* (1995), Malone *et al.* (1993), Hossain *et al.* (1995), Malone *et al.* (1993), and Watts and Zimmerman (1978) with the consideration of agency cost theory. The outcome finds a negative and insignificant coefficient ( $\beta = -0.214$ ) with the profitability (ROA), thus supporting *H7*. This finding is also coherent with the result found in Model 2-5. It indicates that older banks get more clients and gradually start to be profit-oriented than socially responsible (Jahid *et al.*, 2020). Additionally, banks are involved in CSR to avoid cost and regulatory bindings (Watts and Zimmerman, 1978; Fields *et al.*, 2001; Healy and Palepu, 2001).

**Table V: Regression Results of the Random Effect Model**

	Dependent Variable = CSRDI					
	Model-1	Model-2	Model-3	Model-4	Model-5	Model-6
<b>MO</b>	0.091** (0.046)					0.144*** (0.054)
<b>BOARD_SIZE</b>		-0.204 (0.156)			0.034 (0.174)	-0.251 (0.203)
<b>IND</b>			0.196*** (0.061)		0.196*** (0.069)	0.173** (0.069)
<b>FEM</b>				0.060 (0.054)	0.031 (0.054)	0.005 (0.054)
<b>SIZE</b>	12.760*** (1.020)	12.630*** (1.020)	11.167*** (1.095)	12.359*** (1.037)	11.048*** (1.139)	11.683*** (1.154)
<b>LVG</b>	16.034*** (5.632)	15.337*** (5.732)	11.586** (5.784)	14.822** (5.880)	10.850* (5.962)	9.432 (5.931)
<b>ROA</b>	-0.214 (0.599)	-0.112 (0.612)	-0.151 (0.594)	-0.284 (0.601)	-0.187 (0.607)	0.102 (0.611)
<b>AGE</b>	-15.352*** (1.521)	-15.194*** (1.529)	-14.195*** (1.545)	-14.920*** (1.567)	-14.011*** (1.579)	-14.215*** (1.566)
<b>TYPE</b>	-10.378*** (1.568)	-8.265*** (1.541)	-7.784*** (1.454)	-8.667*** (1.461)	-7.718*** (1.549)	-9.038*** (1.614)
<b>Year</b>	yes	yes	yes	yes	yes	yes
<b>Constant</b>	-69.241*** (14.513)	-63.048*** (14.568)	-50.861*** (14.958)	-63.215*** (14.603)	-50.074*** (15.054)	-55.114*** (15.037)
<b>Observations</b>	330	330	330	330	330	330
<b>R<sup>2</sup></b>	0.435	0.432	0.447	0.431	0.447	0.459
<b>Adjusted R<sup>2</sup></b>	0.425	0.421	0.436	0.420	0.433	0.444
<b>F Statistic</b>	249.148***	245.313***	260.624***	244.520***	259.660***	271.503***

Note: \*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

Source(s): Authors

In Model 2, the result divulges a negative and insignificant coefficient ( $\beta = -0.204$ ) of the size of the board (BOARD\_SIZE), thus not supporting H2. We have also found a consistent outcome with the result reported in Model 6. Nevertheless, model 5 determines a positive but insignificant coefficient ( $\beta = 0.034$ ) of the BOARD\_SIZE variable. This outcome is consistent with the findings of Amran *et al.* (2014); Rouf and Hossan, (2021). It indicates that CSR disclosure doesn't depend on the board size for the Bangladeshi banks; rather, it depends on the board's ability, willingness, and regulatory bindings. Agency theory supports that a greater board can afford more diversity within the board. However, CSR reporting is greatly affected by the behavior of the organization. The results exhibit a positive and significant coefficient ( $\beta = 0.196$ ,  $p < 0.01$ ) of the board independence (IND) in Model 3, thus supporting H3. This finding is also congruous with the outcome demonstrated in Models 5 & 6. This outcome is consistent with the findings of Allegrini and Greco (2013), Cai *et al.* (2014), Jo and Harjoto (2011); Jahid *et al.* (2020); Jizi *et al.* (2014); Ntim *et al.* (2013); Khan *et al.* (2013); Liao *et al.* (2014); Rashid and Hossain (2022); Rouf (2017); Rouf and Hossan (2021); Sharif and Rashid (2014). It indicates that independent directors in Bangladeshi banks ensure good governance and a lower level of affiliation with the management. With the impact of agency theory, greater proportion of independent directors on the board increases the effectiveness of the board in monitoring and controlling management (Liao

*et al.*, 2014; Jizi *et al.*, 2014). The result of Model 4 documents a positive but insignificant coefficient ( $\beta = 0.060$ ) of the female directors on the board (FEM), thus not supporting *H4*. This outcome is also aligned with the result demonstrated in Models 5 & 6. This outcome is consistent with the findings of Khan (2010) and Muttakin and Ullah (2012). In Bangladesh, female directors are mainly appointed by family members or sponsor directors. Besides, as per agency theory, they have limited power to use in any disclosure issues.

In Model 5, the result exhibits a negative but significant coefficient ( $\beta = -14.215$ ,  $p < 0.01$ ) with the control variable age (AGE), thus supporting *H8*. This finding is also coherent with the result found in Model 1-5. By considering the legitimacy theory, the outcome indicates that newer banks do more CSR reporting (Alsaed, 2006; Hossain and Reaz, 2007). In Model 6, we considered all the hypothesized variables to run the regression. The output exhibits a negative and insignificant coefficient ( $\beta = -9.038$ ,  $p < 0.01$ ) for the control variable bank type (TYPE), thus supporting *H9*. This finding is also coherent with the result found in Model 1-5. As per legitimacy theory, Bangladeshi conventional banks respond more to CSR disclosure. Belal and Momin (2009) also explain that non-Islamic Shari'ah-based banks are more responsive in CSR reporting.

**Table VI: Regression Results of Fixed Effect Model**

	Dependent Variable = CSRDI					
	Model-1	Model-2	Model-3	Model-4	Model-5	Model-6
MO	0.087* (0.047)					0.142** (0.055)
BOARD_SIZE		-0.181 (0.158)			0.056 (0.176)	-0.224 (0.205)
IND			0.204*** (0.065)		0.209*** (0.073)	0.192*** (0.073)
FEM				0.051 (0.054)	0.022 (0.055)	-0.004 (0.055)
SIZE	10.849*** (1.510)	10.706*** (1.514)	9.978*** (1.497)	10.419*** (1.513)	9.858*** (1.527)	10.731*** (1.550)
LVG	10.498 (6.387)	9.904 (6.451)	7.723 (6.395)	9.352 (6.582)	7.295 (6.550)	6.539 (6.498)
ROA	-0.069 (0.642)	0.023 (0.652)	-0.149 (0.635)	-0.122 (0.645)	-0.198 (0.650)	0.052 (0.651)
AGE	-15.300*** (1.537)	-15.153*** (1.544)	-14.208*** (1.557)	-14.915*** (1.582)	-14.064*** (1.591)	-14.271*** (1.579)
TYPE	-9.953*** (1.606)	-7.975*** (1.565)	-7.556*** (1.473)	-8.331*** (1.490)	-7.599*** (1.568)	-8.944*** (1.639)
Year	yes	yes	yes	yes	yes	yes
Observations	330	330	330	330	330	330
<i>R</i> <sup>2</sup>	0.391	0.386	0.403	0.385	0.403	0.416
Adjusted <i>R</i> <sup>2</sup>	0.359	0.355	0.372	0.354	0.368	0.380
F Statistic	33.431***	32.831***	35.151***	32.719***	26.247***	24.498***
df	(6; 313)	(6; 313)	(6; 313)	(6; 313)	(8; 311)	(9; 310)

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

Source(s): Authors

Table VI provides the regression results of the fixed effect model. The study has estimated all six models using the regression of the fixed effect model with the dependent variable CSR disclosure index

(CSRDI). The results depict a positive and significant coefficient with the managerial ownership (MO) in Models 1 & 6. However, Models 2, 5 & 6 find no significant relationship with the size of the board. Independent directors and CSR disclosure are positively and significantly associated in Models 3, 5 & 6. Nonetheless, female directors and CSR reporting are not significantly associated in any model. Control variable board size is positively significant in all models. Nevertheless, control variables leverage (LVG) and profitability (ROA) display insignificant output for disclosing CSR activities. Whereas models 1-6 indicate that newer banks report more CSR and Bangladeshi conventional banks have a greater percentage in CSR reporting than any Islamic Shari'ah-based banks.

## CONCLUSION

This study fulfills the aim of empirically investigating the variability of CSR disclosure for CG elements of DSE-listed banks in Bangladesh using archival data from 2010 to 2020. This paper exhibits that banks in Bangladesh extend their CSR activities towards diversified sectors. Their CSR efforts in all different sectors are evidence of the willingness of the banks to the development and welfare of communities. To conclude the objective of this paper, the random effect model and fixed effect model were used to check the significance of CG elements and other control variables on the extent of the disclosures of CSR activities for the Bangladeshi banking sector. The paper evidence that managerial ownership (MO) and independent directors (IND) variables are positively significant within the extent of disclosing CSR activities. We also found that owner-managed banking businesses perform more CSR activities. Besides, independent directors in Bangladeshi banks ensure good governance and more affiliation with CSR reporting. However, we find no significant impact of the control variable board size and female directors (FEM) on CSR disclosure. In our empirical findings, bigger banks and higher-leverage banks tend to report more CSR activities. Newer banks are more involved in diversified CSR activities. Furthermore, conventional banks are more involved in CSR reporting than any Islamic Shari'ah-based banks in Bangladesh.

In line with the abovementioned results, this paper makes several contributions to the area of CSR. First, the study has expanded previous CSR research in banks that had rigorous regulatory bindings. It documents the scenario of CSR practice in developing economies. It has opened up more aspects to compare these findings with the banks of emerging and advanced nations. Second, the outcome underlines the theoretical impact of the CG variable on the banking sector in Bangladesh. Third, the findings documented the role of the board and the composition of the board in reporting decisions to ensure CG. Furthermore, the outcome reflects the scenario in governance in Bangladeshi banks and helps the regulatory bodies to identify opportunities to positively affect in the banking industry. Fourth, it underlines the role of independent directors as well as female directors in reporting decisions. Lastly, this study captures the intensity of CSR reporting with the hypotheses of DSE-listed banks in Bangladesh. The results will widen the future research and literature in this arena.

Although this empirical research has evidenced some pragmatic implications, it is still not beyond limitations. This limited scope can be fuel for further study. First, we have studied eleven years (from 2010 to 2020) of 30 DSE-listed banks in Bangladesh. The findings in our study are not the generalized outcome for all banks and NBFIs. Unlisted banks and NBFIs have been omitted from the study. Second, panel data from different time series can be considered for time series analysis. Third, a model can run with the comparing outcome between Islamic Shari'ah-based banks and conventional banks or analyze the results before, during, and after a major shock such as Covid-19. Fourth, the paper has studied only the annual reports, banks may disclose their CSR activities through different means such as newspapers, brochures, websites, social media platforms, newsletters, etc. Fifth, a future study could take all DSE-

listed and unlisted banks together as a sample to get a better generalized outcome. And finally, we have considered a single country study. Further research can be done considering multi emerging nations conducting a cross country analysis. Besides, a comparison between developing and developed nations can be made in future studies.

## REFERENCES

- Adams, C.A. Hill, W.Y. and Roberts, C.B. (1998) 'Corporate social reporting practices in Western Europe: legitimating corporate behaviour?', *The British Accounting Review*, 30(1), pp. 1-21.
- Adams, R.B. and Ferreira, D. (2009) 'Women in the boardroom and their impact on governance and performance,''' *Journal of Financial Economics*, 94(2), pp. 291–309.
- Ahmed, F. (2006) 'Corporate governance – Bangladesh perspective,''' paper presented at the ICMAB Conference on Corporate Governance Bangladesh Perspective, Dhaka, pp. 24-7.
- Alam, T. Mossamma, S.H. and Uddin, M.E. (2021) 'An Empirical Study on Export, Import and Economic Growth in Bangladesh', *Asian Journal of Economics, Finance and Management*, 5(4), pp.1-8.
- AL-Dhamari, R.A. Ku Ismail, K.N.I., and Al-Gamrh, B.A. (2016) 'Board diversity and corporate payout policy: Do free cash flow and ownership concentration matter?', *Corporate Ownership and Control*, 14(1), pp. 373–383.
- Allegrini, M. and Greco, G. (2013) 'Corporate boards, audit committees and voluntary disclosure: Evidence from Italian Listed Companies', *Journal of Management and Governance*, 17(1), pp. 187–216.
- Alsaeed, K. (2006) 'The association between firm-specific characteristics and disclosure: The case of Saudi Arabia,''' *Managerial Auditing Journal*, 21(5), pp. 476–496.
- Amran, A. Lee, S.P. and Devi, S.S. (2014) 'The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality,''' *Business Strategy and the Environment*, 23(4), pp. 217–235.
- Aribi, Z.A. and Gao, S. (2010) 'Corporate social responsibility disclosure,''' *Journal of Financial Reporting and Accounting*, 8(2), pp. 72–91.
- Barako, D.G. and Brown, A.M. (2008) 'Corporate Social Reporting and Board Representation: Evidence from the Kenyan Banking Sector,''' *Journal of Management and Governance*, 12(4), pp. 309–324.
- Barnea, A. and Rubin, A. (2010) 'Corporate social responsibility as a conflict between shareholders', *Journal of Business Ethics*, 97(1), pp. 71–86.
- Bear, S. Rahman, N. and Post, C. (2010) 'The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation,''' *Journal of Business Ethics*, 97(2), pp. 207–221.
- Belal, A.R. and Momin, M. (2009) 'Corporate social reporting (CSR) in emerging economies: A review and future direction,''' *Research in Accounting in Emerging Economies*, 9, pp. 119–143.
- Bernardi, R.A. Bosco, S.M. and Columb, V.L. (2013) 'Does female representation on boards of directors associate with the 'most ethical companies' list?', *Corporate Reputation Review*, 13(1), pp. 132–150.
- Bhattacharyya, A. (2015) 'Corporate Social and Environmental Responsibility in an Emerging Economy: Through the Lens of Legitimacy Theory' *Australasian Accounting, Business and Finance Journal*, 9(2), pp. 79–92.
- Bidari, G. and Djajadikerta, H.G. (2020) 'Factors influencing corporate social responsibility disclosures in Nepalese banks', *Asian Journal of Accounting Research*, 5(2), pp. 209–224.



- Carter, D.A. Simkins, B.J. and Simpson, W.G. (2003) 'Corporate governance, board diversity, and firm value,' *Financial Review*, 38(1), pp.33-53.
- Chau, G.K. and Gray, S.J. (2010) 'Family ownership, board independence and voluntary disclosure: Evidence from Hong Kong', *Journal of International Accounting, Auditing and Taxation*, 19(2), pp. 93–109.
- Chau, G.K. and Gray, S.J. (2002) 'Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore,' *International Journal of Accounting*, 37(2), pp. 247–265.
- Cooke, T.E. (1989) 'Disclosure in the Corporate Annual Reports of Swedish Companies', *Accounting and Business Research*, 19(74), pp. 113–124.
- Cowen, S.S. Ferreri, L.B. and Parker, L.D. (1987) 'The impact of corporate characteristics on social responsibility disclosure: A typology and frequency-based analysis' *Accounting, Organizations and Society*, 12(2), pp. 111–122.
- Dahlsrud, A. (2008) 'How corporate social responsibility is defined: An analysis of 37 definitions', *Corporate Social Responsibility and Environmental Management*, 15(1), pp. 1–13.
- Dahya, J. Lonie, A.A., and Power, D.M. (1996) 'The Case for Separating the Roles of Chairman and CEO: An Analysis of Stock Market and Accounting Data', *Corporate Governance: An International Review*, 4(2), pp. 71–77.
- Deegan, C. (2002) 'Introduction: The legitimising effect of social and environmental disclosures—a theoretical foundation', *Accounting, auditing & accountability journal*, 15(3), pp. 282–311.
- Deegan, C. and Gordon, B. (1996) 'A study of the environmental disclosure practices of Australian corporations', *Accounting and Business Research*, 26(3), pp. 187–199.
- Deegan, C. and Rankin, M. (1997) 'The materiality of environmental information to users of annual reports' *Accounting, Auditing & Accountability Journal*, 10(4), pp. 562–583.
- Deegan, C. Rankin, M. and Voght, P. (2000) 'Firms' disclosure reactions to major social incidents: Australian evidence,' *Accounting Forum*, 24(1), pp. 101–130.
- Eng, L.L. and Mak, Y.T. (2003) 'Corporate governance and voluntary disclosure,' *Journal of Accounting and Public Policy*, 22(4), pp. 325–345.
- Fahad, P. and Nidheesh, K.B. (2020) 'Determinants of CSR disclosure: an evidence from India,' *Journal of Indian Business Research*, 13(1), pp. 110–133.
- Fama, E.F. and Jensen, M.C. (1983) 'Separation of Ownership and Control,' *Journal of Law and Economics*, 26(2), pp. 301–325.
- Farooque, O.A. van Zijl, T. Dunstan, K. and Karim, A.W. (2007) 'Ownership structure and corporate performance: Evidence from Bangladesh,' *Asia-Pacific Journal of Accounting & Economics*, 14(2), pp.127-149.
- Friedman, M. (1970) 'The social responsibility of business is to increase its profits,' *New York Times Magazine*, Sept. 12.
- Fields, T.D., Lys, T.Z. and Vincent, L. (2001) 'Empirical research on accounting choice,' *Journal of accounting and economics*, 31 (1-3), pp. 255-307.
- Fourkan, M. (2021) 'Global Travel Restriction's Effect on The Number of Deaths from COVID-19: An Analysis on Global COVID-19 Data'.
- George, G. Howard-Grenville, J. Joshi, A. and Tihanyi, L. (2016) 'Understanding and tackling societal grand challenges through management research', *Academy of Management Journal*, 59(6), pp.1880-1895.
- Gray, R. Kouhy, R. and Lavers, S. (1995) 'Constructing a research database of social and environmental reporting by UK companies', *Accounting, Auditing & Accountability Journal*, 8(2), pp. 78–101.
- Gray, R. Kouhy, R. and Lavers, S. (1995) 'Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure', *Accounting, Auditing & Accountability*

*Journal*, 8(2), pp. 47–77.

- Guthrie, J. and Parker, L.D. (1989) 'Corporate Social Reporting: A Rebuttal of Legitimacy Theory', *Accounting and Business Research*, 19(76), pp. 343–352.
- Guthrie, J. and Parker, L.D. (1990) 'Corporate social disclosure practice: a comparative international analysis', *Advances in public interest accounting*, 3, pp. 159–175.
- Habib, S.M.A. and Ullah, M.S. (2022) 'Reshaping Governance in Banking in the Covid-19 Regime', *Journal of Banking, Finance & Insurance*, 1, pp. 31–48.
- Haji, A.A. (2013) 'Corporate social responsibility disclosures over time: Evidence from Malaysia', *Managerial Auditing Journal*, 28(7), pp. 647–676.
- Halme, M. Roome, N. and Dobers, P. (2009) 'Corporate responsibility: Reflections on context and consequences', *Scandinavian Journal of Management*, 25(1), pp. 1–9.
- Hamid, F.Z.A. (2004) 'Corporate social disclosure by banks and finance companies: Malaysian evidence', *Corporate Ownership and Control*, 1(4), pp. 118–130.
- Haniffa, R.M. and Cooke, T.E. (2002) 'Culture, corporate governance and disclosure in Malaysian corporations', *Abacus*, 38(3), pp. 317–349.
- Harjoto, M.A. and Jo, H. (2011) 'Corporate Governance and CSR Nexus', *Journal of Business Ethics*, 100(1), pp. 45–67.
- Harte, G. and Owen, D. (1991) 'Environmental Disclosure in the Annual Reports of British Companies: A Research Note', *Accounting, Auditing & Accountability Journal*, 4(3), pp. 51–60.
- Hassan, A. and Harahap, S.S. (2010) 'Exploring corporate social responsibility disclosure: the case of Islamic banks', *International Journal of Islamic and Middle Eastern Finance and Management*, 3(3), pp. 203–227.
- Healy, P.M. and Palepu, K.G. (2001) 'Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature', *Journal of accounting and economics*, 31(1-3), pp. 405–440.
- Herremans, I.M., Akathaporn, P. and McInnes, M. (1993) 'An investigation of corporate social responsibility reputation and economic performance', *Accounting, Organizations and Society*, 18(7–8), pp. 587–604.
- Hidalgo, R.L. García-Meca, E. and Martínez, I. (2011) 'Corporate Governance and Intellectual Capital Disclosure', *Journal of Business Ethics*, 100(3), pp. 483–495.
- Hopkins, M. (2003) 'The business case for CSR: where are we?', *International Journal of Business Performance Management*, 5(2-3), pp. 125–140.
- Hossain, M. and Hammami, H. (2009) 'Voluntary disclosure in the annual reports of an emerging country: The case of Qatar', *Advances in Accounting*, 25(2), pp. 255–265.
- Hossain, M. and Reaz, M. (2007) 'The determinants and characteristics of voluntary disclosure by Indian banking companies', *Corporate Social Responsibility and Environmental Management*, 14(5), pp. 274–288.
- Hossain, M. Perera, M.H.B. and Rahman, A.R. (1995) 'Voluntary Disclosure in the Annual Reports of New Zealand Companies', *Journal of International Financial Management & Accounting*, 6(1), pp. 69–87.
- Huse, M. and Solberg, A.G. (2006) 'Gender-related boardroom dynamics: How Scandinavian women make and can make contributions on corporate boards', *Women in Management Review*, 21(2), pp. 113–130.
- Ibrahim, K. (2014) 'Firm Characteristics and Voluntary Segments Disclosure among the Largest Firms in Nigeria', *International Journal of Trade, Economics and Finance*, 5(4), pp. 327–331.
- Ibrahim, N.A. and Angelidis, J.P. (1994) 'Effect of Board Members' Gender on Corporate Social Responsiveness Orientation', *Journal of Applied Business Research (JABR)*, 10(1), pp. 35–40.
- Jahid, M.A. Rashid, M.H.U. Hossain, S.Z. Harayono, S. and Jatmiko, B. (2020) 'Impact of corporate

- governance mechanisms on corporate social responsibility disclosure of publicly-listed banks in Bangladesh', *The Journal of Asian Finance, Economics and Business*, 7(6), pp. 61-71.
- Jizi, M.I. Salama, A. Dixon, R. and Stratling, R. (2014) 'Corporate governance and corporate social responsibility disclosure: Evidence from the US banking sector', *Journal of Business Ethics*, 125, pp. 601-615.
- Jo, H. and Harjoto, M.A. (2011) 'Corporate Governance and Firm Value: The Impact of Corporate Social Responsibility', *Journal of Business Ethics*, 103(3), pp. 351-383.
- 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*, 42(5), pp. 564-576.
- Kansal, M. Joshi, M. and Batra, G.S. (2014) 'Determinants of corporate social responsibility disclosures: Evidence from India', *Advances in Accounting*, 30(1), pp. 217-229.
- Kathyayini, kathy R. Carol, A.T. and Laurence, H.L. (2012) 'Corporate governance and environmental reporting: An Australian study', *Corporate Governance: The international journal of business in society*, 12(2), pp. 143-163.
- Khan, A. and Hossain, D.M. (2006) 'Disclosure on corporate governance issues in Bangladesh: A survey of the annual reports', *Bangladesh Accountant*, pp. 95-99.
- 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*, 114, pp. 207-223.
- Khan, H.U.Z. (2010) 'The effect of corporate governance elements on corporate social responsibility (CSR) reporting: Empirical evidence from private commercial banks of Bangladesh', *International Journal of Law and Management*, 52(2), pp. 82-109.
- Książka, P. and Fischbach, B. (2017) 'Triple bottom line: The pillars of CSR', *Journal of corporate responsibility and leadership*, 4(3), pp. 95-110.
- Larmou, S. and Vafeas, N. (2010) 'The relation between board size and firm performance in firms with a history of poor operating performance', *Journal of Management and Governance*, 14(1), pp. 61-85.
- Lattemann, C. Fetscherin, M. Alon, I. Li, S. and Schneider, A.M. (2009) 'CSR communication intensity in Chinese and Indian multinational companies', *Corporate Governance: An International Review*, 17(4), pp. 426-442.
- Letendre, L. (2004) 'The dynamics of the boardroom', *Academy of Management Perspectives*, 18(1), pp. 101-104.
- Leung, S. and Horwitz, B. (2004) 'Director Ownership and Voluntary Segment Disclosure: Hong Kong Evidence', *Journal of International Financial Management and Accounting*, 15(3), pp. 235-260.
- Liao, L. Lin, T.P. and Zhang, Y. (2018) 'Corporate Board and Corporate Social Responsibility Assurance: Evidence from China', *Journal of Business Ethics*, 150(1), pp. 211-225.
- Malone, D. Fries, C. and Jones, T. (1993) 'An empirical investigation of the extent of corporate financial disclosure in the oil and gas industry', *Journal of Accounting, Auditing & Finance*, 8(3), pp. 249-273.
- Mangos, N.C. and Lewis, N.R. (1995) 'A socio-economic paradigm for analysing managers' accounting choice behaviour', *Accounting, Auditing & Accountability Journal*, 8(1), pp. 38-62.
- Martinez, F. Smith, M.A. and Esposito, M. (2017) 'Perspectives on the role of business in social innovation', *Journal of Management Development*, 36(5), pp. 681-695.
- Matuszak, Ł. and Różańska, E. (2017) 'An examination of the relationship between CSR disclosure and financial performance: The case of Polish banks', *Journal of Accounting and Management Information Systems*, 16(4), pp. 522-533.

- Matuszak, Ł., Róžańska, E. and Macuda, M. (2019) 'The impact of corporate governance characteristics on banks' corporate social responsibility disclosure: Evidence from Poland', *Journal of Accounting in Emerging Economies*, 9(1), pp. 75–102.
- McWilliams, A. and Siegel, D. (2001) 'Profit maximizing corporate social responsibility', *Academy of Management Review*, 26(4), pp. 504–505.
- Mia, P. and Al Mamun, A. (2011) 'Corporate social disclosure during the global financial crisis', *International Journal of Economics and Finance*, 3(6), pp. 174–187.
- Money, K. and Schepers, H. (2007) 'Are CSR and corporate governance converging?: A view from boardroom directors and company secretaries in FTSE100 companies in the UK', *Journal of General Management*, 33(2), pp. 1–11.
- Muttakin, M.B. and Ullah, M.S. (2012) 'Corporate governance and bank performance: Evidence from Bangladesh. Corporate Governance and Bank Performance: Evidence from Bangladesh (October 1, 2012)', *Corporate Board: Role, Duties & Composition*, 8(1), pp. 62–69
- Myers, S.C. (1977) 'Determinants of corporate borrowing', *Journal of Financial Economics*, 5(2), pp. 147–175.
- Newson, M. and Deegan, C. (2002) 'Global expectations and their association with corporate social disclosure practices in Australia, Singapore, and South Korea', *International Journal of Accounting*, 37(2), pp. 183–213.
- Ntim, C.G. and Soobaroyen, T. (2013) 'Corporate Governance and Performance in Socially Responsible Corporations: New Empirical Insights from a Neo-Institutional Framework', *Corporate Governance: An International Review*, 21(5), pp. 468–494.
- Parker, L.D. (2020) 'The COVID-19 office in transition: cost, efficiency and the social responsibility business case', *Accounting, Auditing and Accountability Journal*, 33(8), pp. 1943–1967.
- Patten, D.M. (1992) 'Intra-industry environmental disclosures in response to the Alaskan oil spill: A note on legitimacy theory', *Accounting, Organizations and Society*, 17(5), pp. 471–475.
- Perego, P. and Kolk, A. (2012) 'Multinationals' Accountability on Sustainability: The Evolution of Third-party Assurance of Sustainability Reports', *Journal of Business Ethics*, 110(2), pp. 173–190.
- Petra, S.T. (2005) 'Do outside independent directors strengthen corporate boards?', *Corporate Governance*, 5(1), pp. 55–64.
- Pflugrath, G., Roebuck, P. and Simnett, R. (2011) 'Impact of assurance and assurer's professional affiliation on financial analysts' assessment of credibility of corporate social responsibility information', *Auditing*, 30(3), pp. 239–254.
- Platonova, E. Asutay, M. Dixon, R. and Mohammad, S. (2018) 'The impact of corporate social responsibility disclosure on financial performance: Evidence from the GCC Islamic banking sector', *Journal of Business Ethics*, 151, pp. 451–471.
- Rashid, M.H.U. and Hossain, S.Z. (2022) 'Does board independence moderate the effect of politician directors on CSR disclosure? Evidence from the publicly listed banks in Bangladesh', *Social Responsibility Journal*, 18(5), pp. 935–950.
- Roberts, R.W. (1992) 'Determinants of corporate social responsibility disclosure: An application of stakeholder theory', *Accounting, Organizations and Society*, 17(6), pp. 595–612.
- Rouf, M.A. (2017) 'Firm-specific characteristics, corporate governance and voluntary disclosure in annual reports of listed companies in Bangladesh', *International Journal of Managerial and Financial Accounting*, 9(3), pp. 263–282.
- Rouf, M.A. and Akhtaruddin, M. (2020) 'Corporate governance reporting in Bangladesh', *International Journal of Ethics and Systems*, 36(1), pp. 42–57.
- Rouf, M.A. and Hossan, M.A. (2021) 'The effects of board size and board composition on CSR disclosure: a study of banking sectors in Bangladesh', *International Journal of Ethics and*



- Systems*, 37(1), pp. 105–121.
- Samaha, K. Khelif, H. and Hussainey, K. (2015) 'The impact of board and audit committee characteristics on voluntary disclosure: a meta-analysis', *Journal of International Accounting, Auditing and Taxation*, 24, pp. 13–28.
- Schipper, K. (1981) 'Discussion of voluntary corporate disclosure: The case of interim reporting', *Journal of Accounting Research*, 19, pp. 85–88.
- Siciliano, J.I. (1996) 'The Relationship of Board Member Diversity to Organizational Performance', *Journal of Business Ethics*, 15(12), pp. 1313–1320.
- Simpson, W.G. and Kohers, T. (2002) 'The Link between Corporate Social and Financial Performance: Evidence from the Banking', *Journal of Business Ethics*, 35(2), pp. 97–109.
- Singhvi, S.S. and Desai, H.B. (1971) 'An Empirical Analysis of the Quality of Corporate Financial Disclosure', *The Accounting Review*, 46(1), pp. 129–138.
- Sun, N. Salama, A. Hussainey, K. and Habbash, M. (2010) 'Corporate environmental disclosure, corporate governance and earnings management', *Managerial auditing journal*, 25(7), pp. 679–700.
- Tilt, C.A. (1994) 'The Influence of External Pressure Groups on Corporate Social Disclosure Some Empirical Evidence', *Accounting, Auditing & Accountability Journal*, 7(4), pp. 47–72.
- Trotman, K.T. and Bradley, G.W. (1981) 'Associations between social responsibility disclosure and characteristics of companies', *Accounting, organizations and society*, 6(4), pp. 355–362.
- Uddin, S. and Choudhury, J.A. (2008) 'Rationality, traditionalism and the state of corporate governance mechanisms: Illustrations from a less-developed country', *Accounting, Auditing and Accountability Journal*, 21(7), pp. 1026–1051.
- Ullah, M.S. (2013) 'Corporate Social Responsibility Practices in the Banking Sector in Bangladesh - An Assessment', *Bank Parikrama*, XXXVIII, pp. 129–152. Available at: <https://www.researchgate.net/publication/265089327>.
- Ullah, M.S. (2021) 'Reinforcing the Essence of Corporate Governance and Corporate Social Responsibility in Banks in the Context of COVID-19', *Bank Parikrama*, XLVI(3 & 4), pp. 91–122.
- Ullah, M.S. Muttakin, M.B. and Khan, A. (2019) 'Corporate governance and corporate social responsibility disclosures in insurance companies', *International Journal of Accounting and Information Management*, 27(2), pp. 284–300.
- Ullman, A. (1985) 'Data in Search of a Theory: A Critical Examination of the Relationship Among Social Performance, Social Disclosure and Economic Performance', *Academy of Management Review*, Vol. 10, No. 3, pp. 540–577.
- Waddock, S.A. and Graves, S.B. (1997) 'The corporate social performance-financial performance link', *Strategic Management Journal*, 18(4), pp. 303–319.
- Wallace, R.S.O. Naser, K. and Mora, A. (1994) 'The Relationship Between the Comprehensiveness of Corporate Annual Reports and Firm Characteristics in Spain', *Accounting and Business Research*, 25(97), pp. 41–53.
- Watts, R.L. and Zimmerman, J.L. (1978) 'Towards a Positive Theory of the Determination of Accounting Standards', *Accounting Review*, 53(1), pp. 112–134.
- Webb, E. (2004) 'An examination of socially responsible firms' board structure', *Journal of Management and Governance*, 8(3), pp. 255–277.
- Williams, R.J. (2003) 'Women on Corporate Boards of Directors and their Influence on Corporate Philanthropy', *Journal of Business Ethics*, 42, pp. 1–10.
- Woodward, D.G., Edwards, P. and Birkin, F. (1996) 'Organizational legitimacy and stakeholder information provision', *British journal of management*, 7(4), pp. 329–347.
- Zhang, D. Hu, M. and Ji, Q. (2020) 'Financial markets under the global pandemic of COVID-19',



*Finance Research Letters*, 36, pp. 1–6.

Zu, L. (2008) '*Corporate social responsibility, corporate restructuring and firm's performance*', Springer.

**Appendix A: CSR Checklist**

Serial No.	CSR Items
	<b>A: Contribution to Health sector</b>
1	Medical support for AIDS patients
2	HIV/AIDS assistance program
3	Health assistance to underprivileged and disable children
4	Support to acid and dowry victims
5	Donation to Smile Brighter Program (cleft-lips and/or palate surgery for boys and girls)
6	Organizing plastic surgery operation
7	Donation of costly medical equipment in different medical hospitals
8	Donation of cash money for setting up cancer hospital
9	Donation of cash money for operation theater for kidney hospital
10	Donation to rotary club to purchase equipment to help the disadvantaged children with hearing impairment
11	Donation of cash money to women and child hospitals to bear their operational cost
12	Donation to different eyes hospital
13	Financial support for performing ophthalmological operation of all born blind children
	<b>B: Contribution to education sector</b>
14	Donation to the schools for construction
15	Donation to the universities for constructing research center
16	Scholarships to the research students of different universities
17	Scholarship to meritorious and poor students
18	Granted fund for blind education and rehabilitation
19	Scholarships for physical disable students
20	Donation of books to different colleges and universities
21	Organizing different local and international students' competitions
22	Donation for the students whose are suffered from different death catching diseases
23	Internship facility for universities students with cash allowance
24	Part time job facilities for the students
	<b>C: Activities for natural disaster</b>
25	Donation for the flood and tornado affected people
26	Donation for the landslide's victim people
27	Donation for rehabilitations of homeless people due to river erosions
28	Distribution of worm cloths among the cold-affected people
29	Donation to Prime Minister relief fund for flood victim people
	<b>D: Other donations</b>
30	Establishment of health care center for rural people for free medical services
31	Donation to the families' victim of road accidents
32	Donation to hospitals for purchasing equipment for reducing sufferings of poor Thalassemia patients
33	Donation for improvement of Street children's condition
34	Financial support to the natural affected victims of neighboring countries
35	Sponsoring to different national and international games and events
36	Donation to different sports organizations
37	Assistance to different Trusts that work for destitute people of the society

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	<b>E: Activities for employees</b>
38	vaccination program for employees
39	Employees' trainings cost
40	Number of employees
41	Career development
42	Employee benefits
43	Compensation plan for employees
44	Facilities for employees' children
45	Number of employees trained
46	Amount of budget allocation on employee training
47	Employees' category by function
48	Cost of employees' safety measures
49	Information about support for day-care, maternity and paternity leave
	<b>F: Environmental issues</b>
50	Awards for environmental protection
51	Planting of trees to make the country green
52	Support for public/private actions designed to protect the environment (e.g., CNG station establishment)
53	Past and current operating costs of environment-friendly equipment and facilities
54	Promoting environmental awareness to the community through promotional tools
	<b>G: Product/services/statements</b>
55	Explanation of major kinds of products/services
56	Improvement of product/service quality
57	Improvement of customer service
58	Receipt of awards (local or international) for CSR activities
59	Value added statement
60	Providing information for conducting safety research on the company's products

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**Source(s):** Khan (2010)

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Declarations

### **Ethics approval and consent to participate**

Not applicable

### **Consent for publication**

Not applicable

### **Availability of data and materials**

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

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