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#### **Article**

Institutional factors and CSR reporting in a developing country: Evidence from the neo-institutional perspective

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# Institutional factors and CSR reporting in a developing country: Evidence from the neo-institutional perspective

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# ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

## Institutional factors and CSR reporting in a developing country: Evidence from the neo-institutional perspective

Md Abu Jahid<sup>1\*</sup>, Rizal Yaya<sup>2</sup>, Suryo Pratolo<sup>2</sup> and Firman Pribadi<sup>2</sup>

Abstract: This research aims to investigate how institutional pressures, such as legal, cultural, and normative factors, affect CSR reporting (CSRR) in the context of a developing nation. Based on the purposive sample method, 272 DSE-listed companies from 2017–18 to 2020–21 were identified, and 1088 observations were investigated in this research. The study also employed a content analysis approach to preparing the CSRR index, considering 40 items. The proposed hypotheses were then investigated using the OLS regression model. Applying the neo-institutional theory and the regression analysis results revealed that CSR reporting is positively and significantly associated with the country's institutional environment. Specifically, the presence of CSR reporting guidelines, the reforming of the corporate governance code, firms auditing with big audit firms, the company's multinational operations, and firm GRI registration positively impact CSR reporting. As opposed to that, firms' membership in CSR-related associations was found to have a negative and insignificant impact on CSR reporting. This study pays rigorous attention to policy-level and managerial implications. Mainly, the study provides the regulatory



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Md Abu Jahid is a Ph.D. researcher at the Program of Doctoral Management in Universitas Muhammadiyah Yogyakarta, Indonesia. He worked in the higher educational institutions in Bangladesh, Saudi Arabia, and Indonesia. Mr. Jahid has been teaching as an adjunct faculty in Universitas Muhammadiyah Yogyakarta since September 2019. His research interests include Managerial Accounting. Rizal Yaya is a Professor in the Department of Accounting, Universitas Muhammadiyah Yogyakarta, Indonesia. He is also the Dean of the Faculty of Economics and Business. His research interests include managerial and Islamic accounting. Survo Pratolo is an Associate Professor in the Department of Accounting, Universitas Muhammadiyah Yogyakarta, Indonesia. He is also Vice-Rector for Financial and Asset Management. His research interests include public-sector accounting. Firman Pribadi is an Assistant Professor in the Department of Management, Universitas Muhammadiyah Yogyakarta, Indonesia. His research interests include Risk Management.

#### **PUBLIC INTEREST STATEMENT**

Corporate Social Responsibility (CSR) is a hot topic in the changing world. The impact of institutional factors on CSR reporting is examined in this study. For example, developing and applying CSR guidelines, revising corporate governance regulations, and company audits with big audit firm implications. Indeed, several institutions continuously work for a better society and environment for the world's well-being. It is implemented in the name of CSR by the company's taking facility for their functions from society and the environment. We gauge their contributions in this regard based on their CSR-related reporting in yearly reports.

This study found the pressures of the institutions on the companies to contribute and more CSR engagement in Bangladesh.







bodies with a valuable insight into applying institutional factors to enhance firm CSR reporting. The study's findings added to the body of knowledge on CSR reporting by presenting new data on the influence of institutional elements on CSR reporting in the setting of a developing nation like Bangladesh.

Subjects: Environmental Economics; Accounting; Corporate Governance; Corporate Social Responsibility & Business Ethics

Keywords: Neo-institutional theory; institutional factors; CSR reporting; developing country; Bangladesh

#### 1. Introduction

CSR was born out of the belief that businesses may positively and substantially impact social development while also enjoying the potential advantages (Du et al., 2010). CSR has grown significantly over time as businesses' obligations to society have been recognized as going beyond financial gain (Carroll & Shabana, 2010). CSR is "a concept whereby companies integrate social and environmental concerns in their business operations and their interaction with their stakeholders voluntarily" (2001; The European Commission, page 6). As stated by United Nations Industrial Development Organizations (UNIDO), CSR is a management concept in which companies integrate social and environmental issues into their internal operations and stakeholder interactions. It is a way for a business to address the needs of various stakeholders while balancing financial, environmental, and social imperatives (United Nations Industrial Development Organization (UNIDO), 2020). In this study, "CSR" refers to reporting procedures and policies businesses use to lessen the adverse effects of their activities on people and the environment. According to Gray et al. (1996), and De Villiers and Alexander (2014), the concept includes CSR disclosure or sustainability reporting, which refers to company disclosures regarding their impact on society or the environment. CSR provides numerous chances for organizations and their communities to improve (KPMG, 2022).

Businesses now see CSR as an investment for the long term. Better financial performance as a source of profits, the creation of new business networks, increased hiring and employee retention, and an improved brand image have all been connected to CSR and are positive factors in a company's reputation (Kahreh et al., 2014). M. Weber (2008) outlined five potential advantages for businesses participating in CSR activities. First, CSR may improve a company's image and reputation (Dutot et al., 2016), which improves its competitiveness (Gray & Balmer, 1998). Second, CSR increases employee motivation, retention, and recruitment since motivated employees are more likely to stay with a company or participate in CSR initiatives (Pedersen, 2015). Third, cost savings are a possible benefit for companies. Establishing a sustainability strategy or building a good rapport with a particular stakeholder, like regulators, can aid businesses in becoming more efficient, saving time, and gaining access to funding, claim Epstein and Roy (2001). Furthermore, CSR may result in increased revenue through increased sales and market share, typically obtained indirectly through a positive brand image (Branco & Rodrigues, 2006). Finally, by participating in CSR initiatives, businesses can mitigate and manage risks such as negative headlines, boycotts, and dissatisfied customers (M. Weber, 2008).

CSRR started managing public opinion and satisfying stakeholders with annual reports (Patten, 1992). CSR reporting began with employee reporting, then expanded to include more specialized categories, including social reporting, triple bottom line reporting, environmental reporting, and, ideally, sustainability reporting (Bhur et al., 2007). The CSRR of firms also informs stakeholders that businesses operate not only for profit but also for social, environmental, and ethical reasons (A. Rashid et al., 2020). CSRR started to receive increased attention in the early 1990s for several reasons, including rising stakeholder pressure, public awareness, and social worries about unethical business practices (Tschopp & Nastanski, 2014). The importance of CSRR as a tool to manage



these duties has increased with the importance of important stakeholders and the recognition of more accountability needs from stakeholders with nonfinancial expectations (Gray et al., 1996). This phenomenon has emerged as a research topic, in line with the relevance of CSRR. CSRR has been defined in a variety of ways by different scholars and organizations. It has also been referred to as social accounting, corporate social disclosures, sustainability reporting, and social responsibility accounting (Belal, 2001; Gray, 2000; Mathews, 1984). Understanding such a wide variety of expressions can be challenging and require clarification (Gray, 2000; Mathews, 1984). Simply, it is the public disclosure of a corporation's social, legal, and environmental issues (A.R. Belal, 2008).

The need to consider how corporate operations affect the social and environmental surroundings has progressively increased over the last few decades (Castelo Branco & Delgado, 2011). Companies have four fundamental obligations to their stakeholders: ensuring financial returns, complying with rules and regulations, acting morally beyond legal requirements, and being willing to participate in voluntary activities (Carroll, 1983, p. 608). At first, the company's role was considered as maximizing shareholder returns and the fundamental reason for its existence. M. A. K. Masud et al. (2019) mentioned that the primary responsibility of corporate management was to boost shareholders' wealth within the legal border. Such a responsibility causes corporate executives to ignore other stakeholders in their operations, such as the environment, ecology, and society (Uwuigbe et al., 2017). However, because of globalization, increased stakeholder activity, and the free flow of information, firms must now conduct business socially and transparently. Due to the adoption and development of socially responsible practices, the role of a company has expanded to act as a social agent with essential responsibilities to society (Latapí Agudelo et al., 2019). To maintain the long-term stability of their functions, firms are expected to behave morally and as good corporate citizens.

CSR reporting with annual reports has become a high trend in the last years, with an increasing number of nations, such as the European Union, United States, India, Indonesia, Denmark, Argentina, France, China, and Malaysia. They have adopted mandatory reporting for CSR information with their annual reports (KPMG, 2020).

Bangladesh after its independence in the last 52 years, several steps have been taken by various political governments to improve the country's socio-political scenario. However, the country has lagged other developing countries because of political unrest, military coups, weak government, lack of long-term development strategy, and corruption (M. Masud et al., 2018). To achieve quick industrialization through foreign investment, Bangladesh is concentrating on an industrial development plan led by the private sector (Belal, 2001). Although such a strategy is beneficial economically, it has produced many ethical, social, and environmental issues, calling for increased corporate transparency and accountability (Qian et al., 2021; Belal & Owen, 2007). Bangladesh's labor policy emphasizes improving worker working conditions by integrating them into production, swiftly resolving labor disputes, outlawing child labor, and ensuring education, training, and a safe workplace (Belal, 2001). The Bangladesh Companies Act of 1994 does not require publicly traded companies to declare their CSR-related activity (M.M. Rahim, 2012). Companies are encouraged to adopt strategies and initiatives that take social and environmental concerns into account due to the social and environmental crises.

From the above discussion, an imbalance of work is seen in the literature to find the relevant regional investigation except in southeast Asian and GCC countries. For a single country, empirical analysis of unequal work is also seen in the literature to find relevant works. Presently, Malaysia is the highest-examined country on CSR, following Indonesia, Libya, India, Taiwan, and Pakistan (R.M. Haniffa & Cooke, 2002; Tran, 2018; Alshabili, Elamer & Beddewela, 2019; Shu & Chiang, 2020; Gerged, 2021; Suryanto et al., 2022). In the context of developing economies in Bangladesh, partial investigations have been done on institutional pressures on CSR reporting. With our best understanding, an investigation has yet to be initiated as our setting considers all listed firms for an extended period.



#### 2. Theoretical framework and hypothesis

#### 2.1. Theoretical framework

The term "institution" has been described in a variety of forms (DiMaggio & Powell, 1983, 1991; Scott, 1987; C. Scott, 2001), but most often, it refers to firmly established socioeconomic attitudes, norms, and practices in fields like law, politics, religion, education, and the workplace (W. Judge et al., 2010). Economic institutions are keen on discovering why members of society (people, companies, and nations) engage in financial activities like growth boosting (W. Q. Judge et al., 2008). These establishments can be formal or informal. As a result, the neo-institutional theory is connected directly to the concepts of "economic efficiency" or "instrumentation" (Aguilera et al., 2007; Zattoni & Cuomo, 2008) from an economic standpoint. It indicates that people compete with one another for resources broadly to further their interests. On the other hand, sociologists see institutions as sociocultural building blocks with symbolic meaning rather than just efficient ways to supply goods and services (Meyer & Rowan, 1977). Prior research on CSR reporting, CSR performance, and CSR disclosure heavily relied on several theories, including resource dependency theory, agency theory, intuitional theory, resource-based view, signaling theory, stakeholder theory, and legitimacy theory (Eteokleous et al., 2016; Velte, 2022). Earlier empirical studies suggest that the institutional context significantly impacts how corporations adopt new accounting and reporting methods (Khan et al., 2020). According to this viewpoint, CSR reporting is crucial for managing a legitimation strategy and a company's reputation (Martin-de Castro, 2021). It is a crucial avenue for businesses to connect with and persuade numerous stakeholders that they are responsive to societal concerns (Ardiana, 2019).

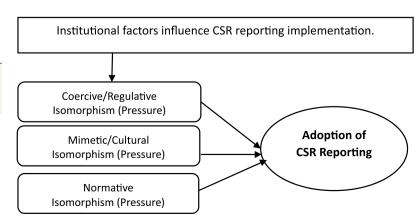
The study on the connection between institutional factors and CSR reporting is examined, and the framework proposed by DiMaggio and Powell (1983, 1991) is then argued as a means of developing pertinent and testable institutional variables and factors (See Figure 1). The three pillars of regulative, cultural, and normative ideas were then employed to reflect the impact of institutional components on CSR reporting. Appropriate hypotheses are generated for each of the variables utilizing reasons from the current literature, like those provided by Amran and devi (2007) and Alshbili et al. (2019).

#### 2.2. Hypothesis development

A hypothesis is a prediction based on sample data concerning the population parameter to be investigated (Felin et al., 2021). The essential tool in statistical inference is statistical hypothesis testing. In business and industry, hypothesis tests are commonly used to make decisions. At the same time, probability and selection theory is becoming increasingly important in establishing the criteria used to make business decisions. Making estimates or assumptions about the populations involved is essential when making decisions. Statistical hypotheses are assumptions that may or

Figure 1. The neo-institutional (coercive, mimetic, and normative) framework.

Source: Adopted from Azlan Amran (2007) and Alshbili et al. (2019)





may not be accurate (Verma & Abdel-Salam, 2019). The value of a parameter is hypothesized, but the only data available to reveal the unknown parameter are those provided by a sample.

#### 2.2.1. Regulative

Governments and nations typically establish regulatory systems by applying laws, rules, and regulations, making them more official, clear, and constitutionally protected (Palmer, 2013). Rules are regulatory organizations that control behavior through application and supervision (North, 1990). According to Shnayder, Van Rijnsoever, Hekkert et al. (2016a), the regulative component includes organizations that exert pressure on enterprises' behavior through regulations, directives, and other legally required restrictions. Social constructivism's regulatory aspects have received more attention than its softer normative and cultural parts (Scott, 2005). Regulative quality goes faster, is simpler to control, and is more evident than the other features (Scott, 2008). Regulatory systems are frequently ignored in favor of normative and cultural problems because they are essential (Scott, 2008). As a result, the success of regulatory systems depends more and more on external controls like monitoring and punishment, which often lead to tactical responses (Scott, 2005). According to neo-institutional theory, the government's "coercive power" (in the form of guidelines and standards) is visible in organizations in the implementation of established laws, procedures, and guidelines, ultimately determining organizational behavior (DiMaggio & Powell, 1983; Scott, 1987; C. Scott, 2001).

2.2.1.1. Corporate Social Responsibility Reporting Guidelines (CSRRG). Firms tend to behave more responsibly when there is coercive and normative pressure, such as a robust legal system to protect stakeholders' interests. They are much more likely to report their behavior (J. Y. Campbell, 2006). The judicial system frequently reflects the regulatory pillar's coercive pressure (Barakat et al., 2015). Government rules have long been viewed as a coercive authority and regulatory pressure that forces social actors to conform (Kim et al., 2013; J. L. Campbell, 2007; Scott, 2008). Because of this, literature has measured the regulative element using the scope of these regulations (Ruef & Scott, 1998; Scott, 2008). However, the government's role in legitimizing social reporting has been contentious. Some researchers argue that mandatory reporting is unnecessary since firms have voluntarily disclosed a significant amount of CSR data (Adams & Frost, 2007).

Furthermore, the added regulations and reporting may leave companies with no choice except to relocate to other markets (Rodriguez & LeMaster, 2007). Even though the regulatory implementation has received much criticism, several experts support the requirement for CSR reporting (Cheng et al., 2014). As per the neo-institutional theory, institutional stakeholder group pressure drives businesses to submit CSR data (DiMaggio & Powell, 1983). As a result, businesses that must disclose this information will face more regulatory constraints than others (Wang et al., 2017). It will be possible for nonfinancial stakeholders to raise their expectations by pushing businesses to provide more CSR data through regulation, which may enable money to be shifted from shareholders to other stakeholder parties (Ioannou & Serafeim, 2017). Government policy may use mandatory reporting to control business, requiring firms to absorb societal costs and encouraging corporate compliance. Mandatory reporting exposes inappropriate actions based on norms and expectations by reporting data about the firm's social and environmental performance to the public (Mobus, 2005). There are numerous sustainability reporting guidelines and standards in annual reports related to CSR reporting (KPMG, CCG, GRI, UNEP, 2013). Several empirical studies have shown that mandated regulations favor environmental disclosure and CSR reporting (Christensen et al., 2015; Ioannou & Serafeim, 2017; Othman et al., 2011). As a result of the government's decision, it was anticipated that the law would increase CSR reporting; however, it has successfully encouraged listed companies to submit more information in annual reports. As a result of the new law, more newly formed businesses are beginning to include CSR in annual reports (Pedersen et al., 2013). When CSR reporting is done on a required basis, the determinant elements of voluntary CSR reporting are not rational (García-Sánchez et al., 2021). Therefore, according to the prior study, we concluded that firms would be pressured to include more CSR



information in their annual reports due to the coercive pressure of compulsory CSR reporting requirements.

#### Hypothesis 1 (H1): The presence of CSRRG positively impacts the extent of firm CSR reporting.

2.2.1.2. Reforming Corporate Governance Code 2018 (CGC2018). The new Corporate Governance Code (2018) CGC was approved on 3 June 2018, by the Bangladesh Securities and Exchange Commission (BSEC), the overseer of the Chittagong Stock Exchange (CSE) and the Dhaka Stock Exchange (DSE). The Corporate Governance Guidelines (2012; CGG 2012) have been replaced by Notification No. BSEC/CMRRCD/2006-158/207/Admin/80 was published in the official gazette on 10 June 2018. The CGC-2018's implementation in Bangladesh may or may not reinforce CG practices within companies. It is argued that all Bangladeshi listed companies should follow the requirements of CGC-2018 to enhance their transparency, accountability, and long-term sustainability. According to CGC-2018, every publicly traded firm must have an official website that is linked to the stock exchange's website. From the time of listing, the company must keep the website operational. As required by the listing regulations of the concerned stock exchange, the firm will make complete disclosures available on its website(s). A yearly certificate of compliance with the terms of the Commission's Corporate Governance Code must be obtained by the company from a practicing professional accountant or secretary other than its statutory auditors or audit firm. It must be disclosed in the annual report (Corporate Governance Guidelines, 2012). These requirements were not present in corporate governance guidelines (Corporate Governance Guidelines, 2012).

Strict state rules and an independent organizational monitoring mechanism encourage corporations to implement sustainable business practices (J. L. Campbell, 2007). Esa and Ghazali (2012) found that CSR disclosure increased after implementing the silver book in Malaysian government-owned firms. Haji (2013); and Hamad et al. (2020) observed similar findings, while Javaid Lone et al. (2016) reported comparable findings in Pakistan. More CSR reporting is motivated by the institutional code of conduct according to the neo-institutional theory (DiMaggio & Powell, 1983), which requires more new guidelines. We contrast the current Corporate Governance Guidelines, 2012) and the previous Corporate Governance Guidelines (2012) in terms of CSR reporting in the business' annual reports. To evaluate the difference in CSR reporting level within the periods, we propose the hypothesis below:

# Hypothesis 2 (H2): Reforming the corporate governance code reforming positively impacts the extent of the firm's CSR reporting.

## 2.2.2. Cultural Cognitive

Culture can be defined as a communal psychological system that affects citizen and corporate behavior and is highly invisible, subconscious, and difficult to change (Hofstede, 1983; Vitell, 2003). According to Harris (1993) Culture is the learned, socially acquired traditions and lifestyles of the members of a society, including their patterned, repetitious way of thinking, feeling and acting. Culture is translated into normative pressures, detecting social life's prescriptive, evaluative, and obligatory components. It offers instructions or standards on how people should act, judging or determining the acceptability of activities and ethically restricting obligations (DiMaggio & Powell, 1983; Park et al., 2022; C. Scott, 2001).

2.2.2.1. Audit Quality and BIG4. The amount of information given is related to the audit firm's size. Because they have more expertise and experience (Wallace, 1994), they want to maintain their reputations (Bacha et al., 2020). They act as a mechanism of opportunistic behavior by agents; the



big audit firms (BIG-4) are said to be more likely to influence firms to report additional information (Sierra et al., 2013). As a result, the existence of BIG4 audit firms, according to the literature, increases the level of a voluntary report in corporate annual reporting (Adnan et al., 2018; Handayati et al., 2022; R.M. Haniffa & Cooke, 2002; Ridwan & Mayapada, 2022)

# Hypothesis 3 (H3): Auditing the firm with BIG4 positively impacts the extent of the firm's CSR reporting.

2.2.2.2. Firm's Multinational Operations (MULO). Operating in many countries, multinational corporations (MNCs) face a wide range of stakeholders as well as the complexities of ethical issues. Several studies have identified the role of institutional pressures in MNCs' decision to pursue a CSR strategy (Barkemeyer & Figge, 2014). The existing CSR research primarily ignores the impact of company size on policy and practice engagement (Wickert et al., 2016). Smaller companies can only invest up to the minimum required by law due to inadequate financial resources (Aragòn-Correa et al., 2020). The pressure on smaller businesses to adopt such practices is increased because larger companies frequently disclose more about their social and environmental performance (Rajandran, 2018). Therefore, it is reasonable to anticipate that firms will adhere to other people's CSR rules and practices (Martnez-Ferrero & Garca-Sánchez, 2017). Memetic isomorphism is the fundamental institutional process seen in this situation. Companies will respond to expectations from relevant public members, claim Newson and Deegan (2002). This reaction for multinational firms goes beyond their home nation and considers their attitude toward the world. According to Muller (2006), firms may be vulnerable to a range of local, national, and international forces in a global setting, all of which may influence their self-regulation tactics. MNCs and larger businesses are anticipated to exert more effort to match their policies with the expectations of their stakeholders and to report more CSR, as was already stated. Results from earlier research on the relationship between multi-nationality and reporting have been inconsistent. Large companies received media attention (Dyck et al., 2019), which adds to the pressure to meet societal standards (Christensen et al., 2015). Smaller businesses thus follow larger organizations' efforts to legitimize their activity, such as by giving to charities (Shabana et al., 2017). They, therefore, frequently maintain the variety of dimensions that appear in CSR reports.

Multinational firms from various industrialized countries conduct business in Bangladesh, and sustainability reporting is believed to encourage local enterprise (Momin, 2006). Locally held enterprises, therefore, base their CSR reporting on multinational corporations to acquire a local and international reputation (Belal, 2008). According to prior research, multinational corporations are more likely to encounter higher social pressure because of their geographic reach. This regional expansion puts increased pressure on multinational corporations regarding their social responsibilities to host nations. As a result, we offer the following hypotheses:

# Hypothesis 4 (H4): Firm Multinational Operations positively impact the extent of the firm's CSR reporting.

#### 2.2.3. Normative

Normative isomorphism's primary concept is the norms that added a prescriptive, evaluative, and mandatory dimension to social life (DiMaggio & Powell, 1983). The normative component, according to theorists, is mainly concerned with the impact of common standards and values. These beliefs are normative expectations for how an actor should behave in a particular scenario as well as forecasts for future behavior (DiMaggio & Powell, 1983; Scott, 2013; C. Scott, 2001). Therefore, the main argument in normative research is the choice between the logic of suitability and instrumentality (Scott, 2013). Actors must decide "what is regarded appropriate" rather than what is best for their interests, which impacts how they behave. Kilduff (1993) says participants' conduct is influenced by normative elements such as shared norms, values, and social networks.



Normative components are essential in defining goals and objectives from an organizational standpoint and guiding businesses on how to achieve them (Laczniak and Murphy., 2006). When an enterprise promotes a proper way of behaving without imposing any laws or consequences, it impacts organizations' operations through normative processes (Weissbrodt & Kruger, 2003). Institutions in the normative pillar influence how organizations behave by applying moral or ethical standards, such as those set by the public or the business community (Shnayder, Van Rijnsoever, Hekkert et al., 2016a). Although coercive constraints like the regulatory dimension do not support normative features, they still impact actors' conduct differently with the help of professional networks instead of changes to state laws, which is how the soft law system is formulated (Scott, 2013).

2.2.3.1. Firm's adoption (registered) on GRI standard (GRIA). There are numerous international and national CSR reporting standards because multiple organizations create guidelines and forms that companies can utilize to improve their reporting procedures. Firms aim to gain expertise, boost the credibility of their efforts, and influence the structure of these standards by participating in these projects (Selsky & Parker, 2005).

The GRI standard has been acknowledged as a successful institutionalization effort in the area of CSR reporting to assist firms in disclosing their CSR reporting operations (Brown et al., 2009) and an essential normative body in social disclosure (Tran & Beddewela, 2020). Regarding CSR reporting as a global reporting standard, GRI has been viewed as a fundamental normative organization (Mahmood et al., 2019). In order to remove the information asymmetry between a company's shareholders and other stakeholders, the GRI is essential as a supporting tool for sustainability reporting (Bunclark & Barcellos-Paula, 2021). One can assess the normative pressure on businesses and determine the value of the standard by examining the effects of reporting guidelines like GRI (Comyns, 2018). GRI is unique because there are no restrictions on report length, and businesses are only expected to abide by the standards and principles they approve (Othman & Ameer, 2009). As a result, this study uses the following hypothesis to examine the impact of GRI on CSR reporting:

# Hypothesis 5 (H5): A firm registered with GRI positively impacts the extent of the firm's CSR reporting.

2.2.3.2. Firms' connection of CSR reporting with associated sponsorship (CSRA). The normative aspect also guides organizational activities and beliefs established for professionalization or moral duty (Hoffman, 1999). Organizations will follow them following professional institutions' or associations' standards. Companies and professional groups are seen as agents that create a normative environment that encourages businesses to conduct themselves properly (J. L. Campbell, 2007). These groups' members better understand CSR's advantages and peer pressure on companies to act more ethically (Martin, 2002). Companies with a CSR focus are more likely to behave ethically, according to J. L. Campbell (2007).

Additionally, many of these CSR-related organizations collaborate with other stakeholder groups to allow them to share their viewpoints on a particular issue, enhancing the validity of the decision-making process. Some stakeholder groups are governments, international organizations, and non-governmental organizations (Buchanan & Marques, 2018). Furthermore, researchers have noted that CSR-related forums and networks allow businesses to comprehend, quantify, and report CSR operations (Jenkins, 2009). According to Perez-Batres et al. (2012), local Mexican businesses that participated in national sustainability initiatives were found to have a significant positive relationship with sustainability reporting. The firms achieve society's expectations; they would be encouraged by such an advantage to actively participate in initiatives and report on their activities (Ali & Frynas, 2018). The following hypothesis is developed based on the above discussion:



Hypothesis 6 (H6): Firms with a connection of CSR reporting with associated sponsorship positively impact the extent of the firm's CSR reporting.

#### 3. Research methodology and design

#### 3.1. Data source; period and sample

The purposive sampling approach was employed to determine the sample by selecting a population based on criteria. The study first tried to cover every company listed on the DSE for the fiscal years 2017–18, 2018–19, 2019–20, and 2020–21. According to DSE statistics, there are 590 companies listed on the exchange (Dhaka Stock Exchange, 2022). However, the initial examination showed that the annual reports of firms in a few sectors failed to publish the data needed for the present study. Several companies, including 221 treasury bonds, eight debentures, 37 mutual funds, and two corporate bonds, had to be left off the list of examples.

Additionally, some of the firms in the chosen industries either stopped operating or did not publish audited yearly reports. The study's final sample comprises 1088 firm years. The Finance Act of 2015, Section 9, requires listed banks, non-bank financial institutions, and insurance companies to close their books of accounts on December 31 of each year and all other DSE-listed companies to do so on June 30 of each year. Another notable fact could impact the study's findings (Finance Acts, 2015). All the information needed to measure the study's variables is gathered from the annual reports of representative financial and nonfinancial companies (MM, M. M. Rashid, 2020). A sector-by-sector summary of the sample is provided in appendix Table A1.

#### 3.2. Variables definition and measurements

#### 3.2.1. Dependent variable (CSR Reporting)

The study used CSR Reporting Index (CSRRI) as a proxy for CSR reporting. There are guidelines and standards to measure CSR reporting, such as Global Reporting Initiatives (GRI), International Standards Organization (ISO), and Sustainability Accounting Standards Board (SASB). The application of the GRI Standards (introduced at the end of 2016) has significantly increased and remains the dominant global standard for sustainability reporting (KPMG, 2022). Nevertheless, some criticisms have been that the GRI standards must be more suitable for developing and underdeveloped economic countries, specifically for small and medium-sized firms (Levy et al., 2010). Companies use their guides for social responsibility rather than a standard such as the GRI (Koerber, 2009). Concerning trends in the adoption of the GRI, the high costs associated with the collection, verification, and design of reports and, in some cases, reports appear to be used as marketing tools (Ferreira Quilice et al., 2018; Koerber, 2009; Levy et al., 2010) are blocking to adopt such standard, especially in developing countries like Bangladesh. According to GRI annual report for Bangladesh,11 listed companies out of 320 follow the GRI framework in preparing their sustainability reports (Global Reporting Initiative, 2020).

Moreover, the regulatory bodies of Bangladesh have yet to enforce to follow any international guidelines for sustainability in preparing their CSR reports. By looking at earlier CSR reporting checklists created by Branco and Rodrigues (2008), Gray et al. (1995), and R. M. Haniffa and Cooke (2005), a checklist of items was created based on the circumstances as mentioned above and the perspective of the current study for analyzing the content of CSR reporting. In addition, more specifically and applicability to the environment of Bangladesh, the checklists were also referenced (e.g., Muttakin & Khan, 2014; Muttakin et al., 2015; A. Rashid, 2021; Sobhani et al., 2012).

The framework focuses on four dimensions: community involvement, human resources, products & consumers, and environment. However, the specifics of what should be reported under each topic are up to the company's choice. The final checklist, which included 40 items, was created after multiple adjustments and improvements, presented in Table A2.



The most prevalent way of assessing CSR reporting in annual reports is content analysis, which is used in this study (Yamagami & Kokubu, 1991). Content analysis is a technique for converting text (or content) into codes for different groups (or categories) based on predetermined criteria (R. P. Weber, 1983). In this analysis, as a dependent variable, we will use CSRRI, and measure as follows:

Each company's reporting score is calculated using a dichotomous process. "1" is given for each reporting item (theme) that is reported, and "0" is given if it is not. This measurement, which has been widely used in the past, examines the presence or lack of CSR reporting (Binti Ju Ahmad et al., 2018; Muttakin et al., 2015; A. Rashid, 2021).

The CSR reporting index was created once the scores were converted by multiplying each company's reporting score by the highest score achievable (1X40 = 40).

$$CSRRI = \frac{\sum_{t=1}^{n_j} X_{ij}}{n_j}$$

where:

CSRRI is the CSR reporting index.

*nj* is the number of items expected for the jth firm, where  $n \le 40$ .

 $X_{ij}$  is the 1 if the firm ith items are reported for firm i; 0 otherwise.

The CSR reporting checklist is included in Appendix Table A2.

#### 3.2.2. Independent and control variables

The institutional factors that are considered Independent Variables in this study are (a) Corporate Social Responsibility Reporting Guidelines (CSRRG); (b) Reforming Corporate Governance Code (2018; CGC2018); (c) Audit Quality and BIG4 (BIG4); (d) Firm's Multinational Operations (MULO); (e) Firm's adoption (registered) on GRI standard (GRIA) (f) Firms connection of CSR reporting with associated sponsorship (CSRA). The hypothesis development (in 2.2) section discusses the independent variables' details.

Control variables can influence the underlying constructs or the measurement of the variables of interest. As a result, it is expected that including control variables would help to refine the correlations between the variables of relevance. A few variables are controlled in this study to avoid potential difficulties related to missing variables. The control variable's choices are based on theoretical expectations and existing literature, in line with previous research (R. M. Haniffa & Cooke, 2005; Anas et al., 2015; JAHID et al., 2020). This study identified a few control variables, namely, Environmental Sensitivity (ENVS), Return on Asset (ROA), Leverage (LEVR), Firm size (SIZE), and Firm Listing Age (AGE). According to Hafsi and Turgut (2013), different industries have different stakeholders, which explains why companies behave differently in reporting. These stakeholders must therefore have a diverse variety of goals and interests. As a result, the depth and topics of CSR reporting vary depending on the interests of various stakeholders. To measure the effect of industries on CSRR, an industry dummy was represented by the industries in line with Anas et al. (2015). Industry-specific characteristics are used to assess the study's reliability (Ahmad et al., 2017). All variables' measurement is shown in appendix Table A3.

#### 3.3. Model formulation

Balanced panel data were used in the study. The best method for estimating the association between CSRR and institutional factors is general regression analysis because the study's data are static in nature **data** (MHU M.H.U. Rashid et al., 2021, and 2022). The researchers employed an OLS regression model to investigate the association between the factors of independent and



dependent variables. The regression model assumptions were tested for multicollinearity based on the correlation matrix and the variance inflation factor (VIF).

The estimated OLS model is as follows:

$$\begin{split} \text{CSRRI}_{it} &= \alpha_0 + \beta_1(\text{CSRRG}_{it}) + \beta_2(\text{CGC2018}_{it}) + \beta_3(\text{BIG4}_{it}) + + \beta_4(\text{MULO}_{it}) + \beta_5(\text{GRIA}_{it}) \\ &+ \beta_6(\text{CSRA}_{it}) + \beta_7(\text{ENVS}_{it}) + \beta_8(\text{ROA}_{it}) + \beta_9(\text{LEVR}_{it}) + \beta_{10}(\text{SIZE}_{it}) + \beta_{11}(\text{AGE}_{it}) + \ \epsilon_{it} \end{split}$$

Where CSRRI = Corporate social responsibility reporting index score received by each sample firm,  $\alpha_0$  = the constant,  $\epsilon_{it}$  = the error term,  $\beta_1$  to  $\beta_6$  = the coefficients of the Institutional factors variables, CSRRG = CSR reporting Guidelines, CGC2018 = Corporate Governance Code (2018), BIG4 = Auditing with BIG4, MULO = Multinational Operations, GRIA = Registered with GRI Standard, CSRA = Membership with CSR related association, ENVS = Environmental Sensitivity; ROA = Return on Asset; LEVR = Leverage; SIZE = Firm Size; AGE = Listing Age and  $\delta_{it}$  = the coefficient of control variables and "i" and "t" = the number of firms and period respectively.

#### 4. Empirical results

#### 4.1. Descriptive statistics—Dependent variable

Table 1 presents the overall performance and CSR reporting trend activities from 2017–18 to 2020–21. Over the period, 37.95% of firm-year 1088 observations reported CSR. According to the data, the average CSR reporting rate for 2017–18 is 35.88 percent, with a minimum of 0.00 and a maximum of 78.00 percent result. Furthermore, the other years 2018–19,2019–20, and 2020–21 are 37.43%, 38.95%, and 39.56%, respectively. The findings show that over the study period, CSR reporting activities by the companies have increased annually over the years. Accordingly, the CSR reporting trend increased in 2018–19 by about 1.54% higher than in 2017–18, in 2019–20 by

| Table 1. De | escriptive st | atistics—De | pendent var        | iable         |         |         |           |
|-------------|---------------|-------------|--------------------|---------------|---------|---------|-----------|
| Period      | Obs.          | Mean (%)    | Standard deviation | Median<br>(%) | Min (%) | Max (%) | Trend (%) |
| 2017-18     | 1,088         | 35.88       | 0.176921           | 32.50         | 0       | 78      |           |
| 2018-19     | 1,088         | 37.43       | 0.184036           | 35.00         | 0       | 93      | 1.54      |
| 2019-20     | 1,088         | 38.95       | 0.179677           | 37.50         | 0       | 83      | 1.53      |
| 2020-21     | 1,088         | 39.56       | 0.181155           | 37.50         | 5       | 85      | 0.61      |
| Total       | 1,088         | 37.95       | 0.180781           | 35.00         | 0       | 93      |           |

| Table 2. Descri | ptive statistics—Inde <sub>l</sub> | pendent and contr | ol variables       |          |
|-----------------|------------------------------------|-------------------|--------------------|----------|
| Variable        | Observation                        | Mean              | Standard deviation | Median   |
| CSRRG           | 1,088                              | 0.331802          | 0.471077           | 0        |
| CGC18           | 1,088                              | 0.5               | 0.50023            | 0.5      |
| BIG4            | 1,088                              | 0.19761           | 0.39838            | 0        |
| MULO            | 1,088                              | 0.273897          | 0.446162           | 0        |
| GRIA            | 1,088                              | 0.170956          | 0.376644           | 0        |
| CSRA            | 1,088                              | 0.378677          | 0.549304           | 0        |
| INVS            | 1,088                              | 1.498162          | 0.502062           | 1        |
| ROA             | 1,088                              | 0.040684          | 0.04798            | 0.028107 |
| LEVER           | 1,088                              | 0.496117          | 0.289586           | 0.470333 |
| SIZE            | 1,088                              | 22.32232          | 2.284478           | 22.08414 |
| AGE             | 1,088                              | 17.21783          | 11.38429           | 14       |



about 1.53%, and in 2020–21 by about 0.61%. The trend indicates that the DSE-listed firms had a little more CSR reporting practice than the previous years. Moreover, in 2020–21 the firms reported higher CSR practices of about 39.56%, and it is also observed that all sample firms reported CSR activities this year.

#### 4.2. Descriptive Statistics- Independent and control variables

Descriptive data for the independent and control variables utilized in this investigation are shown in Table 2. It was found that the mean CSRRG score is 33%; CGC18 is 50%; MULO is 27%; GRIA is around 17%, while CSRA, on average, is 38% of CSR reporting performance. The average INVS is 1.498162, whereas the others, such as ROA, LEVER, SIZE, and AGE, are 4%, 50%, 22.32%, and 17.22%, respectively, reported CSR activities.

The description of variables is shown in appendix Table 3.

#### 4.3. Pearson Product Moment Correlation Coefficient Matrix

Table 6 displays the Pearson correlation matrix for any pair of explanatory factors used in this investigation. It reveals whether there is a significant positive or negative correlation between the variables. Table 5 demonstrates that every variable, except firm age, has a positive and substantial association with CSRR. These findings can be beneficial for further regression testing.

#### 4.4. Bivariate analysis

Since one predictor variable in a multiple regression model might linearly predict others, multicollinearity is a critical issue in checking the accuracy of a model. Multicollinearity is a problem when the correlation coefficient between any two variables is more than 0.90. (Schwarz et al., 2014). As indicated in Table 5, INVS and CSRRG have the most robust correlation coefficient in this study, which is -0.6995, less than 0.90. Therefore, multicollinearity in this study is acceptable. Additionally, the study model's variables' mean-variance inflation factor (VIF) is 1.53. If the VIF is greater than 10, it is a problem (Neter et al., 1983). With the highest VIF for all variables in our research model being 2.42 and the lowest at 1.03, This shows that multicollinearity issues in our regression model are minimal.

## 4.5. Empirical Results: Institutional Factors and CSR reporting

#### 4.5.1 Regression Analysis

The overview of the empirical findings is shown in Table 3, following the hypotheses about how various institutional elements affect CSR reporting that were established in the literature review (section 2.2). The regression model (Panel-A) comprised the dependent variable (CSRR), the independent variables (institutional factors), and the control variables (environmental sensitivity, return on assets, leverage, firm size, and firm age). All the model's variables explain 57.1175 percent of the CSRRI's variance, with an R2 value of 0. 3687. The adjusted R2 value of 0.3622, which is lower than the R2 value, shows that the model is not overfitting. Four of the independent six variables are found to be favorable and statistically significant (p 0.01) with CSRR. These variables include Reforming CG code 2018, Firms auditing with BIG 4, firm's multinational operations, and Firms adopting the GRI standard. All of the results mentioned above are in line with expectations. One other variable with CSR reporting guidelines is found to be positive and statistically significant (p < 0.10) with CSR reporting. At the same time, the other independent variable, Firms' membership with CSR Promoting Associations, was found to be negatively insignificant to CSR reporting activities.

Some control variables in the regression, including leverage, firm size, and firm age, are significant, suggesting that firms with higher leverage, larger firms, and index have higher CSR reporting scores. Moreover, Firm age is negatively significant in CSR reporting. Furthermore, environmentally sensitive industries and return on assets have no significant impact on CSR reporting in this study.

| Table 3. S   | Table 3. Showing the Pearson Product Moment Correlation Coefficient Matrix                                 | Pearson Pro      | oduct Mome      | nt Correlati     | on Coeffici | ent Matrix |            |            |                       |           |         |     |      |
|--------------|--|------------------|-----------------|------------------|-------------|------------|------------|------------|-----------------------|-----------|---------|-----|------|
|              | CSRR   | CSRRG            | CGC18           | BIG4             | MULO        | GRIA       | CSRA       | INVS       | ROA                   | LEVER     | SIZE    | AGE | VIF  |
| CSRR         |  |                  |                 |                  |             |            |            |            |                       |           |         |     |      |
| CSRRG        | 0.2577 ***   | 1                |                 |                  |             |            |            |            |                       |           |         |     | 2.42 |
| CGC18        | 0.072 **   | 0.002            | 1               |                  |             |            |            |            |                       |           |         |     | 1.03 |
| BIG4         | 0.2586 ***   | 0.0082           | -0.0162         | 1                |             |            |            |            |                       |           |         |     | 1.2  |
| MULO         | 0.347***   | 0.1362***        | 0.0041          | 0.2956***        | 1           |            |            |            |                       |           |         |     | 1.46 |
| GRIA         | 0.4611 ***   | 0.4526***        | -0.0049         | 0.1854***        | 0.2631***   | 1          |            |            |                       |           |         |     | 1.52 |
| CSRA         | 0.1686***  | 0.3886***        | 0.0234          | 0.158***         | 0.2446***   | 0.2782***  | 1          |            |                       |           |         |     | 1.34 |
| INVS         | -0.159***  | -0.6995***       | -0.0037         | -0.0557*         | 0.0474      | -0.3729*** | -0.3544*** | 1          |                       |           |         |     | 2.17 |
| ROA          | -0.1017***   | -0.0314          | -0.0999***      | 0.0684**         | 0.0688**    | -0.0875*** | -0.015     | 0.0547*    | 1                     |           |         |     | 1.27 |
| LEVER        | 0.3508***  | 0.2603***        | 0.0296          | 0.2068***        | 0.2643***   | 0.3821***  | 0.0528*    | -0.1732*** | -0.3634***            | 1         |         |     | 1.64 |
| SIZE         | 0.4513***  | 0.374***         | 0.0169          | 0.1998***        | 0.3765***   | 0.4087***  | 0.2689***  | -0.2656*** | -0.1838***            | 0.3755*** | Ţ       |     | 1.6  |
| AGE          | -0.0435  | 0.1727***        | 0.1326***       | 0.1005***        | 0.1251***   | 0.1324***  | 0.1231***  | -0.1291*** | -0.1291*** -0.1357*** | 0.2944*** | -0.0139 | 7   | 1.2  |
| Note: Correl | Note: Correlation is Significant at the $^{st}$ 0.10, $^{stst}$ 0.05 and $^{stst}$ 0.01 level (two-tailed) | ant at the * 0.1 | 10, ** 0.05 and | *** 0.01 level ( | two-tailed) |            |            |            |                       |           |         |     |      |



#### 4.5.1. Robustness test

The study included additional sensitivity analysis to support the validity. When the outcomes of the regression additional analysis (Panel-B) are like the baseline model (Panel-A), the findings are robust. It is asserted that corporations in specific industries may experience varying levels of pressure to report information due to competitive factors (Giannarakis, 2014). According to prior studies, there is a sizeable systematic difference among industries regarding how likely they are to provide CSR data (Ahmad et al., 2017; Giannarakis, 2014). Because companies from a wide range of industries make up the sample in this study, it's crucial to limit how much each industry influences reporting behaviors. As a result, the model was changed by the inclusion of an industry dummy.

The companies in this study are categorized using the DSE industrial classification. The modified regression model looks as below:

$$\begin{split} \text{CSRRI}_{it} &= \alpha_0 + \beta_1 (\text{CSRRG}_{it}) + \beta_2 (\text{CGC2018}_{it}) + \beta_3 (\text{BIG4}_{it}) + + \beta_4 (\text{MULO}_{it}) + \beta_5 (\text{GRIA}_{it}) \\ &+ \beta_6 (\text{CSRA}_{it}) + \beta_7 (\text{ENVS}_{it}) + \beta_8 (\text{ROA}_{it}) + \beta_9 (\text{LEVR}_{it}) + \beta_{10} (\text{SIZE}_{it}) \\ &+ \beta_{11} (\text{AGE}_{it}) + \beta_{12} (\text{INDUSTRYDUMMY}_{it}) + \ \epsilon_{it} \end{split}$$

The results in Panel B of Table 4 are mostly similar to those in Panel A. The four independent variables are similar results in both models and were found positive and significant (p < 0.01) with CSR Reporting, including Reforming CG code 2018, Firms auditing with BIG 4, Firms' multinational operations, and Firms' adoption of GRI standard. Moreover, Firms' membership with CSR Promoting Associations is also found similar negative insignificant to CSR reporting activities. CSRR Guidelines coefficient has changed to a little sign (p < 0.02), representing that imposing new regulation on a specific industry does not affect and influence other industries of a country. Moreover, all the other control variables found similar results to the baseline model. Overall, the finding suggests that regardless of the industry type, institutional variables have the same impact on CSR reporting.

#### 5. Discussion

The result shows that overall, the pressure of institutional factors significantly influences Bangladeshi listed companies' CSR reporting practices. The first hypothesis (H1) predicts that the CSR reporting guidelines will have a positive relationship with financial firms (Banks, Financial Institutions, and Insurance companies). This result supports the corporate social responsibility reporting guideline (CSRRG) hypothesis and is consistent with earlier research (Hamed et al., 2022; Othman et al., 2011).

The results relating to the second hypothesis CGC18 (H2), suggest that reforming the corporate governance code is positively associated with the extent of CSR reporting. This result is consistent with the earlier study. (Esa & Ghazali, 2012; Haji, 2013; Hamad et al. 2022). According to the neoinstitutional theory, more CSR reporting is motivated by the institutional code of conduct (DiMaggio & Powell, 1983), which requires more new guidelines.

According to the third BIG4 hypothesis (H3), companies who audit with BIG 4 firms will have higher levels of CSR reporting. Significant support is found for this hypothesis which suggests that firms with auditing with big audit firms, including KPMG; Ernst &Young; Deloitte, and PricewaterhouseCoopers (PwC) or are more likely to report information about CSR activities through their representatives. This result is consistent with earlier research(Abid & Dammak, 2021; Adnan et al., 2018; Ntim et al., 2017; Ridwan & Mayapada, 2022).

A company's existence of multinational operations is the next important element (H4). The coefficient's sign indicates that multinational operations favor CSR reporting, supporting the MULO hypothesis. This finding is consistent with prior studies (Barkemeyer & Figge, 2014; Khan et al., 2020).



The fifth (H5) hypothesis is that GRIA, companies that have adopted (registered) GRI will have higher levels of CSR reporting. According to the hypothesis's result, being registered with GRI positively correlates with CSR reporting. The results of this study support earlier ones (Levy et al., 2010; Tran & Beddewela, 2020).

According to the sixth hypothesis CSRA (H6) findings, a positive correlation exists between membership in a group that promotes CSR and the volume of CSR reporting. This result is consistent with earlier research (Ali & Frynas, 2018; Khan et al., 2020; Tran & Beddewela, 2020).

Leverage (LEVER), firm size (SIZE), and firm age (AGE) are the control variables that have positive correlations with the degree of CSR reporting. Those findings are consistent with earlier studies (Jahid

|       | Depender                              | nt variable                            |
|-------|---------------------------------------|--|
|       | CSRRI (Panel-A)<br>(Omitted Industry) | CSRRI (Panel-B)<br>(Included Industry) |
| CSRRG | 0.0252*                               | 0.0286                                 |
|       | (0.0145)                              | (0.0186)                               |
| CGC18 | 0.0317***                             | 0.0316***                              |
|       | (0.0089)                              | (0.0089)                               |
| BIG4  | 0.0553***                             | 0.0556***                              |
|       | (0.0120)                              | (0.0121)                               |
| MULO  | 0.0589***                             | 0.0597***                              |
|       | (0.0118)                              | (0.0121)                               |
| GRIA  | 0.1348***                             | 0.1345***                              |
|       | (0.0143)                              | (0.0144)                               |
| CSRA  | -0.0050                               | -0.0057                                |
|       | (0.0092)                              | (0.0096)                               |
| INVS  | 0.0143                                | 0.0127                                 |
| ROA   | (0.0128)                              | (0.0141)                               |
| ROA   | -0.0957                               | -0.0950                                |
|       | (0.1028)                              | (0.1029)                               |
| LEVER | 0.0861***                             | 0.0867***                              |
|       | (0.0194)                              | (0.0195)                               |
| SIZE  | 0.0148***                             | 0.0148***                              |
|       | (0.0024)                              | (0.0024)                               |
| AGE   | -0.0362***                            | -0.0360***                             |
|       | (0.0057)                              | (0.0057)                               |
| INDID |                                       | 0.0006                                 |
|       |                                       | (0.0020)                               |
| _cons | 0.0089                                | 0.0055                                 |
|       | (0.0612)                              | (0.0624)                               |
| V     | 1088                                  | 1088                                   |
| =     | 57.1175                               | 52.3202                                |
| 2     | 0.3687                                | 0.3687                                 |
| r2 a  | 0.3622                                | 0.3617                                 |

Note: Table 4 presents multivariate regression results regarding the relationship between institutional factors and CSRR. \*, \*\* and \*\*\* indicate statistical significance at the 10%, 5% and 1% levels, respectively. The definitions of all the variables are presented in appendix Table A3.



et al., 2022; R.M. Haniffa & Cooke, 2002; A. Rashid, 2021). On the other hand, environmental sensitivity (INVS) and return on assets (ROA) have an insignificant relationship with CSR reporting level and have been found to be inconsistent with past studies (Hamad et al., 2020; JAHID et al., 2020).

#### 6. Conclusion recommendations and direction for future research

The overall finding significantly impacts literature, academia, and public policy. The conclusion can be elaborated in two ways, from theoretical and empirical perspectives.

#### 6.1a. Theoretical perspective findings

According to neo-institutional theory, corporations' function inside social frameworks, rules, and norms that might affect their decisions. Companies are possibly influenced by coercive(regulative), mimetic(cultural), and normative pressures in the business field Companies could resist adopting CSR reporting if they are subjected to a single form of pressure. Coercive pressures occur when institutions promote specific policies. In other words, if institutions have the authority to punish, charge, or refuse a corporate enterprise when they do not perform as expected, it creates coercive pressure on the company. Mimetic pressures arise because firms copy their reporting practice after those of other, more successful business firms. These commercial firms may have yet to learn that other firms have imitated their reporting practices. Normative pressures occur through the influence of professional networks that allow certain reporting practices to permeate a business firm.

#### 6.1b. Empirical perspective findings

The highest level of CSR reporting was recorded in the year 2020–21, two years after the Bangladesh Securities and Exchange Commission code of corporate governance 2018 was implemented. Moreover, 2017–18 had the lowest mean CSR reporting in the index. There were coercive pressures from CSRRG and CGC2018, normative pressures from BIG4 auditing firms and multinational operations of a firm, and mimetic pressure from GRI registration of a firm. This study also found no mimetic pressure and effects on CSR reporting for CSR-related associations in Bangladesh.

## 6.2. Recommendations, limitations, and further directions

In Bangladesh, CSR reporting guidelines should be included for all other nonfinancial industries like financial industries, which Bangladesh Bank regulates. Bangladesh's government may mandate CSR reporting laws by following other developing nations Medium and small-sized auditing firms should be provided with relevant information on CSR reporting to enable them to offer advisory services to business firms about CSR reporting. To increase the trustworthiness of the information in such reports, business enterprises should build their internal business processes while adhering to assurance on CSR reporting. Corporate regulators accredited investors, and auditing firms, among other corporate institutions, should step up their support for CSR reporting.

When interpreting the empirical findings, the research needs to consider issues with the quality of CSR reporting. It is a single-country empirical quantitative investigation, and non-listed companies are not considered for the data result.

For further research, the reporting practice of non-listed companies could be examined to understand their CSRR contribution. A mixed method could be applied with alternative indicators for finding quality CSR reporting practices. A country-level comparative investigation may be applied considering the same economic level for the apparent scenario of CSR reporting in the developing world.

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## **Appendix**

| The industrial sector, according to DSE | DSE-registered selected firms | Firms that four<br>years AR<br>available | firm-year obs. | Sector-wise subtotal obs. |
|---|-------------------------------|--|----------------|---------------------------|
| Bank                                    | 30                            | 30                                       | 120            |                           |
| Financial<br>Institutions               | 23                            | 19                                       | 76             |                           |
| Insurance                               | 47                            | 41                                       | 164            |                           |
| Sub Total of<br>Financial Sector        |                               |  |                | 360                       |
| Cement                                  | 7                             | 7  | 28             |                           |
| Ceramics Sector                         | 5                             | 5  | 20             |                           |
| Engineering                             | 39                            | 30                                       | 120            |                           |
| Food & Allied                           | 17                            | 14                                       | 56             |                           |
| Fuel & Power                            | 19                            | 17                                       | 68             |                           |
| IT Sector                               | 10                            | 7  | 28             |                           |
| Jute                                    | 3                             | 1  | 4              |                           |
| Miscellaneous                           | 13                            | 9  | 36             |                           |
| Paper & Printing                        | 4                             | 3  | 12             |                           |
| Pharma & Chem                           | 32                            | 27                                       | 108            |                           |
| Services & Real<br>Estate               | 4                             | 4  | 16             |                           |
| Tannery Industries                      | 6                             | 6  | 24             |                           |
| Telecommunication                       | 2                             | 2  | 8              |                           |
| Textile                                 | 56                            | 47                                       | 188            |                           |
| Travel & Leisure                        | 5                             | 3  | 12             |                           |
| Sub Total of<br>Nonfinancial<br>Sector  |                               |  |                | 728                       |
| Total                                   | 322                           | 272                                      | (272x4) = 1088 | 1088                      |



|                             | Reporting |   |
|-----------------------------|-----------|---|
| Name of Compar              | ny:       | Annual<br>Report Yea  |
| Industry Catego             | y:        |   |
| Serial                      |           | CSR Reporting Items   |
| 1. Community<br>Involvement | 1.1       | Policies to support the local community                       |
|                             | 1.2       | Donations to charity, education, sports, and arts             |
|                             | 1.3       | Sponsoring religious activities                               |
|                             | 1.4       | Rehabilitation program orphanage, old home, home for distress |
|                             | 1.5       | Parks and gardens construction                                |
|                             | 1.6       | Road/City beautification                                      |
|                             | 1.7       | Community poverty alleviation                                 |
|                             | 1.8       | Honored to an eminent person                                  |
|                             | 1.9       | Skill development program for young unemployed                |
|                             | 1.10      | Support for public health                                     |
|                             | 1.11      | Total 10 (theme) items  |
| 2. Human resources          | 2.1       | Occupational health and safety policies                       |
|                             | 2.2       | Service rule and employee benefits                            |
|                             | 2.3       | Sweatshop-free work environment                               |
|                             | 2.4       | Employee profile  |
|                             | 2.5       | Employee profit sharing                                       |
|                             | 2.6       | Employee training and education                               |
|                             | 2.7       | Freedom of Association  |
|                             | 2.8       | Study scholarship for the employee's children/benevolent fund |
|                             | 2.9       | Maternal and parental leave facilities                        |
|                             | 2.10      | Total 9 (theme) items   |
| 3. Products & Consumers     | 3.1       | Information on products/services                              |
|                             | 3.2       | Safe products/services  |
|                             | 3.3       | Environmentally friendly products                             |
|                             | 3.4       | Ethical principles in stakeholder engagement                  |
|                             | 3.5       | Good customer relations                                       |
|                             | 3.6       | Protecting the financial privacy of customers                 |
|                             | 3.7       | Total 6 (theme) items   |
| 4.<br>Environment           | 4.1       | Compliance with environmental laws and regulations            |
|                             | 4.2       | Policy for pollution reduction                                |
|                             | 4.3       | Energy savings in performing business operations              |
|                             | 4.4       | Environmental damage repair                                   |
|                             | 4.5       | Use of recycled materials                                     |
|                             | 4.6       | Waste management practices                                    |
|                             | 4.7       | Wastewater treatment plant installation                       |
|                             | 4.8       | Control of emissions in business operations conduct           |
|                             | 4.9       | Information on air pollution                                  |
|                             | 4.10      | Water discharge details                                       |

(Continued)



|   | 4.11        | Tree plantation                                  |
|---|-------------|--|
|   | 4.12        | Tourism development                              |
|   | 4.13        | Pure drinking water and sanitation               |
|   | 4.14        | Investment in environment-friendly projects      |
| 4.15 Providing online information to reduce pollution |             | Providing online information to reduce pollution |
|   | 4.16        | Total 15 (theme) items                           |
| A total of 40 (t                                      | heme) items |  |

| Table A3. Variables de                 | finition, measurements, | , and supporting literatu  | ire  |
|--|-------------------------|--|--|
| Variables                              | Symbol                  | Measurement  | Supporting prior studies   |
| Dependent Variable                     |                         |  |  |
| CSR Reporting Index                    | CSRRI                   | CSRRI checklist is<br>developed by using the<br>scores of "1" if the firm<br>reports the corporate<br>social responsibility<br>items(theme) and "0" if it<br>is not.                       | Gray et al., 1995; Branco<br>& Rodrigues, 2008;<br>R. M. Haniffa & Cooke,<br>2005; Sobhani et al.,<br>2012; Muttakin & Khan,<br>2014; Muttakin et al.,<br>2015; A. Rashid, 2021. |
| Independent Variables                  |                         |  |  |
| CSRR Guidelines                        | CSRRG                   | Assigned value "1" to<br>i firm at the year of<br>t firms for mandatory CSR<br>reporting (Applying<br>Bangladesh Bank CSR<br>policy Guidelines), and<br>"0" for otherwise.                 | Wang et al., 2017; Esa & Ghazali, 2012; Haji, 2013; Carcia-Sanchez et al. 2013; Esteban et. al., 2017; Fatma, et al., 2021.  |
| Reforming CG Code 2018                 | CGC2018                 | Assigned value "1" to<br>i firm at the year of t firm<br>practicing modified<br>Corporate Governance<br>Guidelines, 2012, and "0"<br>for otherwise   | Hamad et al., 2020;<br>Koirala et al., 2020;<br>Siddiqui, Javed, &<br>Chowdhury Saima<br>Ferdous. 2014,<br>Oehmichen, Jana, 2018.  |
| Firms Auditing with BIG 4              | BIG4                    | Assigned value "1" to firm i in year t if the annual reports are audited with BIG 4 audit firms (including KPMG; Ernst &Young Deloitte, and PricewaterhouseCoopers) and "0" for otherwise. | Mohamed Adnan,<br>S. et al., 2018; Jizi et al.,<br>2014; Ridwan &<br>Mayapada., 2022; Abid<br>and Dammak, 2022.  |
| Firms' Multinational<br>Operations     | MULO                    | Assigned value "1" to<br>firm i in year t if the firm<br>operates in more than<br>one country, "0" for<br>otherwise.   | Amran & Haniffa, 2011;<br>Coffie, W.et al., 2018.  |
| Firms with Adoption of<br>GRI Standard | GRIA                    | Assigned value "1" to<br>firm i in year t if the firm<br>adopted(registered) GRI<br>standard, "0" for<br>otherwise   | Tran & Beddewela, 2020;<br>Barakat et al., 2015;<br>Adams, Alhamood & He,<br>2022.   |
|  | •                       |  | (Continued)  |

(Continued)



| Table A3. (Continued                      | )      |   |  |
|---|--------|---|--|
| Variables                                 | Symbol | Measurement   | Supporting prior studies   |
| Membership with CSR promoting association | CSRA   | Assigned value "1" to<br>firm i in year t if the firm<br>has a professional<br>network promoting CSR<br>reporting, "0" for<br>otherwise | Hoffman, 1999;<br>J. L. Campbell, 2007;<br>Galasklewicz, 1991; Tran<br>& Beddewela, 2020; Ali &<br>Frynas, 2018.   |
| Control Variables                         |        |   |  |
| Environmental<br>sensitivity*             | INVS   | Assigned value "1" to firm i in year t if the firm is working in an environmentally sensitive industry, 0 for otherwise.                | Gamerschlag et al., 2011;<br>Coffie et al. 2018; Hamad<br>et al., 2020;  |
| Leverage                                  | LEVR   | Total liabilities divided by total assets of i firm at the year t   | Reddy & Bather, 2013;<br>Chou et al., 2013;<br>Akhtaruddin & Haron,<br>2010; M. Masud et al.,<br>2018.   |
| Return on Asset                           | ROA    | Total net income divided by the total assets of the firm i and the year t.  | Villiers et al.,2011;<br>M. Masud et al., 2018;<br>Khan et al.,2013  |
| Age                                       | AGE    | Number of years in the<br>business from the date of<br>establishment to DSE,<br>Bangladesh  | Kolsi, 2017; Sarhan et al.,<br>2019  |
| Firm size                                 | SIZE   | The natural logarithm of total assets of the firm i during the year t.  | Michelon & Parbonetti,<br>2012; Rao et al., 2012; R.<br>M. Haniffa & Cooke, 2002;<br>Kamel and Awadallah,<br>2017; Sarhan et al., 2019;<br>M. M. Rashid, 2020. |

<sup>\*</sup> Firms with a high risk of harming the environment, such as those that use chemicals, steel & metals, oil & gas, mining, building & construction, and utility distribution, are considered environmentally sensitive industries (Branco & Rodrigues, 2008, p. 691). Fuel & Power, Ceramic, Cement, Tannery, Jute, Paper, Miscellaneous, Food & Allied, Textile, and Pharmaceuticals & Chemicals are therefore included in this study as examples of environmentally sensitive industries.





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