Environmental Reporting Practices in an Emerging Economy

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Abstract: The study aimed to recognize the environmental awareness of corporate entities by exploring the extent of their associated information reporting practices. The study also strived to learn the notable board characteristics that transform the environmental reporting practices of the listed companies in an emerging market economy. This quantitative study was based on annual reports of randomly selected 100 manufacturing companies listed on the Dhaka Stock Exchange. The research used a self-developed disclosure index linked to the environment to collect data for the study. The study revealed that the extent of average environmental reporting practices by the sampled companies was too low, which was only 14.48% of the disclosure index developed for this study. Moreover, 4% of the selected companies did not disclose any environmental information in their annual report for the fiscal year 2018–2019. The most disclosed theme was the concern for the general environment, whereas the lowest was the environmental performance, which was between 25.83% and 6.2%. The study documented that no other board characteristics were highly significant and could positively explain the extent of corporate environmental reporting practices in Bangladesh, only the willingness to disclose by the board.

Keywords: Bangladesh, Dhaka Stock Exchange, disclosure, emerging economy, environmental accounting and reporting.

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INTRODUCTION

Environmental reporting is a process of communicating environment-related corporate activities having assorted ecological impacts beyond reporting the usual financial information among the corporate stakeholders (Chandok & Singh, 2017; Bandara & Perera, 2022). Various corporate actions may affect the physical and natural environment -where they operate (Wilmshurst & Frost, 2000). Research interest in environmental reporting practices started in the early 1970s (Gray & Stone, 1994; Azzone et al., 1996). Norway was the pioneer in initiating environmental reporting, and has augmented over time (Deegan, 2002; Milne & Patten, 2002). And in the twenty-first century, it has become a significant domain of social research (Pahuja, 2009), as sustainability awareness and environmental concern have become vital sissues amongst policy makers, ecologists, and the general people of society (Ribeiro & Aibar-Guzman, 2010). Understandably, corporate environmental disclosure



has come to the front of attention among the government and nongovernment quarters (Belal et al., 2010). Firm performance is not only based on economic achievement but also on how efficiently it discharges its social and environmental responsibilities (Chandok & Singh, 2017). Bebbington & Larrinaga-Gonzalez (2008) stated that accounting and reporting practices need to go 'beyond the conventional accounting toolbox' to reflect the risks regarding environmental issues. To address social demand, traditional corporate reporting has been extended to Socio-environmental affairs instead of just considering various financial matters (Abd Rahman et al., 2011).

Many studies on environmental disclosure have recognized an increased adverse impact of corporate activities on the environment and ecology (Ahmad & Sulaiman, 2004). People require corporations to respect human rights and protect social interests, including minimizing various detrimental effects of business activities and maintaining high environmental standards (Smith, 2002). Accordingly, the growing pressure on corporations to become more responsive to the community has guided them to run their operations in an environment-caring manner (Pahuja, 2009). Due to the increasing demand for environmental information, companies have started to disclose their social and ecological issues in numerous ways. Thus, realizing the importance of environmental issues, many countries have made it mandatory for companies to disclose some of their ecological information (Pahuja, 2009).

Many studies, however, discovered that reporting on environmental issues differs markedly across countries, industries, and sectors (Pahuja, 2009). Though environmental reporting practices are still in the phase of infancy, remarkable progress has been evident over the past couple of years (Chandok & Singh, 2017). Legislative agencies and communities in developed and developing countries have already given much attention to environmental issues. And as such, firms now disclose ecological information in numerous ways, including corporate annual reports, websites, and special bulletins (Jahamani, 2003). The USA and the UK have attained remarkable improvements in the theory and practice of environmental reporting (Jahamani, 2003). Over time, a complex issue like global climate change has emerged as a critical issue of concern for the world (Chandok & Singh, 2017). The environmental issue is also a big concern for Bangladesh (Sobhani et al., 2009; Ahmad & Sulaiman, 2004). Inam (1995) realized the fact earlier and expressed his concern that in the absence of necessary measures to control environmental pollution, Bangladesh faces some environmental 'catastrophe'. Thus, environmental issues have become the utmost important issue of research.

The present study contributes to the literature by recognizing the influential factors concerning the ecological reporting practices in an emerging economy like Bangladesh. The present study contributes to literature by extending the body of knowledge in an emerging market economy. For the first time, the study used 'board willingness' as an explanatory variable to test the association between the board's willingness to disclose voluntary information and the extent of environmental reporting practices. The study has considered a few environmental reporting issues that have not been considered earlier, viz., corporate plan for environmental protection and reporting on pollution measurement criteria. The study has strived to locate the ecological consciousness by assessing the extent of environmental disclosure practices by the listed manufacturing companies in Bangladesh.

METHODS

All the manufacturing companies listed on the Dhaka Stock Exchange (DSE) have constituted the universe of the present study. The study randomly selects a sample of 100 companies listed on DSE based on several criteria,

viz., a) the companies must be listed with the DSE in or before the fiscal year 2018-2019, b) the companies should have an active website, and finally c) the companies must make available a complete set of annual reports on their websites for the fiscal year 2018-2019.

This study employs secondary data collected from the annual reports of the sampled companies, which are available on their websites. Existing literature revealed that numerous studies used annual reports as their data source. (See, for example, Chiu et al., 2020; Iredele, 2020; Aliyu, 2019; Fernandes et al., 2019; Kılıç & Kuzey, 2019; Maama & Appiah, 2019; Faisal et al., 2018; Mata et al., 2018; Chandok & Singh, 2017; Ezhilarasi & Kabra, 2017; Radu & Francoeur, 2017; Welbeck et al., 2017; Akbas, 2016; Bhattacharyya, 2014; Braam et al., 2016; Kalu et al., 2016; Nor et al., 2016; Chaklader & Gulati, 2015; Fontana et al., 2015). Some reasons worked behind choosing corporate annual reports as the source of required data, viz., Firstly, many prior studies on environmental disclosure used corporate annual reports as their data source, and for became consistent, data sources should be the same (Ahmad & Sulaiman, 2004). Secondly, annual reports are relatively more accessible to researchers (Unerman, 2000). Thirdly, information in annual reports is most credible and reliable as responsible authorities verify the information. Fourthly, companies publish annual reports regularly, and annual reports are continuous source. And finally, annual reports contain a wide range of corporate data.

Necessary data for the fiscal year 2018-2019 has been collected from the annual reports of the sampled companies through content analysis. Content analysis is a well-known research tool to gather certain words, text, or themes within a given source. The study adopted content analysis because it is a cost-effective, systematic, and reliable method to analyze data (Krippendorff, 2018). Also, content analysis helps measure the data in an objective, reliable, and orderly manner. Considering those unique features, many studies on corporate environmental reporting adopted content analysis. The fiscal year 2018-2019 has been chosen as the study year.

Both descriptive and inferential data analysis techniques have been used for this study. The study used descriptive statistics to find the minimum, maximum, and mean values and standard deviation with skewness and kurtosis. The study also used Pearson correlation analysis to find the correlation between dependent and independent variables. It used multiple regression analysis to learn the association between the dependent and independent variables. In addition, to test multicollinearity, Variance Influence Factor (VIF) has been applied.

To appraise the level of environmental disclosures, the study developed a disclosure checklist containing 48 environmental information under the 6 information categories. Those information categories are General environmental concerns, Environmental management, Environmental protection initiative, Adverse environmental impact reporting, Environment and sustainability reporting, and Environmental performance. Based on the existing literature related to environmental disclosure practices, the study primarily listed relevant environmental information that should be disclosed by a reporting entity and sent the list to the academic experts (professors having expertise in environmental disclosures). To improve the disclosure checklist, they provided necessary recommendations and instructions. Thus, under the active supervision of a group of schoolers, the disclosure checklist for the study has been finalized. To assess the corporate disclosure level, a large number of prior studies in this field used a disclosure checklist (see, for example, Chiu et al., 2020; Iredele, 2020; Khaireddine et al., 2020; Kilincarslan et al., 2020; Rosa Portella & Borba, 2020; Aliyu, 2019; Fernandes et al., 2019; Kılıç & Kuzey, 2019; Deswanto & Siregar, 2018; Faisal et al., 2018; Wang et al., 2018; Ahmadi & Bouri, 2017; Braam et al., 2016; Fallan, 2016; Sulaiman et al., 2014; Pahuja, 2009). The study used an unweighted scoring

approach as it is expected that the information user group of this study is general in nature. Hossain & Hammami (2009) also supported the argument and mentioned that an unweighted scoring approach is better when the group of information users is general and there is no priority of any information types. A series of prior studies in this field followed the unweighted scoring method. The fundamental of an unweighted approach is whether a company reported a piece of information or not in its reporting media (Islam & Hossain, 2022). According to the unweighted method, an item of information is assigned 1 (one) if reported and 0 (zero) if otherwise. Finally, the approach totals the entire disclosure score of a company using the following formula.

Total disclosure = $\sum_{i=1}^{n} di$

Where,

TD = Total number of disclosures

n = Total number of items

d = 1, if an item of information is reported

Thus, an unweighted approach considers all the pieces of information equally important, which is more helpful for the users.

Earlier it is found that using the weighted and unweighted scoring techniques for measuring the disclosure makes 'no difference' or 'a little difference' to the study findings (Coombs & Tayib, 1998).

ER SCOREI = α + β 1BOARD-SIZE + β 2CHANGE+ β 3WILLINGNESS + β 4LIBERTY + β 5DIVERSITY + ϵ

Where,

ER_SCORE = Environmental reporting score of a company

 α = The constant value

BOARD-SIZE = Board size, the number of the board of directors of a company

CHANGE = New board member in the fiscal year 2018-2019. A dummy variable which takes '1'if the board

of directors contains any new member, or 'o' if otherwise.

WILLINGNESS = Board willingness to report, proxied by the number of pages in the annual report of a

company.

LIBERTY = Board liberty, proxied by the number of independent directors of a company

DIVERSITY = Board diversity, proxied by the member of women directors of a company

ε = The prediction error or error term

The extent of corporate environmental disclosure is the dependent variable of this study. The extent of environmental disclosure is assessed by content analysis of corporate annual reports with the help of a self-developed disclosure checklist. Many earlier studies, as mentioned in the literature review section, used disclosure checklists in social and environmental research. Though the disclosure checklist is widely acceptable to researchers, there is no commonly accepted disclosure checklist. Therefore, the study developed a disclosure index consisting of 48 items of disclosure. The disclosure checklist is based on the previous studies conducted by Ahmadi & Bouri (2017), Ezhilarasi & Kabra (2017), and Sulaiman et al. (2014), which are very much related to this study. Moreover, the study used several pieces of information that are missing in the prior studies, e.g., plan for environmental protection and reporting on pollution measurement criteria. The independent variables as follows (Table 1).

Table 1 Independent Variables at a Glance and Their Measurement

Variable Name	Proxy	Variable Code	Measurement Criteria	Hypothesis No.	Expected Sign
Board Size	Board of directors	BOARD-SIZE	The number of board members in 2018-2019	H1	+
New Board Member(s)	New board member(s) compared to last fiscal year	NEW-FACE	Dummy variable which takes a value 1 if there any new director in 2018-2019 (compared to previous fiscal year) and 0, if otherwise	H2	+
Board Willingness to Disclose	Number of annual report's pages	WILLINGNESS	Number of pages in the annual report in 2018-2019	H5	+
Board Liberty	% of independent director	LIBERTY	% of independent directors in 2018-2019	Н3	+
Board Diversity	% of women directors	DIVERSITY	% of women directors in 2018- 2019	H4	+

RESULTS AND DISCUSSION

Table 2 depicts the descriptive statistics for the sample companies. The environmental reporting score (ER_SCORE) shows that the highest score achieved by the company is 24, and the lowest score is 0 and a standard deviation of 5.476. The number of board members (board size) ranges between 4 and 19 and a mean of 7.69. The mean value of the board new-face is 0.64 with a standard deviation of 0.482. Willingness to disclose (number of pages) presents that the height and lowest values are 361 and 52, with a mean value of 126.43 and a standard deviation of 62.691. The height percentage of independent directors is 60, whereas the lowest is 10, and a standard deviation of 26.445. Gender diversity (percentage of women directors) shows 0 (zero) as the minimum value and 57.14 as the maximum value bearing a standard deviation of 15.259.

Table 2 Descriptive Statistics

Mean	Mean	Minimum	Maksimum Standard Deviation		Skev	vness	Kurtosis	
Mean	MEan	Millimani	Maksiiiiuiii	Standard Deviation	Statistics	Std. Error	Statistics	Std. Error
ER_SCORE	6.950	0	24	5.476	1.125	0.241	0.793	0.478
BOARD-SIZE	7.69	4	19	2.733	1.751	0.241	4.284	0.478
NEW-FACE	0.64	0	1	0.482	-0.592	0.241	-1.683	0.478
WILLINGNESS	126.43	52	361	62.691	1.467	0.241	2.279	0.478
LIBERTY	26.622	10	60	9.198	2.013	0.241	5.099	0.478
DIVERSITY	14.523	0	57.14	15.259	0.796	0.241	-0.343	0.478

N = 100 companies, Valid N (listwise) = 100

Table 3 exhibits the Pearson correlation matrix of the dependent and independent variables. The table shows the highest correlation between the explanatory variable Board Size and Board Liberty is -0.351. An ordinary correlation is not problematic until it exceeds 0.80 or 0.90 (Bryman & Cramer, 2002). Considering the variable influence factor (VIF), if the value of VIF exceeds 10, it should be regarded as an indication of problematic multicollinearity (Kutner et al., 2004). In our model, the height VIF observed is 1.170, and the remaining values are lower than that. Hence, the detected correlations among the explanatory variables are not harmful. These findings propose that multicollinearity among the explanatory variables is very unlikely to make a severe problem in the result explanation of the regression analysis.

Table 3 Correlation Matrix and Multicollinearity Analysis

Correlations		ER_SCORE	BOARD-SIZE	NEW-FACE	WILLINGNESS	LIBERTY	DIVERSITY
ER_SCORE	Correlation Sig. (2-tailed)	1					
BOARD-SIZE	Correlation Sig. (2-tailed)	0.075 0.461	1				
NEW-FACE	Correlation Sig. (2-tailed)	-0.095 0.348	0.137 0.175	1			
WILLINGNESS	Correlation Sig. (2-tailed)	0.756 ** 0.000	0.147 0.144	-0.019 0.852	1		
LIBERTY	Correlation Sig. (2-tailed)	-0.076 0.453	-0.351 ** 0.000	-0.128 0.204	-0.120 0.235	1	
DIVERSITY	Correlation Sig. (2-tailed)	0.090 0.373	-0.065 0.520	-0.073 0.473	0.059 0.560	0.082 0.416	1
Collinearity Statistics							
	Tolerance	-	0.855	0.969	0.966	0.862	0.983
	VIF	-	1.170	1.032	1.035	1.161	1.017

[N= 100, Two-tailed test]

Table 4 presents the result of the multiple regression analysis. The table depicts the association between the extent of environmental disclosure and the explanatory variables. The table shows the coefficient of coordination (R square), beta coefficients, F ratio, and t-statistics for the regression model. It also shows the concise results of the dependent variable (the extent of environmental reporting practices) on the experimental variables. The results indicate that the R square of 0.580 and the F value of 26.011 are significant at the 0.000 level. The adjusted R square is 0.558, i.e., 55.8%. These values indicate that a portion of the variation in environmental reporting can be explained by the distinctions in the whole set of experimental variables. The extremely influential board characteristic detected in this study is board eagerness to disclose environmental information (measured by the number of pages in the corporate annual report). The positive coefficient for the board willingness to disclose is 0.755, which is statistically significant at the 0.000 level. Thus, a company willing to report more voluntary information discloses more information relating to the environment. So, the hypothesis H3 is supported. The coefficient of other variables, viz., board size, new board member, board liberty, and board diversity, are statistically insignificant, which implies that these variables are not capable enough to explain the extent of corporate environmental reporting practices.

^{**} Correlation is significant at the 0.01 level (2-tailed)

^{*} Correlation is significant at the 0.05 level (2-tailed)

Table 4 Regression Analysis

I. Model summary

Model	R R Square		Adjusted R Square	Std. Error of the Estimate
1	0.762 ^a	0.580	0.558	3.64009

a. Predictors: (Constant), BOARD-SIZE, NEW-FACE, WILLINGNESS, LIBERTY, DIVERSITY

II. ANOVA^a

Model 1	Sum of Squares	Df	Mean Square	F	Sig
Regression	1723.229	5	344.646	26.011	0.000 ^b
Residual	1245.521	94	13.250		
Total	2968.750	99			

a. Predictors: (Constant), BOARD-SIZE, NEW-FACE, WILLINGNESS, LIBERTY, DIVERSITY

III. Coefficients^a

Dependent Variable: ER SCORE

Model	Unstandardi	zed Coefficients	Standardized Coefficients	t	Sig.
1	В	Std. Error	Beta		218.
(Constant)	-0.526	2.084		-0.252	0.801
BOARD-SIZE	-0.053	0.145	-0.027	-0.367	0.714
NEW-FACE	-0.852	0.770	-0.075	-1.106	0.272
WILLINGNESS	0.066	0.006	0.755	11.113	0.000
LIBERTY	-0.004	0.043	-0.007	-0.102	0.919
DIVERSITY	0.014	0.024	0.039	0.579	0.564

a. Dependent Variable: ER_SCORE

This study indicates that the average environmental reporting practice of the selected firms is only 14.48% of the checklist (Table 5). The highest observed theme is 'general environmental concern', which is 25.83%, and the lowest is corporate 'environmental performance', which is 6.20%. The highest score of 24 (out of 48) is achieved by only two companies (out of 100), whereas 4 companies (4% of the sample companies) have not disclosed any environmental information in their annual reports (Table 6).

Table 7 depicts the environmental information practices status by the various sectors/industries. It shows that the cement industry discloses most of the environmental information, which is 27.92% of the disclosure checklist, and the ceramic industry is the second height with a value of 20.14%. The lowest disclosures practice revealed by the tannery industry is 7.64%, and the second lowest is the miscellaneous sector of the DSE, which has a score of 8.33%. The table also reveals that the service industry has no disclosure on the theme 'Environmental Management'. But the tannery industry has no disclosure relating to 'Adverse Environmental Impact Reporting'.

b. Dependent Variable: ER SCORE

Table 5 Theme Wise Disclosure Status

	Disclosure themes	Disclosure Items	Number of firms	Expected disclosures	Actual disclosure	% of actual disclosure
		[a]	[b]	[c = ab]	[d]	[e = (d÷c)100]
Α.	General Environmental Concern	6	100	600	155	25.83%
В.	Environmental Management	4	100	400	33	8.25%
C.	Environment Protection Initiative	13	100	1300	193	14.85%
D.	Adverse Environmental Impact Reporting	8	100	800	107	13.38%
E.	Environment and Sustainability Reporting	7	100	700	145	20.71%
F.	Environmental Performance	10	100	1000	62	6.20%
	Total	48	100	4,800	695	14.48%

Table 6 Disclosure Extent by the Number of Companies

Number of disclosures	0	1-5	6-10	11-15	16-20	21-25	= 695 disclosures
Number of companies	4	49	23	15	6	3	= 100 companies

Table 7 Sector-Wise Disclosure Status

SL.	Sector	Number of firms	Expected Disclosure*	General Environmental Concern	Environmental Management	Environment Protection Initiative	Adverse Environmental Impact Reporting	Environment and Sustainability Reporting	Environmental Performance	Total	Disclosure in %**
1.	Cement	5	240	13	5	21	6	14	8	67	27.92%
2.	Ceramics	3	144	5	1	8	4	6	5	29	20.14%
3.	Engineering	18	864	22	2	40	21	19	9	113	13.10%
4.	Food and Allied	9	432	16	5	20	8	16	8	73	16.90%
5.	Fuel and Power	14	672	22	5	18	17	18	5	85	12.65%
6.	Miscellaneous	6	288	6	2	4	5	5	2	24	8.33%
7.	Paper and Printing	2	96	5	1	3	2	5	1	17	17.71%
8.	Pharmaceuticals and Chemicals	14	672	30	8	34	17	22	9	120	17.86%
9.	Service	2	96	3	0	4	2	3	1	13	13.54%
10.	Tannery	3	144	3	1	2	0	1	4	11	7.64%
11.	Textile	24	1152	30	4	40	24	35	10	143	12.41%
Tota	I	100	4800	155	33	193	107	145	62	695	14.48%

^{*} Expected disclosure = Number of items in the checklist, i.e., 48 × Number of companies

^{**} Disclosure in percentage = (Total disclosure by the sector × 100) / Total expected disclosure of the sector

Board Diversity

H5

Table 8 shows the accepting or rejecting status of the hypothesis related to the explanatory variables used in this study. The study provides evidence of an insignificant relationship between the extent of corporate environmental reporting and the board size. So, the first hypothesis (H1) is not supported. The study also found an insignificant association between the level of corporate environmental disclosure and the new member in the board. So, the second hypothesis (H2) is rejected as well. The independent variable 'willingness to disclose' shows a notably significant positive effect on the volume of corporate environmental reporting. This explanatory variable is significant at the .ooo level. Thus, the third hypothesis (H3) is supported. However, the study did not find any association between the level of corporate environmental reporting practices and corporate board liberty. So, the fourth hypothesis (H4) is rejected. Finally, the study has yielded an insignificant association between the extent of corporate environmental reporting and the women on board. Thus, the result rejects the fifth hypothesis (H5) also.

Related variables Level of Significance Hypothesis No. **Expected Sign Results** H1 **Board Size** Rejected Insignificant + H₂ New Board Member Rejected Insignificant Н3 Willingness to Disclose Supported 0.000 H4 **Board Liberty** Rejected Insignificant

+

Rejected

Insignificant

Table 8 Summary of Hypothesis, Variables and the Multiple Regression Results

The study has observed that board willingness to disclose is the most influencing explanatory variable that can explain the extent of corporate environmental reporting positively in the manufacturing industry in Bangladesh. It implies that a board that is very eager and willing (measured by the number of pages of an annual report) to convey various voluntary information to the stakeholders discloses increased environmental information. The desire of a board to disclose more voluntary information explains the extent of environmental reporting. Most probably, this eagerness of a board is to create firm value, generate and uphold customers' confidence, preserve goodwill, reduce agency costs, and address information asymmetry between the insiders and outsiders of a company. The study discovered an insignificant association between the extent of corporate environmental reporting practices and the board size, i.e., the number of board members of a manufacturing company does not explain environmental information. So, the first hypothesis (H1) is not supported. Most probably, the reason behind this, board members give less priority to disclosing environmental issues because reporting on environmental issues is not obligatory in Bangladesh. This result is like the earlier studies done by Aliyu (2019), Fernandes et al. (2019), Odoemelam & Okafor (2018), and Ezhilarasi & Kabra (2017).

An insignificant correlation was evident between the level of corporate environmental disclosure and a new board member, which indicates that a newly appointed board member does not play a role in increasing environmental reporting by the manufacturing companies in Bangladesh. Probably, this is because the new board is similar to any other existing board and is not conscious of environmental issues. Again, the new board may not be interested enough to break trends, traditions, practices, or ongoing culture. The study did not find any connection between the level of corporate environmental reporting practices and corporate board liberty. This result also confirms that, in a manufacturing concern, an independent board is just like the other boards

that do not heed environmental issues. Therefore, board liberty fails to enhance the extent of environmental disclosure of a manufacturing company. This finding confirms the results of the works of Khaireddine et al. (2020), and Nurhayati et al. (2016).

The study has discovered an insignificant association between the level of corporate environmental disclosure and the women on board. It means women on board have no remarkable influence on the scope of corporate environmental reporting. The study indicates that, in the case of influencing environmental disclosure, male and female board members are alike, and women on board cannot impact differently to enhance corporate environmental reporting practices. This finding supports the outcomes of several prior studies by Khaireddine et al. (2020) and Fernandes et al. (2019). The study found that the overall environmental reporting practices by the manufacturing companies in Bangladesh are weak and descriptive. There may have the following reasons behind this poor level of disclosures, viz., (i) reporting on corporate environmental information in Bangladesh is voluntary, and the corporations are not willing enough to disclose this type of corporate information; (ii) there are very few recommended guidelines or set of standards for environmental reporting; (iii) being a developing country, corporations and their stakeholders are not knowledgeable enough on environmental issues; (iv) there is some weakness in playing a significant role by the professional bodies, such as the Institute of Chartered Accountants of Bangladesh-ICAB (Islam & Dellaportas, 2011). To date, most companies are using standalone reports or similar special bulletins to disclose various voluntary information, including corporate social responsibilities (CSR) and corporate environmental information, which may cause an inadequate extent of environmental disclosure in the annual report. Besides, some companies disclose environmental information on their websites, which might be another reason for poor environmental reporting in the corporate annual reports.

A good number of prior studies revealed that the tradition of corporate environmental reporting practices in Bangladesh is generally weak (see, for example, Islam & Hossain, 2022; Belal et al., 2010; Sobhani et al., 2009), and that unexpected situation is continuing. The present study confirms the findings and recognizes that in an emerging economy, more specifically in Bangladesh, no factor of a board influences the extent of environmental reporting practices except the willingness of the board to disclose. The authors' self-developed disclosure checklist, consisting of 48 items, has been used to collect available environmental information in the corporate annual reports of the randomly selected 100 manufacturing companies listed on the DSE.

CONCLUSION

This study has ascertained the extent of corporate environmental awareness by examining and evaluating the level of environmental reporting practices by the sampled manufacturing companies in Bangladesh. It has explored five explanatory variables related to corporate board characteristics, viz., the board size, board new members, board willingness to disclose, board liberty, and board diversity to discover which of these variables influences the level of corporate environmental reporting practices. The study has observed that no other board characteristics the study considered but board willingness to disclose is the only influencing variable that can explain the extent of corporate environmental reporting positively in the manufacturing industry in Bangladesh. The study depicts contemporary corporate environmental reporting scenarios in Bangladesh, and the findings of this study will contribute to developing environmental regulations, policies, and guidelines. In addition to helping policymakers and regulators, the study will guide corporate administrators and individuals in environmentally related decision-making. These will motivate an organization to obey environmental regulations in its diversified operations. This study has some shortcomings. It is a cross-sectional study that has considered

only the year 2018-2019, the sample has been selected from the publicly traded manufacturing companies only, and the study examined a few explanatory variables. Moreover, the study has applied an unweighted scoring technique; a different result could arise while using a weighted scoring technique. Again, to determine the extent of environmental reporting, the study has used only the corporate annual reports. To get a more realistic scenario, a few other sources like the special bulletin, standalone report and corporate website could have been considered to conduct this research.

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