Examining the Impact of Financial Performance on Environmental Accounting Practices in the Banking Sector of Bangladesh

Md. Shafiqul Islam[1] and Md. Minhaj Uddin[1]
[1]Associate Professor, Department of Accounting and Information Systems, Jatiya Kabi Kazi Nazrul Islam University, Trishal, Mymensingh.
Corresponding Author: Md. Shafiqul Islam, PhD, shafiquejkkniu@gmail.com

ARTICLE INFO

Keywords: Firms Performance, Environmental Accounting, Firm Size, ROA, ROE

RECEIVED
11 May 2025

ACCEPTED
26 July 2025

PUBLISHED
31 August 2025

DOI
https://doi.org/10.5281/zenodo.17292945

ABSTRACT

This paper examined the effect of financial performance on environmental accounting and reporting practices in Bangladesh's banking sector. Following the random sampling method, this study collected secondary data from 20 listed banks' annual reports from 2012 to 2021. Multiple regression analysis was applied to test the linkage between banks' performance and their environmental accounting practices. The analysis revealed no statistically significant connection between financial performance and environmental accounting and reporting practices. However, a favorable linkage was found between firm size and environmental reporting practices. By emphasizing the financial and organizational stimuli influencing environmental reporting behaviors in the banking sector of Bangladesh, the study offers valuable insights for policymakers, regulators, and industry practitioners.

1. Introduction

The banking sector, a key player in fostering economic well-being and development in Bangladesh, acts as an intermediary between investors and borrowers, providing investment facilities and driving commerce and financial development through financial inclusion. The sector's role is crucial, and its contributions are vital, underscoring the importance of incorporating environmental considerations into the corporate practices of the Bangladeshi banking sector. Environmental practices serve as a medium of showing banks' commitment to environmental protection, communicate their activities' effects on environmental and their efforts to minimize environmental risks. Ongoing pressure from stakeholders, global reporting frameworks, society, and policymakers is compelling banks to adopt more transparent and accountable environmental practices. By adopting environmental accounting cultures, banks in Bangladesh can meet society's demands, evaluate and reduce environmental risks, identify opportunities for sustainable development, and enhance their goodwill among environmentally conscious people (Deb et al., 2020; Deb et al., 2022; Sobhani et al., 2012; Khan et al., 2010). Environmental disclosure practices can also create long-term value by reporting their environmental motto, plans, and environmental performance tools, aligning their business operations with sustainable goals (Dura & Suharsono, 2022; Kurniawan & Fitranita, 2024). One of the most important optional disclosures that denote sustainable company operations to protect the environment is an environmental accounting practice. It is emergency in lowering environmental crises and enhancing the environmental conditions today. As a result, environmental accounting (EAR) could act as a safety net by establishing corporate entities' accountability for their measures to save the environment in their corporate initiatives (Dilling, 2010). Additionally, EAR, CSR, sustainability reporting, and sustainability practices enhance an entity's reputation among owners and stakeholders, indirectly motivating corporate management to use environmental accounting and enhance the environment (Elijido-Ten, 2011). Even though there are no legal obligations, many companies choose to disclose environmental information voluntarily. This indicates that diverse internal and external factors influence the extent and quality of environmental accounting practices.

Several theoretical perspectives provided valuable insights into how a firm's financial performance can drive its environmental disclosures quality. According to Slack Resource Theory, companies with better financial scores have excess resources that can be used for voluntary environmental reporting, without jeopardizing their main operations. In the same way, Legitimacy Theory indicates that financially healthy firms are more likely to attract public attention, which in turn, compelling firms to legitimize their actions through transparent disclosure of environmental impacts. Additionally, the Resource-Based View (RBV) suggests that firms with strong

financial performance are better able to develop their internal competencies in regard to environmental management, which in result supports robust environmental disclosure. Taken together, these theories highlight that sound financial performance not only facilitates but also incentivizes organizations to be more active and transparent in environmental reporting.

Despite the increasing significance of environmental accounting practices in the banking sector, there seems to be a research gap, particularly investigating the effect of firm performance on environmental accounting behaviors within the Bangladeshi context. This gap presents an intriguing opportunity for further exploration. Examining how firms' performance affects environmental reporting cultures is vital for Bangladeshi policymakers, stakeholders, regulators, and businessmen to develop strategies and adopt initiatives that foster environmental sustainability. Previous studies extensively discussed how environmental accounting behaviors influence firm performance, while rare efforts have been made to examine the opposite relationship. Considering this situation, this study seeks to examine the effect of firm performance on environmental accounting practices in Bangladesh's banking sector. By conducting an empirical investigation, this study tries to provide valuable insights that are likely to add value to the current literature on environmental accounting and sustainability within the banking sector, providing practical contributions and practical implications for policymakers, regulators, and industry practitioners in Bangladesh.

2. Literature Review and Hypothesis formulation

2.1 Literature Review

A substantial body of literatures emphasizes the growing significance of environmental reporting in promoting the sustainable development. Several scholars have explained the connection between environmental reporting and firm performance from different perspectives.

Abed (2019) investigated the potential of green financial institutions in Iraq to support a sustainable economy, focusing policy interventions to ensure environmental responsibility across generations. Likewise, Eny & Rum (2019) and Shakkour et al. (2018) argued for integrating costs into corporate practices. Their results recommend that correct environmental accounting improves both efficiency and sustainable corporate growth.

In Southeast Asia, Islam& Rahman (2022) and Giang et al. (2020) highlighted on Bangladesh and Vietnam respectively, emphasizing the importance of green accounting in accelerating sustainability. Yet, these researches suggest that green accounting is perceived as cost-effect by many companies, which discourages widespread acceptance—particularly in developing countries.

Additionally, Deb et al. (2020) tested how green accounting efforts such as actions, investments, and strategies match with institutional and shareholder requirements in the banking sector. Their result demonstrated significant favorable linkage between bank performance and green reporting, although bank size has negative moderating effect on this connection.

Corporate governance attributes are considered as the prime factors of environmental disclosures quality. Masud et al. (2018) examined South Asian organizations and demonstrated that institutional ownership, board size, and independence favorably influence environmental sustainability reporting. Likewise, Osemene et al. (2020) emphasized the impact of investor composition and board committees and in finding the environmental reporting level across six African countries. Based on agency, legitimacy and stakeholder theories, the results indicate that well-governed organizations are more likely to accept transparent reporting practices.

The association between environmental reporting and performance is additionally explained by socio-political forces. Doan & Sassen (2020) performed a meta-analysis presenting that environmental reporting is weakly connected with actual environmental scoring. Wu et al. (2020) also performed similar study on Chinese firms, demonstrating that external stimuli like carbon disclosure information and media coverage considerably influence firm goodwill and competitiveness.

On the other hand, Yusoff & Daras (2014) revealed that environmental disclosures level among Malaysian industrial organizations is minimum which covers only 22% compliance level across main indicators. Singh et al. (2018) found similar finding in India, where such reporting is mainly qualitative and lack of standardization. In Nigeria, Beredugo & Biobele (2018) evidenced that environmental investments considerably impact business profitability and social responsibility approaches.

In the context of South Asia, Ekundayo & Odhigo (2021) and Tien et al. (2020) examined the interplay between sustainability efforts and environmental reporting. Their analysis outcomes highlight that corporate environmental strategy (CES) and corporate social responsibility (CSR) considerably lead to financial success, but gaps are found in the incorporation of these approaches into long-run corporate strategies.

Earlier studies have also identified how environmental management accounting (EMA) impacts on both financial and environmental performances. In Bangladesh, Deb et al. (2022) showed that EMA favorably and significantly affects financial performance (FP) and environmental performance (EP). In the same way, Dura & Suharsono (2022) presented that green reporting and financial success enhance long-term development, but green reporting can't foster growth until backed by financial outcomes. Islam et al. (2024) have showed that environmental reporting favorably and considerably influences the market performance, although this effect is insignificant for financial performance. Sobhan et al. (2025) found that despite poor reporting performance in Bangladesh, environmental disclosures have positive and

significant bearing on both accounting-based and market-based performance metrices. Besides, greater degree of board independence is found to increase this positive linkage. These outcomes support the view that integrating financial and environmental strategies is vital for sustained performance

Despite substantial research efforts focusing the environmental reporting relevance, a significant gap exists in explaining how company-specific financial performance indicators impact environmental accounting and disclosure practices—especially in the Bangladeshi context. The extent of research in Bangladesh does not directly examine how profitability, return on assets (ROA), or return on equity (ROE) drive environmental reporting practices.

Due to scarce empirical finding on the linkage between financial performance and environmental disclosure in the context of Bangladesh, it demands more research to explore whether better performing firms engage in enhanced transparency in environmental reporting. This study aims at addressing this gap by testing the connection between firm financial performance and environmental disclosure in the Bangladeshi context, and thus contributing new additions to the literature on corporate environmental reporting in emerging countries. Therefore, researchers focus on the research framework shown in figure 1:

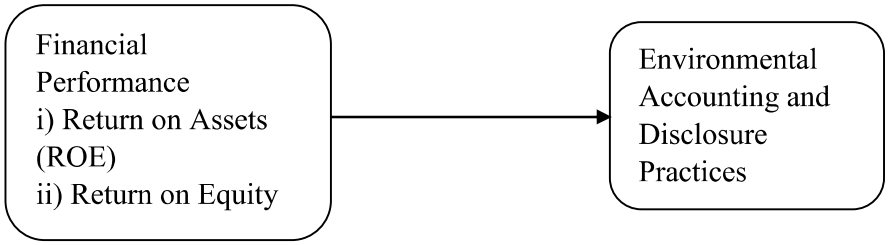

Figure-1: Conceptual Framework

2.2 Hypothesis development

In financial and operational aspects, highly performing companies may influence several activities, including environmental reporting efforts. Various earlier researches provided some arguments in this regard. Jones et al. (2007), revealed that several financial performance related variables including cash position, capital structure, working capital, and different asset-related ratios have positive bearing on the sustainability reporting. Similirly, Dilling (2010) have evidenced that companies with higher profits margins are more likely to generate high-quality sustainability reports. Masud et al. (2018) argued that higher financially performing firms with

higher ROE and ROA have more excellent resources and stability, leading to more investment in environmental practices and reporting activities. Singh et al. (2018) concluded that profitable companies face special monitoring from stakeholders such as regulators, customers, shareholders, and governments for better environmental practices. Firms with greater ROA and ROE always attempt to enter long-run strategic positions through environmentally sustainable reporting to create competitive advantage and enhance prospects (Tien et al., 2020). Additionally, financially well-off firms can invest more to comply with environmental compulsions, including sustainable environmental reporting mandates (Osemene et al., 2020). In the same way, Sitorous et al. (2024) have concluded that profitability plays moderating role on the influence of the board of directors and leverage on sustainability report disclosure. In line with this, Lin et al. (2025) argued that corporate financial performance (CFP) is positively linked with corporate sustainability performance (CSP). Finally, financially successful companies can create market differentiation and, thereby, an extra advantage when they showcase their environmental performance to meet the demands of environmentally conscious stakeholders (Giang et al., 2020). Likewise, high performance in terms of increased ROA and ROE can significantly influence environmental reporting practices through resource distribution initiatives, meeting stakeholders' needs, prioritizing sustainable efforts, confirming regulatory mandates, and market differentiation initiatives. Therefore, it is hypothesized that

H_1: Financial performance measured by Return on Equity (ROE) positively influences the enlivenment reporting practices.

H_2: Financial performance measured by Return on Assets (ROA) positively influences the enlivenment reporting practices.

3. Methodology

3.1 Papulation, sample and data:

This study's population comprises all 30 banks listed on the Dhaka Stock Exchange Limited in Bangladesh. Following the random selection method, we chose 20 banks out of the 30 listed on the Dhaka Stock Exchange as the sample size, constituting 66.67% of the total population, which provides statistical significance and confirms the generalizability of findings.

This study is mainly based on secondary data collected from various annual reports of listed banks. The data collection spans from 2012 to 2021, spanning a decade of information. The data for the most recent year, 2022-2023, for some banks are unavailable now, so researchers could not include the required data for 2022.

Researchers conducted a content analysis of the annual reports obtained from the banks' websites as environmental-related information is published in the companies' annual reports. The annual report is the most reliable source for examining the performance concerning any disclosure compared to any alternative source (Khan et al., 2013). The sample distribution is summarized in Appendix 1.

3.2 Model

To achieve the objective of this research, researchers used two research models (ROE model and ROA model) comprising dependent, independent and control variables. The following two equations expresse the research models:

(i) $EARD_{it} = \beta_0 + \beta_1 ROE + \beta_2 FAGE + \beta_3 FSIZE + \varepsilon$

(ii) $EARD_{it} = \beta_0 + \beta_1 ROA + \beta_2 FAGE + \beta_3 FSIZE + \varepsilon$

Where, EARDs refers to environmental accounting and disclosure score measuring the dependent variable. ROE and ROA are the independent variables measuring return on assets and return on equity respectively. The independent variable is firm performance as assessed by the environmental disclosure index, made through content analysis of six contents on environmental disclosure of the sample firms. $\beta 0$ is the constant, and $\beta 1–3$ is the slope of control and independent variables. FAGE and FSIZE, the control variables, indicate firm age and firm size respectively, (ε) indicates random error, (i) denotes sample firms and, (t) indicates the period.

3.3 Variable selection

Researchers built the environmental disclosure index to assess how the firm influences environmental disclosure, utilizing a coding approach. Under this methodology, if a bank reports any item of the environmental aspects, it gets one as a score, and otherwise 0. Earlier researches such as Islam et al. (2024), Tien et al. (2020), Giang et al. (2020), and Hosain et al. (2018) employed this approach to make the disclosure index. All environmental disclosure contents are divided into six categories, including 18 points. The categories chosen based on current Bangladesh Bank green policy guidelines and previous research are environmental regulation, waste management, environmental award, environmental audit, environmental cost, and energy usage. The EARD disclosure score index (EARD) is created for the 18 points.

By following the formula proposed by Cooke (1992), an unweighted environmental disclosure index (EDI) was utilized in this study to assess whether the sample firms

disclosed environmental information in their annual reports. The formula is as follows:

$$EARDs = \sum_{i=1}^{n} di$$

Here,

EARDs = Environmental Accounting and Reporting Score for each bank for a given year; and

di = 1 if the item is reported, or 0 otherwise and n = Total score of items

The variable construction and their measurement approach are exhibited in the following Table 1.

Table 1: Variable assessment

Constructs	Form	Assessments	Source
Independent Variables			
Firm Performance	ROA	Net profit after tax divided by total assets	Agyemang et al. (2023)
	ROE	Net profit after tax divided by shareholder equity	Islam et al. (2024)
Dependent Variable			
Environmental and Accounting Disclosure Index	EARD	The Environmental Disclosure Index is ascertained as the number of environmental items disclosed divided by the maximum number of environmental items disclosed multiplied by 100.	Wu et al. (2020) and Islam et al. (2024).
Control Variables			
Firm Age	FAGE	The natural logarithm of the number of years since the firm was listed.	Deb et al. (2022) and Islam et al. (2024).
Firm Size	FSIZE	The natural logarithm of total asset.	

4. Results Analysis

4.1 Descriptive Statistics

Table 2 shows the statistics of the variables considered in the research model involving average and standard deviations. The mean values for EARD, ROE, ROA, FAGE, and FSIZE are 10.3650, 11.75%, 0.94%, 27.33 years, and 9.1644, respectively, with corresponding standard deviations of 2.80555, 3.81%, 0.38%, 11.46 years, and 2.13264. On the hand, the minimum values for same variables are 4.74, 4.23%. 0.17%. 4.39 years, and 4.78 with corresponding maximum values of 15.87, 19.29%, 1.73%, 39.75 years, and 13.42. Standard deviation values indicate that there is a moderate amount of variability in each of the constructs considered around its average.

Table: 2 Descriptive statistics

Variable	Unit of measurement	Mean	Standard deviation	Minimum	Maximum	N
EARD	(Score)	10.3650	2.80555	4. 74	15.87	200
ROE	(%)	11.7514	3.80912	4.23%	19.29%	200
ROA	(%)	0.9410	0.37752	0.17%	1.73%	200
FAGE	(Years)	27.3300	11.45983	4.39	39.75	200
FSIZE	(Natural log of total assets)	9.0825	2.13264	4.78	13.42	200

Source: Researcher's Calculation

4.2 EARDs ranking of Sample Banks

Table 3 depicts the Environmental Accounting and Reporting Disclosures (EARDs) for 20 banks covering a decade, showing their respective percentages and rankings in EARDs. Bank Asia, Islami Bank Limited, and NCC Bank demonstrates top

performance in EARDs with percentages of 78.89%, 76.67%, and 71.67%, respectively, implying that they are strongly committed to environmental accounting and reporting. Whereas Jamuna Bank, Eastern Bank, and United Commercial Bank are mid-range performers in terms of EARDSs, with percentages ranging from 66.11% to 63.33%. Although they are not topper, they still show considerable level of commitment towards EARDs. Conversely, banks towards the bottom of the list, such as Trust Bank, One Bank, and Uttara Bank fall in bottom line, with percentages ranging from 47.78% to 35.56%, indicating efforts to be taken for improvement.

Table 3: EARDs rankings in 18 items from 2012-2021

Banks Name	EARDs (10 years)	Percentage (%)	Rank
BANK ASIA	142	78.89	1
ISLSMI BANK LIMITED	138	76.67	2
NCC BANK	129	71.67	3
JAMUNA BANK	121	67.22	4
EASTERN BANK	119	66.11	5
UNITED COMMERCIAL BANK	117	65	6
DHAKA BANK	114	63.33	7
DUTCH-BANGLA BANK	112	62.22	8
MERCANTILE BANK	104	57.78	9
SOUTHEAST BANK	101	56.11	10
BRAC BANK	100	55.56	11
STANDARD BANK	96	53.33	12
AL-ARAFA ISLAMI BANK	94	52.22	13
CITY BANK	94	52.22	13
PUBALI BANK	90	50	15
IFIC BANK	89	49.44	16
PREMIER BANK	88	48.89	17
TRUST BANK	86	47.78	18
ONE BANK	75	41.67	19
UTTARA BANK	64	35.56	20
Source: Researchers' Calculations			

4.3 Analysis of Co-relation Matrix

The table 4 displays the correlation matrix between Environmental Accounting and Reporting Disclosures (EARD), Return on Assets (ROA), Return on Equity (ROE), Firm Age (FAGE), and Firm Size (FSIZE). EARD is negatively correlated with ROA (-0.043), FAGE (-0.108), and positively correlated with ROE (0.013) and FSIZE (0.451), implying minimal linear relationships between EARD and ROA/ROE, EARD and FAGE, but significant linkage between EARD and FSIZE. Conversely, ROE and ROA is positively corelated with each other, providing a strong association between them. In these outcomes, none of the correlation coefficient values are greater than usually accepted threshold of **0.80**, implying that multicollinearity is not serious concern among the variables considered.

Table 4: Correlation Statistics					
Constructs	EARD	ROA	ROE	FAGE	FSIZE
EARD	1.000				
ROA	0.043	1			
ROE	0.013	0.798**	1		
FAGE	-0.108	-0.029	-0.114	1	
FSIZE	0.451**	0.376**	0.344**	0.319**	1
**. Correlation is significant at the 0.01 level (2-tailed). Source: Researchers' Calculation.					

4.4 ***Multicollinearity analysis***

According to Neter & Shakhar (1989), when the tolerance is less than 0.1 or variable inflation factor (VIF) score is above 10, the data violates the collinearity assumption. Table 5 displays the multicollinearity results, providing the tolerance values for the independent variables ranging from 0.901to 0.987, when the VIF values spans from 1.013 to 1.081 respectively. This demonstrates that the model does not suffer from multicollinearity issues and can be considered valid for conducting data analysis.

Table 5: Multicollinearity results		
Variable	**Tolerance**	**VIF**
ROA	0.987	1.013
ROE	0.954	1.048
FAGE	0.901	1.081
FSIZE	0.931	1.072
Source: Researchers' Calculations		

4.5 *Divergent validity analysis*

In this study, the divergent validity is ensured utilizing Mahalanobis' distance, as advocated by McLachlan (1999). When the values calculated exceed the recommended threshold (18.47) for four independent variables, it indicates the existence of multivariate outliers. Table 6(A) shows that ascertained values for Mahalanobis' distance is 15.430 for ROE model (see table 6(B) and 11.392 for ROA model (see table 6 (B), which are lower than suggested value of 18.47, indicating no outlier is present in the models. Besides, Cook's distance was employed, recommended by Kim et al. (2001), to estimate the effect outliers, if any, on the regression model. Table 6(A) and 6(B) reveals that the values for Cook's distance remain below suggested value of 1.00, implying that the model is free from outlier's effect and thereby, confirming the divergent validity of this study.

Table 6 (A): Statistics for divergent validity for ROE model

	Minimum	Maximum	Mean	St. Deviation	N
Mahal. Distance	0.235	14.085	2.985	2.152	200
Cook's Distance	0.000	0.075	0.005	0.009	200

Dependent Variable: EARD
Source: Researchers' analysis

Table 6 (B): Statistics for divergent validity for ROA model

	Minimum	Maximum	Mean	St. Deviation	N
Mahal. Distance	0.139	11.392	2.985	2.110	200
Cook's Distance	0.000	0.067	.005	.008	200

Dependent Variable: EARD
Source: Researchers' analysis

4.6 Hypothesis testing results and Discussion

After satisfying the model's validity, researchers conducted analysis for testing hypothetical connections. The outcomes of hypothesis testing are exhibited in the Table-7 and Table-8. The beta co-efficient *(β)*, t-value, and p-value were used to evaluate each variable's significance in estimating EARD. Analysis results indicate that coefficients of ROE ($\beta=0.085$) and ROA ($\beta=0.089$) are favorable, revealing a positive association with EARD, but the relationships are not statistically important as

their p-values (ROE's p=0.506 and ROA's p=0.607) are greater than usual significant benchmark of 0.05. Earlier studies' findings provide mixed evidences regarding this finding. This finding is consistent with Admas et al. (2016) who suggested that performance measures such as ROA, ROE are not powerful tools of predicting companies' environmental accounting, and inconsistent with Tien et al. (2020), Giang et al. (2020) and Masud et al. (2018). This may be due to the fact that the other causes such as pressures from regulators, competitors and stakeholders, corporations' values may play significant bearing on influencing firms' environmental behavior in accounting. On other hand, FAGE is negatively connected with EARD with β=-0.107, t=-1.576, p=0.157 for ROE model, and β=-0.807, t=-1.568, p=0.245 ROA model respectively, indicating statistically insignificant relationship which matches with Admas et al. (2016) suggesting that older companies are not engaged in environmental reporting in comparison to younger ones. This may be due to factors of obstacle to change, variations in corporate values and culture of the firms. Finally, FSIZE is statistically significant in predicting the EARD as its coefficients (*β=0.426 for ROE model and β=0.328 for ROA model*) is positive with acceptable p-values of 0.002 and 0.003 respectively, suggesting that big firms are likely to have better environmental accounting and disclosures. The adjusted R-squared value for ROE model is presented as 0.1805, implying that 18.05% in EARD's variation can be explained by the independent variables. Similarly, and for ROA model it is shown as 0.1786, indicating that 17.86% in EARD's variation can be explained by the independent variables. Furthermore, F-values (0.001 for ROE model and 0.002 for ROA model) are statistically significant in explaining the EARD. This finding is matched with the finding of Clarkson et al. (2011) in which they argued that larger firms have greater capabilities in terms of financial resources, technological innovation and human resources, which in turn, engaging themselves in environmental accounting and reporting. Dhaliwal et al. (2011) also argued that big size firms are more inclined to environmental reporting due to pressures created by the stakeholders through scrutiny over the activities performed by the organizations.

Table 7: Results of Hypothesis Testing for Model-1(ROE)

Variables	Beta	t-value	P- value	Accept/Reject	R^2	f
ROE	0.085	0.693	0.506	Reject	18.05	4.189 (sig.0.001)
FAGE	-0.107	-1.576	0.157	Reject		
FSIZE	0.426	3.793	0.002**	Accept		

Note: **Significant at p<0.01.
Source: Researcher's calculations

Table 8: Results of Hypothesis Testing for Model-1(ROA)						
Variables	Beta	t-value	P- value	Accept/ Reject	R^2	f
ROA	0.089	0.798	0.607	Reject	17.86	3.410 (sig.0.002)
FAGE	-0.807	-1.568	0.245	Reject		
FSIZE	0.328	3.390	0.003**	Accept		
Note: **Significant at p<0.01. Source: Researcher's calculations						

5. Implications

The results from the analysis are significant for the Bangladeshi context in several ways. First, the insignificant association between ROA and EARD, ROE, and EARD suggests that Bangladeshi firms should consider factors beyond financial performance measures (ROE and ROA) when considering environmental accounting. Second, the considerable effect of firm size on EARD suggests that regulators, policymakers, and shareholders in Bangladesh ought to inspire smaller companies to accept environmental accounting practices via capacity development initiatives. Third, the inverse connection between firm age and ERD indicates that older firms in Bangladesh may encounter challenges in adopting environmental accounting due to several factors identified in the section above. So, regulators and policymakers in Bangladesh should come forward to remove the problems the older firms face by adopting environmental reporting practices and thereby ensure a sustainable reporting culture. Finally, low value of adjusted R^2 provides the necessity for capacity enhancement and consciousness building programs.

6. Limitations and scope of future research

Despite several implications, this research has some drawbacks that can provide avenues for future studies: Firstly, this study considers only the banking sector and has a limited sample size. Future researchers can include other sectors in the sample size to provide more extensive and robust outcomes. Secondly, the study fails to show causality due to the data's cross-sectional nature. Hence, future studies can conduct longitudinal research to test whether environmental reporting is affected by the dynamics of firm characteristics and other factors. Finally, the research adopts

quantitative methods only. Future researchers are welcome to adopt qualitative research methods, such as case studies and interviews, to generate better insights into the factors influencing Bangladeshi companies' environmental accounting behaviors.

References

Abed, H. A., & Sultan, S. J. (2019). The role of green financial institutions in achieving sustainable development: A vision in the possibility of its application in Iraq. *Gharee for Economics & Administration Sciences, 16*(2).

Abed, H. A., & Sultan, S. J. (2019). The role of green financial institutions in achieving sustainable development: A vision in the possibility of its application in Iraq. *Gharee for Economics & Administration Sciences, 16*(2).

Adams, C. A., Potter, B., Singh, P. J., & York, J. (2016). Exploring the implications of integrated reporting for social investment (disclosures). *The British Accounting Review, 48*(3), 283–296. https://doi.org/10.1016/j.bar.2016.03.002

Beredugo, S. B., & Mefor, I. P. (2012). The impact of environmental accounting and reporting on sustainable development in Nigeria. *Research Journal of Finance and Accounting, 3*(7), 55–63.

Clarkson, P. M., Overell, M. B., & Chapple, L. (2011). Environmental reporting and its relation to corporate environmental performance. *Abacus, 47*(1), 27–60. https://doi.org/10.1111/j.1467-6281.2011.00330.x

Cooke, T. E. (1992). The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese listed corporations. *Accounting and Business Research, 22*(87), 229–237. https://doi.org/10.1080/00014788.1992.9729440

Deb, B. C., Rahman, M. M., & Rahman, M. S. (2022). The impact of environmental management accounting on environmental and financial performance: Empirical evidence from Bangladesh. *Journal of Accounting & Organizational Change.* Advance online publication. https://doi.org/10.1108/JAOC-08-2021-0123

Deb, B. C., Saha, S., & Rahman, M. M. (2020). Does green accounting practice affect bank performance? A study on listed banks of Dhaka Stock Exchange in Bangladesh. *PalArch's Journal of Archaeology of Egypt/Egyptology, 17*(9), 7225–7247.

Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review, 86*(1), 59–100. https://doi.org/10.2308/accr.00000005

Dilling, P. F. (2010). Sustainability reporting in a global context: What are the characteristics of corporations that provide high quality sustainability reports—An empirical analysis. *International Business & Economics Research Journal, 9*(1), 19–30.

Doan, M. H., & Sassen, R. (2020). The relationship between environmental performance and environmental disclosure: A meta-analysis. *Journal of Industrial Ecology, 24*(5), 1140–1157. https://doi.org/10.1111/jiec.12992

Dura, J., & Suharsono, R. (2022). Application of green accounting to sustainable development: Improving financial performance in the green industry. *Jurnal Akuntansi, 26*(2), 192–212.

Giang, N. M., Hanh, D. T. H., Linh, L. T. T., & Thuy, T. N. T. (2020). Overview of environmental accounting for sustainable development: Evidence from Vietnamese enterprises. *Journal of Asian Finance, Economics and Business, 7*(10), 977–985. https://doi.org/10.13106/jafeb.2020.vol7.no10.977

Hosain, M. S., Dey, M. M., & Sil, S. C. (2018). Effects of firm size, firm age and independent director on corporate social responsibility disclosure in Bangladesh: A study on banking sector. *Journal of Business, 11*(2), 241.

Islam, M. N., Uddin, M. M., & Hossain, S. Z. (2024). Do environmental reporting practices impact firm performance in Bangladesh? An empirical perspective. *Open Journal of Accounting, 13*(2), 15–31. https://doi.org/10.4236/ojacct.2024.132002

Jones, S., Frost, G., Loftus, J., & Van Der Laan, S. (2007). An empirical examination of the market returns and financial performance of entities engaged in sustainability reporting. *Australian Accounting Review, 17*(41), 78–87. https://doi.org/10.1111/j.1835-2561.2007.tb00449.x

Khan, A., Muttakin, M. B., & Siddiqui, J. (2013). Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy. *Journal of Business Ethics, 114*(2), 207–223. https://doi.org/10.1007/s10551-012-1336-0

Khan, H. U. Z. (2010). The effect of corporate governance elements on corporate social responsibility (CSR) reporting: Empirical evidence from private commercial banks of Bangladesh. *International Journal of Law and Management, 52*(2), 82–109. https://doi.org/10.1108/17542431011029406

Lin, Y., Zhang, Y., Wang, F., & Dong, Z. (2025). Who is more likely to become a sustainable corporation? An empirical research based on corporate sustainability performance. *Sustainable Development, 33*(3), 3728–3746. https://doi.org/10.1002/sd.3313

Masud, M. A. K., Nurunnabi, M., & Bae, S. M. (2018). The effects of corporate governance on environmental sustainability reporting: Empirical evidence

from South Asian countries. *Asian Journal of Sustainability and Social Responsibility, 3*(1), 1–26. https://doi.org/10.1186/s41180-018-0021-7

Osemene, O. F., Ololade, R. A., & Eriki, P. O. (2020). Investigating the effects of corporate governance factors on environmental accounting reporting in six African nations. *Cogent Business & Management, 7*(1),1792414. https://doi.org/10.1080/23311975.2020.1792414

Shakkour, A., Alaodat, H., Alqisi, E., & Alghazawi, A. (2018). The role of environmental accounting in sustainable development: An empirical study. *Journal of Applied Finance and Banking, 8*(1), 71–87.

Singh, A., & Chakraborty, M. (2018). Environmental disclosure level and reporting quality in India. *International Journal of Business and Management Invention, 7*(6), 38–45.

Sitorous, C. I., Bukit, R. B., & Bulan, N. (2024). The influence of company size, board of directors and leverage on sustainability report disclosure with profitability as a moderation variable in LQ45 companies listed on the Indonesia Stock Exchange. *International Journal of Current Science Research and Review, 7*(5), 2673–2688.

Sobhan, R., Shohan, M. M. R., & Uddin, S. I. (2025). Environmental reporting and financial performance: The role of board independence. *Journal of Accounting & Organizational Change.* https://doi.org/10.1108/JAOC-05-2024-0149

Sobhani, F. A., Amran, A., & Zainuddin, Y. (2012). Sustainability disclosure in annual reports and websites: A study of the banking industry in Bangladesh. *Journal of Cleaner Production, 23*(1), 75–85. https://doi.org/10.1016/j.jclepro.2011.09.023

Tien, H. T. T., Thang, N. N., & Quyen, L. V. (2020). Corporate financial performance due to sustainable development in Vietnam. *Journal of Asian Finance, Economics and Business, 7*(3), 197–207. https://doi.org/10.13106/jafeb.2020.vol7.no3.197

Wu, D., Zhu, S., Memon, A. A., & Memon, H. (2020). Financial attributes, environmental performance, and environmental disclosure in China. *International Journal of Environmental Research and Public Health, 17*(23), 8796. https://doi.org/10.3390/ijerph17238796

APPENDIX-1

S.L	NAME OF THE COMPANIES	S.L	NAME OF THE COMPANIES
01.	BANK ASIA	11.	NCC BANK
02.	AL-ARAFA ISLAMI BANK	1 2.	PREMIER BANK

03.	BRAC BANK	13.	UNITED COMMERCIAL BANK
04.	CITY BANK	14.	TRUST BANK
05.	DHAKA BANK	15.	UTTARA BANK
06.	DUTCH-BANGLA BANK	16	STANDARD BANK
07.	EASTERN BANK	17.	JAMUNA BANK
08.	ONE BANK	18.	PUBALI BANK
09.	IFIC BANK	19.	MERCANTILE BANK
10	ISLAMI BANK LIMITED	20.	SOUTHEAST BANK

APPENDIX-2

Serial No.	Issue of Compliance	
01.	Any mention of Environmental Regulation.	
02.	Involvement of Environmental Experts in the Organization	
03.	Environmental Impact of Principal Product and Services	
04.	Any steps on Tree Plantation	
05.	Environmental Related Cost	
06.	Online Banking	
07.	Air Pollution Management	
08.	Environmental Award	**Source:** Bangladesh Bank Policy Guidelines and related literatures
09.	Energy Usage Information	
10.	Training on Environmental Management Systems	
11.	Encouragement of Renewable Energy Consumption	
12.	Any Mentioned Environmental Policy	
13.	Environmental Audit	
14.	Water Pollution Management	
15.	Green Marketing	
16.	Any Steps in Carbon Management	
17.	Any Steps regarding Waste Management	
18.	Methods of Waste Management	