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# Do Environmental Reporting Practices Impact Firm Performance in Bangladesh? An Empirical Perspective

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## Abstract

The study investigates how environmental reporting impacts the performance of the Dhaka Stock Exchange (DSE) listed firms in Bangladesh. Data for the study was obtained using a random sampling technique from the annual reports of 177 companies listed on the DSE till the end of 2021. The results obtained from the multiple regression analysis show that environmental disclosers positively and significantly impact the market performance measured by the market performance tool, Tobin's Q (TQ). However, the findings also imply that environmental disclosures are insignificant to impact on the firm financial performance assessed by return on equity (ROE) and earnings per share (EPS). The results show critical insights that can be used by DSE-listed firms, marketers, policymakers, shareholders, and stakeholders to maximize the advantages of environmental reporting.

## Keywords

Environmental Reporting, Return on Equity, Return on Assets, Tobin's Q, Firm Performance, Bangladesh

## 1. Introduction

The environment has emerged as one of the most important issues in personal and professional life over the last few decades. In recent years, various organizations worldwide have become highly motivated to engage in environmental reporting practices and movements (Bhuiyan et al., 2017; Ullah et al., 2013). According to Bassey et al. (2013), environment accounting (EA) entails the identification, measurement, distribution, and inclusion of environmental expenses

into corporate operations and the means of disseminating this information to stakeholders of the companies. Patterns of environmental disclosure may be qualitative or quantitative. It is well known that companies hide behind qualitative disclosures while avoiding giving thorough quantitative data to demonstrate that the environmental impact of their operations has been taken into account (Uagbale-Ekatah & Eguasa, 2021). EA disclosure must be appropriately disclosed to business organizations, the community where the business is located, other stakeholders, and nations at large (Chinedu & Ogochukwu, 2020; Menike, 2020). The inclusion of environmental-related facts in company annual reports started in the 1970s and significantly increased in the 1990s (Shil & Iqbal, 2005; Mehedy et al., 2018). Shil & Iqbal (2005) evidenced that there were scant efforts to provide environmental-related facts in the company's annual reports before the 1990s. Companies are expected to demonstrate their commitment to environmental policies and the necessity for environmental-related information to be reported in their annual financial statements, sustainability reports, and firm disclosure of environmental information (Kurawa & Shuaibu, 2022). So, no type of business, whether small or large, private or public, profitable or non-profitable, lives in a vacuum or runs in a closed system without any environmental connection.

The business area's most pressing environmental problems are global warming and climate change (Abdullah & Fuong, 2010; Menike, 2020). Company activities harm the environment and are to blame for serious issues such as pollution, global warming, and climate change (Kurawa & Shuaibu, 2022). Because industrial pollution of the environment is disturbing, it must defend the extent to which it includes EA facts in its annual financial statements to raise consciousness among the organization's related parties (Mehedy et al., 2018). The foundation for a country's economic development is industrialization. The environmental problem is caused by unplanned, rapid industrialization without taking environment brings environmental crisis (Das, 2017; Sarkar et al., 2020). However, because of prompt industrialization, the negative influences on the environment have been raised due to the disposal of industrial waste, forest depletion, aggressive land development, water pollution, and biological pollutants that put the earth's organic components at risk (Menike, 2020). The International Organization for Standardization (ISO) developed the ISO 14000 series of standards, which cover various facets of environmental management, to give companies valuable tools to improve their environmental performance as well as increase their productivity and success (Abdullah & Fuong, 2010; Menike, 2020). As Bangladesh moves closer to being a middle-income country, environmental issues are now crucial to consider. However, Bangladesh lags behind other nations significantly regarding EA reporting practices (Dhar & Chowdhury, 2021). Bangladesh faces many environmental challenges, including atmospheric contamination, polluted waterways, land deterioration, garbage handling, and ecological diversity loss, threatening not only human health in Bangladesh but also

economic growth (Islam et al., 2021). According to the Global Climate Risk Index (CRI) 2020 and 2021, Bangladesh is still the seventh most vulnerable nation to climate change (Al Amin, 2021). Nowadays, companies must use environmental disclosureto save the world. It has been demonstrated that companies that disclose their environmental policies perform well (Nor et al., 2016).

Although Bangladesh is subject to important challenges and risks, especially in the fields of climate change, environmental issues, or economic conditions (Mehedy et al., 2018), there has not been much research on environmental reporting in Bangladesh because the concept is still relatively new (Dutta & Bose, 2008). Even though Bangladeshi businesses primarily provide qualitative and very little quantitative data, environmental reporting is voluntary in Bangladesh, and there are no specific disclosure guidelines. Since trade restrictions have been lifted and liberalization has begun, accountants are now expected to play a more active part in environmental protection. That is why environmental accounting and reporting are now of utmost importance. Therefore, researchers are interested in conducting a critical examination of environmental disclosures and its effects on the financial performance and market performance of Bangladeshi listed companies. Therefore, researchers emphasize on the following research framework (**Figure 1**).

## 2. Literature Review and Hypothesis Development

Environmental disclosures are quickly emerging as an urgent issue in corporate and academic sectors (Uagbale-Ekatah & Eguasa, 2021). EA is a comprehensive area of accounting that produces reports for internal and external use (Modupe, 2020). Various publications examined the association of firms' environmental information communication and the financial excellence or profitability in light of the emergence of environmental issues. The findings could be more consistent when reviewing the earlier studies because different methods of measuring the variables were employed. Earlier studies, including Ayu et al. (2020), Abdul Rahman et al. (2009), Lin et al. (2021), Sarkar & Ahmed (2020), Gerged et al. (2021), Ifada et al. (2021), Maniruzzaman & Hossain (2019a, 2019b) have found

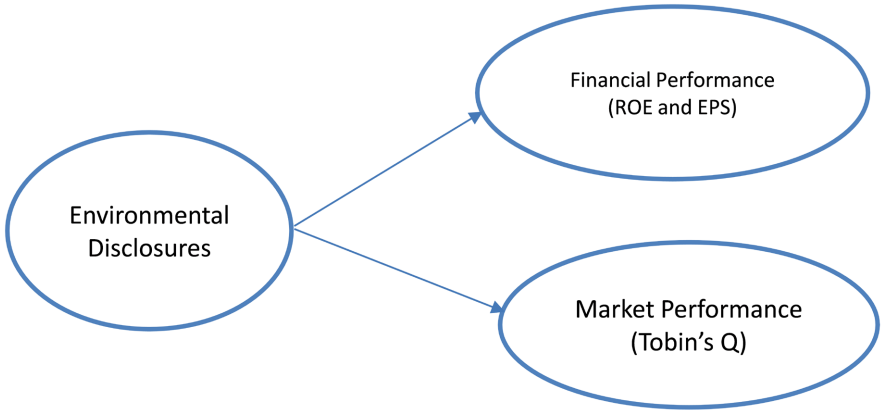


**Figure 1.** Research framework.

favorable linkages between environmental reporting and corporate performance. Other studies also found a positive correlation, such as Şimşek and Öztürk's (2021) conducted how the environmental accounting is linked with corporate performance, using the province of Istanbul as a case study. It was discovered that environmental accounting and performance are related in a significant way. Khandelwal and Chaturvedi (2021) investigated the connection between Indian company's financial excellence and EA disclosures. The multivariate test employed in the study demonstrates that environmental factors and ROE and ROA have significant effects. Olagunju and Ajiboye (2022) investigated the relationship between EA disclosure and the market values of listed non-financial firms in Nigeria. The generalized least square regression findings demonstrated that environmental disclosure significantly and favorably affects earnings per share and the stock price.

Some earlier studies, such as those by Cormier and Magnan (2007), Deswanto & Siregar (2018), and Nwaimo (2020), and Rashid & Hossain (2022) found no linkage between environmental disclosure and corporate financial outcomes. Egbunike and Okoro (2018) also examined the profitability impact of green accounting measured by costs associated with social, environmental, health, and safety risks. The analysis employed canonical correlation, and the outcome demonstrated no significant association between environmental, health, safety, social costs, and profitability measures. Sukmadilaga et al. (2023) examined how green accounting affected the value of publicly listed firms in ASEAN nations that had released their annual reports between 2017 and 2021. This study demonstrates that using green accounting reporting for energy consumption has no appreciable impact on the firm value.

Some earlier studies, like Kongkuah et al. (2021), Wasara and Ganda (2019), Iheduru and Chukwuma (2019), Chinedu et al. (2019), Sohel Rana and Hossain (2023), and Sukmadilaga et al. (2023) found a negative and significant link between the variables. Further investigation by Onuora and Christian (2019) revealed that environmental expenses had a negative and minor influence on the ROCE of 11 listed Nigerian oil and gas companies over the years 2017 and 2018. Jan et al. (2019) examined whether the Islamic corporate governance system moderates the relation of firm sustainability disclosure and financial results. The environmental reporting index measure, the market (Tobin's Q), shareholders (return on equity), and management (return on assets) were all employed in the studies above to assess the operational results, financial outcomes, and market performance of the companies. The findings showed mixed results; some authors found positive, and others found a negative association between sustainable business practices and performance (operational, financial, and market performance). In consistent with the aforementioned discussion, researchers estimate that:

$H_1$: Environmental disclosures favorably relate to the financial performance of firms.

$H_2$: Environmental disclosures favorably relate to the firms' market performance.

## 3. Methodology

### 3.1. Sample and Data

Based on the random sampling approach, the study selected 180 firms listed on the Dhaka Stock Exchange Limited (DSE) of Bangladesh for 2021; due to an outlier, we discarded 3 and finally decided on 177 firms as samples. Because of the unavailability of data, we failed to consider the data for 2022. As environmental-related information is disclosed on the firms' annual reports, we administered content analysis of the annual reports downloaded from the firms' websites. As per Khan et al. (2013), the Annual report is the most reliable source for assessing disclosure performance compared to other sources. The sample distribution summary is exhibited in Table 1.

### 3.2. Data Estimation Model

To test the hypothesized connections, researchers used a research model in which firm performance, comprising of financial performance and market performance indicates dependent variable. Besides, some control variables were used to control the model. All variables are listed in Table 2. The research model is shown in the form of following equation:

$$Perf_{it} = \beta_0 + \beta_1 EDI + \beta_2 FAGE + \beta_3 FSIZE + \beta_4 DE + \varepsilon$$

Table 1. Sample distribution.

| Serial number | Industry Name | Number of firms |
|---|---|---|
| 1. | Bank | 27 |
| 1. | Cement | 6 |
| 2. | Ceramic | 5 |
| 3. | Engineering | 16 |
| 4. | Food | 18 |
| 5. | Fuel | 7 |
| 6. | Insurance | 19 |
| 7. | IT | 3 |
| 8. | Financial Institution | 18 |
| 9. | Paper | 5 |
| 10. | Pharmaceuticals | 15 |
| 11. | Real-estate | 3 |
| 12. | Travel | 4 |
| 13. | Textile | 19 |
| 14. | Telecommunication | 2 |
| 15. | Tannery | 4 |
| 16. | Others | 6 |
| | In total | 177 |

This equation is further segmented into the following three performance dimensions:

$$EPS_{it} = \beta_0 + \beta_1 EDI + \beta_2 FAGE + \beta_3 FSIZE + \beta_4 DE + \varepsilon$$

$$ROE_{it} = \beta_0 + \beta_1 EDI + \beta_2 FAGE + \beta_3 FSIZE + \beta_4 DE + \varepsilon$$

$$TQ_{it} = \beta_0 + \beta_1 EDI + \beta_2 FAGE + \beta_3 FSIZE + \beta_4 DE + \varepsilon$$

Perf denotes performance measuring the dependent variable. The performance (dependent variable) is evaluated by three models, for instance; *EPS* model, *ROE* model, and Tobin's *Q* model). $\beta_0$ is the constant, and $\beta_{1-4}$ is the slope of control and independent variables. The independent variable is environmental reporting as evaluated by the index of environmental disclosure built using a content analysis of thirty contents of environmental reporting of sample companies. The control variables are FAGE, FSIZE, DE. ($\varepsilon$) is a random error, ($i$) stands for firms, ($t$) stands for the period.

### 3.3. Variable Measurements

To measure the impact of environmental disclosures on firm performance researchers calculated the environmental disclosure index by using the coding method. If the firm discloses any content of environmental issues, the score will be 1, and if it does not disclose the item, the score will be 0. Prior researchers such as Majeed et al. (2015); Tran et al. (2020) and Hossain et al. (2018) used this scale for identifying disclosure index.

The annual reports were examined using a manual content analysis method to assess the extent of environmental data disclosed. A data collection of 30 environmental information items was developed through a review of the literature. The 30 environmental aspects are materials/recycled, renewable energy consumption, water and effluents, biodiversity, emissions, effluents and waste, environmental friendly products and services, environmental compliance, environmental friendly transport, supplier environmental assessment, environmental grievance mechanisms, environmental policies, environmental regulations, environmental awards, environmental audit (EA), involvement of environmental expert in business (EE), environmental costs and or expenses, environmental budget, EMS ISO 14001 report, presence of environmental department and personnel, in-house environmental management, environmental awareness training, safeguard natural resources, health and safety risks, environmental risk management, minimize carbon footprint, green &amp, sustainable financing, environmental & amp, social risk rating, maintain separate green accounting, and sponsor any environmental activities. Researchers like Olagunju & Ajiboye (2022), Menike (2020), Nor et al. (2016) have all used it extensively.

The unweighted environmental disclosure index (EDI) was employed in this study to determine whether the company disclosed environmental information in its annual report. Consequently, as a result, the following formula suggested by Cooke (1992) is employed for finding the unweighted EDI:

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

where, EDI indicates each firm's corporate environmental disclosure index for a given year, denoted as a percentage or ratio.

$d$ = 1 if item $di$ is disclosed.

0 = if the item is not disclosed.

$n$ = Total score of items.

The construction of the variables and their measurement method is condensed in Table 2 provided.

## 4. Outcomes Analysis

### 4.1. Descriptive Statistics

Table 3 portrays descriptive data of the independent, dependent, and control variables, including mean value and standard deviation. EPS, ROE, and Tobin's Q averages are 2.8200, 4.8752, and 2.2150, with standard deviations of 18.81998, 42.61247, and 2.88775 respectively. On the other hand, the mean values for EDI, FAGE, FSIZE, and DE were .2231, 13.50, 72407.90, and 3.4421, with standard deviations of .19405, 68.80, 173484.61, and 6.77460 respectively.

Table 2. Variable measurement.

| Variables | Form | Measurements | Source |
|---|---|---|---|
| Dependent Variables | | | |
| Financial Performance | EPS | Net profit after tax divided by number of equities shares outstanding. | (Deswanto & Siregar, 2018; Nor et al., 2016) |
| | ROE | Net profit after tax divided by shareholder equity | (Agyemang et al., 2023; Nor et al., 2016) |
| Market Performance | TQ | Tobin's Q is measured as the market value of common equity plus book value of liabilities, divided by the book value of total assets of the firm at the end of the fiscal year. | (Al Hawaj & Buallay, 2022; Khlif et al., 2015) |
| Independent Variable | | | |
| Environmental Disclosure Index | EDI | The Environmental Disclosure Index is calculated as the number of environmental items disclosed divided by the maximum number of environmental items disclosed multiplied by 100. | (Olagunju, & Ajiboye, 2022; Deswanto & Siregar, 2018) |
| Control Variables | | | |
| Firm Age | FAGE | The natural logarithm of the number of years since the firm was listed. | (Islam, 2023; Olagunju & Ajiboye, 2022) |
| Firm Size | FSIZE | The natural logarithm of total asset. | (Islam, 2023; Agyemang et al., 2023) |
| Financial Leverage | DE | Total liabilities to shareholder equity. | (Islam, 2023; Deswanto & Siregar, 2018) |

Table 3. Descriptive statistics.

| | EPS (Tk.) | ROE (%) | TQ (Ratio) | EDI (Score) | FAGE (No of Years) | FSIZE (Million in Tk.) | DE (Ratio) |
|---|---|---|---|---|---|---|---|
| Mean | 2.8200 | 4.8752 | 2.2150 | .2231 | 13.50 | 72407.90 | 3.4421 |
| Std. Deviation | 18.81998 | 42.61247 | 2.88775 | .19405 | 68.80 | 173484.61 | 6.77460 |
| Minimum | −125.14 | −495.99 | .07 | .00 | 1.00 | 73.50 | −26.15 |
| Maximum | 98.70 | 190.10 | 23.44 | .77 | 45.00 | 1635992.80 | 55.54 |
| N | 180 | 180 | 180 | 180 | 180 | 180 | 180 |

### 4.2. Co-Relation Analysis

Table 4 demonstrates the results of correlation analysis providing the strength of relationships between the variables. Schober et al. (2018) argued that correlation coefficients, varying from +1 to −1, manifest the strength and direction of linear connections between variables. A correlation coefficient of 0 implies no linear relationship, and as the values approach ±1, the association becomes stronger. In accordance with Hemphill (2003), correlation coefficients below .15 are considered weak, those between .15 and .35 suggest a medium connection, and values exceeding .35 indicate a high linkage between variables. Our findings align with Hemphill's characterization, as the correlation coefficients observed in our study are consistently below .50. This supports the notion that the relationships between the variables are not exceptionally strong, reinforcing the idea presented by Hemphill (2003).

### 4.3. Regression Analysis

A regression analysis was employed to test multicollinearity issues in the model. Multicollinearity occurs in a regression model when the independent variables are highly correlated, implying homogeneity of the variables. The data in a model breaches the collinearity assumption if the tolerance is lower than .1 and the variable inflation factor (VIF) score is greater than 10 (Neter & Ben-Shakhar, 1989). Table 5 displays multicollinearity statistics, indicating that the tolerance score of independent variables ranges from .467 to .963, VIF score ranges from 1.038 to 2.141 respectively; confirming that the model is free from multicollinearity problem and is valid for the data analysis.

### 4.4. Measurement of Mahalanobis' (MD) Distance

To ensure divergent validity, we employed Mahalanobis' (MD) distance in the data groups of multiple features (McLachlan, 1999). The recommended value for six independent variables is 22.46 (Statistical value table). If the calculated value for Mahalanobis' distance exceeds the recommended value, indicating the existence of one or more one or more multivariate outliers. Besides, Cook's distance, which measures the extreme or undue effects of one or more observations in a regression model (Kim et al., 2001), was used to examine the impact of such outliers where the maximum Cook's distance proves the outlier samples to be not

significantly effective as the Cook's value is found less than the recommended value of 1.00 for all the three models. Our results in Table 6, Table 7, and Table 8 confirm that our data is free from multivariate outliers, suggesting divergent validity.

Table 4. Pearson's correlation matrix.

| | EPS | ROE | TQ | EDI | FAGE | FSIZE | DE |
|---|---|---|---|---|---|---|---|
| EPS | 1 | | | | | | |
| ROE | .261** | 1 | | | | | |
| TQ | −.259** | .086 | 1 | | | | |
| EDI | .135 | .151* | .126 | 1 | | | |
| FAGE | −.015 | .027 | .034 | .104 | 1 | | |
| FSIZE | .197** | .135 | −.388** | .632** | .006 | 1 | |
| DE | .000 | −.039 | −.175* | .500** | .130 | .620** | 1 |

*. Correlation is significant at the .05 level (2-tailed).

Table 5. Multicollinearity statistics.

| Variable | Tolerance | VIF |
|---|---|---|
| EDI | .575 | 1.739 |
| FAGE | .963 | 1.038 |
| FSIZE | .467 | 2.141 |
| DE | .583 | 1.716 |

Table 6. Divergent Validity Statistics for EPS model.

| | Minimum | Maximum | Mean | St. Deviation | N |
|---|---|---|---|---|---|
| Mahal. Distance | .355 | 31.486 | 3.977 | 3.642 | 177 |
| Cook's Distance | .000 | .225 | .006 | .026 | 177 |

a. Dependent Variable: EPS. Source: Calculated Results.

Table 7. Divergent Validity Statistics for ROE model.

| | Minimum | Maximum | Mean | St. Deviation | N |
|---|---|---|---|---|---|
| Mahal. Distance | .355 | 31.486 | 3.977 | 3.642 | 177 |
| Cook's Distance | .000 | 1.120 | .008 | .085 | 177 |

a. Dependent Variable: ROE. Source: Calculated Results.

Table 8. Divergent Validity Statistics for Tobin's Q model.

| | Minimum | Maximum | Mean | St. Deviation | N |
|---|---|---|---|---|---|
| Mahal. Distance | .355 | 31.486 | 3.977 | 3.642 | 177 |
| Cook's Distance | .000 | .275 | .007 | .032 | 177 |

a. Dependent Variable: Tobin's Q. Source: Calculated Results.

### 4.5. Hypotheses Testing Results and Discussion

Following the satisfaction of the regression model's validity criteria, we analyzed the variables' hypothetical linkages. To make a judgment, standardized estimates (-values), the adjusted $R^2$ value, t-values, and $p$-values were used. **Table 9** presents that adjusted $R^2$ values are .143 for EPS, .157 for ROE, and .277 for Tobin's Q model meaning that 14.3% of EPS, 15.7% of ROE and 27.7% of Tobin's Q can be explained by the environmental disclosure index (EDI) and f values of 2.985, 2.614, and 9.269 respectively with .00 significance level also presents significance of the models with a less than .05 significance level.

Our results (see **Table 9**) indicate that Earnings Per Share (EPS) is not significantly and positively influenced by the environmental reporting index with β = .053, t = −2.271, and $p$ = .084; rejecting H1. This finding is not in line with Al Hawaj & Buallay (2022) and Wu & Li (2023), which have shown that environmental reporting positively impacts the firm's operational performance, meaning that more disclosure on environmental aspects can enhance a firm's legitimization, which helps improve firms' goodwill and customers' confidence, which convert into sales and return on assets employed (Kalash, 2020). It is also similar to Horváthová (2012), who concluded that environmental performance's effect becomes positive for 2 2-year lag period and negative for a 1-year lag period. Wu & Li (2023) argued that the budget incurred for improved environmental disclosure and performance might burden the company in the short run. Still, in the long run, it can enhance the firm's resource usage efficiency and positive feedback from society and the government. Conversely, the environmental reporting index does not influence return on equity, as evidenced by β = .144, t = 1.472, and $p$ = .143 which indicates that H2 is not supported. This is supported by several prior studies (Deswanto & Siregar, 2018; Oti & Mbu-Ogar, 2018; Shonhadji, 2018) and inconsistent with Xi et al. (2022) and Angelia and Suryaningsih (2015), who found positive linkage between environmental disclosure and return on equity. Because the companies operating in Bangladesh may be more interested in the social and economic dimensions and less interested in the environmental reporting dimensions (Al-Dhaimesh, 2019). Similarly, Tobin's Q, which measures market performance, is positively and significantly impacted by the environmental index with β = .184, t = 2.014, and $p$ = .031 confirming H3; in line with the results of Al Hawaj and Buallay (2022) and Radhouane et al. (2018) where they argued that properly disclosed information on environmental aspects satisfy the shareholders needs and social demands which translate into enhanced performance. Our results also represent the effect of four control variables on the firm's earnings per share, return on equity, and Tobin's Q. First, the firm age is insignificant in affecting the EPS, ROE, and Tobin's Q as indicated by Beta value, t-value and $p$-value (.004, .550, .143 for EPS; .041, .541, .589 for ROE; .009, .126, .900 for Tobin's Q). Second, the firm size is also insignificant in influencing the financial performance as indicated by Beta value, t-value and $p$-value (.293, .058, .589 for EPS; .189, 1.744, .083 for ROE), while Firm size is

Table 9. Hypothesis testing outcomes.

| Variables | Model-1 (EPS) | | | Model-1 (ROE) | | | Model-3 (TQ) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Beta | t-value | *p*-value | Beta | t-value | *p*-value | Beta | t-value | *p*-value |
| EDI | .053 | −2.271 | .084 | .144 | 1.472 | .143 | .184 | 2.014 | .031 |
| FAGE | .004 | .550 | .143 | .041 | .541 | .589 | .009 | .126 | .900 |
| FSIZE | .293 | .058 | .589 | .189 | 1.744 | .083 | −.549 | −5.424 | .000 |
| DE | −.209 | 2.719 | .083 | −.233 | −2.404 | .017 | .072 | .794 | .428 |
| Adj. $R^2$ | | .143 | | | .157 | | | .277 | |
| F | | 2.985 (sig. .00) | | | 2.614 (sig. .00) | | | 9.269 (sig. .00) | |

Note: Results are not significant at $p \geq .05$; significant at $p < .05$; and at $p < .01$. Source: Researcher's calculations.

significant for having effect on market performance measured by Tobin's Q (β = −.549, t = −.5424, and $p = .000$). In relation to the leverage (debt/equity) ratio, the coefficients of the debt/equity (DE) variable suggest that EPS, ROE, and Tobin's Q are not considerably affected by changes in leverage ratios. This is supported by the *p*-values exceeding 5%.

## 5. Conclusion

This study explores the effect of environmental disclosure on listed firms' financial performance, and market performance in Bangladesh. Based on data obtained from the 171 listed firms for one year (2021), the study employed regression analysis to test the impact of the environmental disclosure index (EDI) on Earnings Per Share (EPS), Return on Equity (ROE), and Tobin's Q (TQ). The results suggest that environmental disclosure positively affects the market performance, demonstrated by TQ. Conversely, the environmental disclosure index didn't show any substantial influence on the financial performance of the firms, measured by the EPS and ROE respectively. The study provides valuable insights that environmental reporting generates a positive image and increases economic and market performance, thus acting as synergy for the firms. Such findings can benefit the corporate managers, policymakers, stockholders, and other stakeholders in Bangladesh.

The positive association between environmental reporting practices and firm market performance, as revealed in this study can be helpful in sever always: First, policymakers can apply this result to recommend and implement rules and regulations that motivate sustainable reporting practices. They can also consider giving incentives for firms complying and disclosing environment friendly activities such as tax benefits, subsidies, or preferential treatment in government procurement for eco-friendly companies. Second, marketers can leverage the positive linkage between environmental reporting and market performance to build trust and enhance the reputation of their products and brands. Highlighting eco-friendly initiatives in marketing campaigns can resonate positively with environmentally conscious consumers. Third, shareholders can use environmental reports to make more informed investment decisions. And the compa-

nies with strong environmental performance may offer better long-term returns, making them attractive to socially responsible investors. Fourth, companies can benefit from the positive association by gaining easier access to capital, especially from investors focused on environmental criteria and thus, may experience lower costs of capital. Finally, companies can strengthen relationships with customers, employees, and communities, leading to increased loyalty and support by proactively communicating environmental efforts.

In spite of significance, the study suffers from limitations which open avenues for further research opportunities. First, we conducted only content analysis which includes only the quantitative disclosures. The true level of environmental reporting can also be identified by collecting survey data or conducting interview with the company's managers and accountants by the future researchers. Second, the data for the study covers only one year data. Hence, future studies can research on the same topic by incorporating data from more than one year. Third, our study considers only the companies listed on the Dhaka Stock Exchange. There are many other business units which are not listed but performing environmental functions and reporting environmental issues. Thus, future research can be done by extending sample size including both listed and unlisted the companies. Finally, our study also examined the effect of environmental disclosures on market performance from secondary data only, which can also be verified by the future researchers from survey data collected from the market participants like investors, shareholders and other stakeholders of the society.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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