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DEBT FINANCING AND ENVIRONMENTAL SUSTAINABILITY DISCLOSURE OF LISTED OIL AND GAS FIRMS IN NIGERIA

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Abstract

This study examined the effect of debt financing on environmental sustainability disclosure of listed oil and gas firms in Nigeria for a period of eleven (11) years covering from 2014-2024, using debt to equity ratio as the independent variable. Panel data were used in this study, which were obtained from the annual reports and accounts of nine (9) sampled listed oil and gas firms for the periods 2014-2024. Ex-Post Facto research design was employed. Inferential statistics using Pearson correlation coefficient and Panel Least Square (PLS) regression analysis were applied to test the hypotheses of the study. This study revealed that Debt to equity ratio has a significant but negative effect on environmental remediation disclosure (β1 = -0.028870; p-value = 0.0000). It was recommended amongst others that firms should lever on the amount of debt they undertake to finance their undertakings, as it enhances firms' bottom line. Also, those firms should operate with a capital structure mix that would minimize the cost of capital and reducing the reputational risks associated with the company's operations.

Keywords: Debt financing, Environmental sustainability and debt to equity ratio

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Introduction

To ensure long-term financial success, businesses need to recognize that they are operating within a larger biophysical and social environment, and respect the limits and processes governing the sustainability of the larger ecosystem as the global economy expands rapidly toward the carrying capacity of the planet. Consequently, firms, especially the large multinational corporations, are being challenged to behave in an environmentally sustainable and socially responsive manner while maintaining and improving shareholder value. Stakeholders are soliciting information on the environmental and social impacts of business operations as well as on measures to benchmark corporate social and environmental performance indifferent industrial contexts, while investors demand disclosure of material environmental risks and related compliance costs and liabilities. Firm managers continually seek information to improve the triple bottom line performance and to make informed trade-offs among often-conflicting financial, environmental, and social objectives. As a result, the accounting profession is being called upon to expand its traditional role to incorporate environmental and social performance into the financial reporting and management control systems.

Debt financing and its effect on financial performance have emerged as key areas for research in recent years. Various research studies have been performed over the last decade for examining this relationship. However, the results have been inconclusive, inconsistent, and often contradictory. In the light of the foregoing, it is crystal clear that there exists a gap in knowledge, which this study sought to close. In an attempt to closing the variable gap in knowledge, this present study concentrated on environmental sustainability against prior studies that predominantly focused on financial performance (to the best knowledge of the researcher). The main objective of the study is to examine the effect of debt financing on environmental sustainability disclosure of listed oil and gas firms in Nigeria. The specific objective of this study is to determine the effect of debt to equity ratio on environmental remediation disclosure of listed oil and gas firms in Nigeria.

Review of Related Literature

Debt Financing

Debt means the amount of money which needs to be repaid and financing means providing funds to be used in business activities. An important feature in debt financing is the fact that you are not losing ownership in the company. Debt financing is a time-bound activity where the borrower needs to repay the loan along with interest at the end of the agreed period. The payments could be made monthly, half yearly, or towards the end of the loan tenure (Kriss, 2022). Debt financing means when a firm raises money for working capital or capital expenditures by selling bonds, bills, or notes to individual and/or institutional investors. In return for lending the money, the individuals or institutions become creditors and receive a promise to repay principal and interest on the debt (Aruna, Oshiole & Amahalu, 2020).

Debt to Equity Ratio

The Debt to Equity ratio (also called the debt-equity ratio, risk ratio, or gearing), is a leverage ratio that calculates the weight of total debt and financial liabilities against total shareholders' equity. Unlike the debt-assets ratio which uses total assets as a denominator, the D/E Ratio uses total equity. This ratio highlights how a company's capital structure is tilted either toward debt or equity financing (Fernando, 2023). The Debt/Equity Ratio is a ratio of ordinary shareholders' equity and the stake of creditors in a company. In other words, it is a measure of a company's financial leverage (Manson, 2023). The debt-to-equity ratio (D/E ratio) shows how much debt a company has compared to its assets. It is found by dividing a

company's total debt by total shareholder equity. A higher D/E ratio means the company may have a harder time covering its liabilities (Boyle, 2023). Debt-to-equity (D/E) ratio is used to evaluate a company's financial leverage and is calculated by dividing a company's total liabilities by its shareholder equity. D/E ratio is an important metric in corporate finance. It is a measure of the degree to which a company is financing its operations with debt rather than its own resources. Debt-to-equity ratio is a particular type of gearing ratio (Rathburn, 2023).
The debt-to-equity ratio takes into account both short-term debts as well as long-term debt. Short-term debt refers to borrowings that are just that: short term. This could be a couple of months or as much as six to 12 months. Long-term debt, in this case, generally refers to the equity shareholders have invested in the business long term. The D/E formula helps investors and business owners understand what percentage of debt is short term, and how much is due to shareholder equity (long-term debt) (Munichiello, 2023). A high D/E ratio suggests that a business may not be in a good financial position to cover debts. Debt in business is not always a bad thing, of course, but the equity ratio helps present an accurate picture of the current health of a business (Kenton, 2022).

$$\text{Debt/Equity} = \frac{\text{Total Liabilities}}{\text{Total Shareholders' Equity}}$$

Debt to Equity Ratio and Environmental Sustainability Disclosure
Debt structure decisions are among the most important finance decisions firms encounter. The debate still remains until the present day whether such decisions influence costs of capital and firm values. According to Jabbouri and Kijkasiwat (2023) debt financing decision refers to the financial framework of debt levels maintained by an entity. It is vital to managers by reason of the fact that it constitutes the basis for making financing decisions in any firm. Basically, the choice of debt structure a firm adopts is both financial and marketing problem and it depends on the risk and return characteristics of such firm and/or its management (Tran, 2021). Realistically, it is difficult to determine a firm's debt structure because the exact optimal debt mix can hardly be determined. For this reason, the firm must issue different securities in a countless mixtures to produce the combination that maximizes its overall value, and increase performance. Optimal debt structure means a combination of funds which minimizes the weighted average cost of capital (WACC) and increases firm value (Almustafa & Kalash, 2022).

The recent surge in the environmental, social, and governance (ESG) factors has highlighted many unanswered questions in the financial market world (Starks 2021). Shareholders and creditors may price ESG performance of firms depending on their incentives and objectives, which may be in the form of higher and less volatile cash flows, and also on the perceived risk of firms (Ramanathan, He, Black, Ghobadian & Gallear, 2017; Cheng, 2020). However, there is no consensus on the association between debt and sustainability performance. Some empirical research points to negative relationships between sustainability performance and cost of equity (Mithani & Murad, 2023; Zhang, Zhang & Guo, 2019). Contrarily, other studies find a positive relationship between both variables (Hung-Wang & Wei, 2021).

Empirical Review
Hong, Gerab and Toste (2017) examined the effect of sustainability reporting quality on corporate financial performance (CFP) among the firms listed on corporate sustainability index (ISE) and to examine the quality of information disclosed in their sustainability reports (SR). The sample was composed of all firms listed on ISE for the period 2008 to 2014 using linear regression model. The study considered accounting and market-based indicators and

control variables. There was no clear consensus as to whether the financial performance of companies listed in sustainability indices relates to their sustainability performance. The main findings were that there is no association between accounting and market-based variables and the reporting quality.

Emerald, Owusu and Kusi (2017) examined the effect of environmental-related information disclosure on organizational performance in Ghana, Using the Global Reporting Initiative (GRI) index as a benchmark, a content analysis of the corporate annual report of 17 firms listed on the Ghana Stock Exchange (GSE) was conducted over a 10-year period (2003 to 2012) to determine the total environmental disclosure scores of the sampled firms. The determinants of environmental disclosure practices of the firms were ascertained by means of a regression analysis. Results of the study indicated that listed firms in Ghana disclose some amount of environmentally-related information espoused by GRI though the level of disclosure is low. Also, the level of disclosure by environmentally-sensitive firms is higher than the less sensitive firms similar to existing studies. Moreover, the study found firm size, auditor type, age of the firm and industry type to be significant predictors of firms' environmental disclosure practices.

Egbunike and Tarilaye (2017) examined the association between firm's specific attributes (firm size, earnings, leverage and governance) and voluntary environmental disclosure with evidence from listed manufacturing companies in Nigeria. To achieve this, data of firm size, earnings, leverage and governance were obtained from the annual reports and accounts of some selected manufacturing companies during 2011-2015. Data collected were analyzed using both descriptive and inferential statistics. The study used regression analysis in order to resolve the non-normality nature of the variables and error term in the model. The study showed that there was a positive relationship between environmental disclosure, firm size, leverage, earnings per share and governance of the studied manufacturing companies in Nigeria.

Sarumpaet, Nelwan and Dewi (2017) investigated the effect of environmental performance rating on company stock price. A sample of 60 companies that were participants in PROPER during 2002-2012 was used. 246 observation samples were obtained from these companies. Correlation and multivariate analysis were used to analyze the data collected. The study found that environmental performance had a positive and significant effect on firm value.

Uyagu, Okpanachi, Nyor and Muhammad (2017) examined the effect of firm characteristics on environmental reporting practices of listed manufacturing firms in Nigeria for a period of 2000-2015. The population of the study comprises of sixty-one (61) manufacturing firms with a sample size of 29 firms drawn using judgmental sampling technique. Data were gathered using annual reports and accounts of the sampled firms through content analysis and analyzed using multiple regression technique. The study found that the firm characteristics of firm size, leverage, return on assets and firm age have significant and positive effect on environmental reporting practices of listed manufacturing firms in Nigeria.

Ong and Djajadikerta (2019) evaluated the impact of corporate governance on sustainability reporting by investigating companies operating in the Australian resources industry. The study investigated the relationships between the total sustainability disclosures and, separately, the three aspects of sustainability disclosures: economic, environmental, social and corporate governance mechanisms proxied by various attributes of board composition from 2010-2017. A positive correlation was found between the extent of sustainability

disclosures and the proportion of independent directors, multiple directorships and female directors on the board.

Erhirhie and Ekwueme (2019) examined corporate social sustainability reporting and financial performance of Oil and Gas Industry in Nigeria from 2011-2017. The study assessed the effect of corporate social sustainability reporting on Return on Assets, Return on Equity, and Return on Capital Employed of oil and gas companies listed on the Nigeria Stock Exchange. Ten oil and gas companies were sampled for the study. The study utilized secondary data collected via financial ratios and accounts of the individual companies and content analysis. The findings showed that social sustainability reporting exerts negative effect on all three performance proxies, howbeit only its effect on return on equity was statistically significant.

Andriana and Anisykurlillah (2019) examined the effect of environmental disclosure on financial performance. The population was mining and oil and gas companies listed on the Indonesia Stock Exchange from 2013 to 2017 in the amount of 38 companies. Purposive sampling technique was used and 10 companies were obtained. The data analysis techniques used for the study were Path Analysis and Sobel Test. The results indicated that environmental performance and environmental disclosure had significant positive effect on economic performance while profit margin and firm size had no significant effect on economic performance. Environmental performance and firm size had no significant effect on economic performance through environmental disclosure. Profit margin had a significant effect on economic performance through environmental disclosure. The conclusions of the study showed that higher level of environmental performance and environmental disclosure led to the higher level of economic performance.

Atang and Eyisi (2020) investigated the determinants of environmental disclosures of listed manufacturing firms in Nigeria. The data for the study was gotten from a sample of 22 listed firms in the industrial sector. The companies were randomly selected based on the availability of annual reports for the period 2011 to 2016. Ex post facto research design was adopted for the study and multiple regressions was used in analyzing the data obtained. Descriptive and inferential statistics were used to generalize the results and conclude the findings. The study showed that an increase in the profitability of manufacturing firms will lead to a 1.8% increase in the environmental disclosure of the company. The study also revealed that board composition influences about 13% of the variation in the environmental disclosure of manufacturing firms in Nigeria and also on the other hand auditor type contributes only 5.6% of the changes in the environmental disclosure of the manufacturing firms in Nigeria. The study concluded that profitability, auditor type, board composition and firm size jointly influences the environmental disclosure of manufacturing firms in Nigeria. The study recommended that the regulatory bodies should initiate policies that will make the disclosure of environmental information compulsory in Nigeria.

Salawu, Mamman, Dahiru, Garba and Yunusa (2021) examined the relationship of specific oil and gas firms attributes; firms age, board composition, financial performance, existence of foreign directors on the board and financial leverage with Environmental Disclosures (ED). Data were collected from the published annual reports of nine listed oil and gas firms quoted on the floor of the Nigerian Stock Exchange (NSE) as at 2018, for a period of seven years (2012-2018). Generalized Least Square (GLS) was used to test the hypotheses. The study established a positive and significant relationship between board composition, financial leverage, existence of foreign directors on the board and environmental disclosure (ED).

Also, firm age and financial performance was found not to have significant relationship with environmental disclosure (ED).

Kurawa (2021) examined the impact of corporate governance on voluntary disclosure by firms in the downstream sector of the Nigerian petroleum industry from 2001-2010. A secondary data obtained from the Annual Report and accounts of the 7 sampled companies were used. The data were analyzed by means of descriptive statistics and multiple regression analysis using STATA package. The study showed that board size and ownership structure has a positive effect on disclosure.

Okafor, Egbunike and Amahalu (2022) ascertained the determinants of environmental disclosure of quoted Oil and Gas firms in Nigeria for a period of thirteen (13) years spanning from 2008 to 2020. Descriptive statistics of the dataset from the sampled firms were used to describe using the mean, standard deviation, minimum and maximum values of the data for the study variables. Inferential statistics using Pearson correlation coefficient, Multicollinearity test, Panel Least Square (PLS) regression analysis and Hausman test were applied to test the hypotheses of the study. The results of the tested hypotheses revealed that there is a significant and positive relationship between Leverage and Effluent Disposal of quoted Oil and Gas firms in Nigeria at 5% level of significance (β_1 = 0.546845; P-value = 0.0000 < 0.05); there is a significant but negative relationship between Firm Size and Effluent Disposal of quoted Oil and Gas firms in Nigeria at 5% level of significance (β_2 = -0.030633; P-value = 0.0026 < 0.05); there is a significant and positive relationship between Audit Committee Size and Effluent Disposal of quoted Oil and Gas firms in Nigeria at 5% level of significance (β_3 = 0.08007; P-value = 0.0000 < 0.05).

Li, Fu, Han and Liang (2023) examined the relationship between corporate social responsibility (CSR) and financial performance (FP). The study collected data on listed companies in China from 2014 to 2020 in order to demonstrate whether CSR is positively or negatively correlated with financial performance and studied the relationship using media attention as a moderating variable. Through a regression analysis, it was found that (1) companies with good CSR performance show a high level of FP; (2) the higher the media's attention on the company, the better the CSR performance.

Almustafa, Jabbouri and Kijkasiwat (2023) examined the effect of economic policy uncertainty (EPU) on firm-level investment and corporate financial leverage. The panel data of 1072 firms traded on the New York Stock Exchange (NYSE), New York Stock Exchange Market over the period 2012–2021 was analyzed using the fixed-effect model. The empirical results showed that the financial leverage of a firm is negatively affected by EPU.

Kumar (2023) examined the role of sustainability as a major driver of innovation, and assesses its effect on firms' performance. The study was based on companies listed in the Forbes list of 100 most innovative companies and BCG's 50 most innovative companies. A logit regression model was employed to predict whether firms that adopt sustainability initiatives tend also to be innovative companies. Firms with high intensity of investment in social and governance initiatives tended to be innovative. Innovative firms had greater focus on social initiatives related to employee satisfaction, promotion of a healthy and safe workplace, and diversity. However, innovative firms tended to score lower in terms of human rights initiatives.

Nguyen, Pham, Truong, Phi, Le and Vu (2023) examined the relationship between capital structure Vietnamese company's profitability. Regression model was used to test the data

given by 300 Vietnamese firms for the period from 2012 to 2018. The findings indicated that firm profitability, represented by Return on Equity (ROE) and Return on Assets (ROA), was associated with liquidity and debt; there was a positive relationship between liquidity and profitability of Vietnamese entrepreneurs, while there was a negative relationship between long-term debt and profit maximization. Moreover, the short-term loan also has a positive impact on the firm's profitability.

Methodology

Research Design

Ex-post facto research design was employed in this study. This study was treated as *ex-post facto* research since it relied on historical data.

Population of the Study

The population of the study consisted of all the nine (9) Oil and Gas firms listed on the Nigerian Exchange (NGX) Group as at 31st December, 2024. They are: Ardova Plc, Conoil Plc, Eterna Plc, Japaul Gold and Venture Plc, MRS Oil Nigeria Plc, Oando Plc, Seplat Energy Plc, Total Nigeria Plc, and Capital Oil Plc.

Sample Size and Sampling Technique

Since the entire population size was used as sample hence, no need for sample size.

Source of Data

The data to be used in this study were collected mainly from secondary source. These data were obtained for eleven (11) years annual reports and account from 2014-2024 of the sample Oil and Gas firms.

Method of Data Analysis

The thrust of this study was to ascertain the effect of debt financing on environmental sustainability disclosure of listed oil and gas firms in Nigeria over a period of eleven (11) years from 2014 to 2024. *Ex-post facto* research design was adopted for the study. This study made use of panel data from secondary sources through the sampled firms annual reports and accounts. Descriptive statistics was utilized to describe the mean, median, standard deviation, kurtosis, skewness, maximum and minimum values of the study variables via E-Views 10 statistical software. Inferential statistics of this study was carried out using:

i. **Pearson Correlation Analysis:** This is a good measure of relationship between two variables which tells us about the strength of relationship and also the direction of relationship.
ii. **Panel Least Square (PLS) regression analysis:** was used to predict the value of the dependent variable based on the value of the independent variable.

Moreover, content analysis was adopted in this study. A content analysis was performed on the sample environmental reports to study how organizational boundaries are set for the whole report and how operational boundaries are set for specific environmental indicators.
This study adopted the Global Reporting Initiative (GRI) framework disclosures according to the G4 guidelines for the purpose of developing the environmental sustainability disclosure indices.

Model Specification

This study adapted and modified the model of Uyagu, Okpanachi, Nyor and Muhammad (2017):

$ED = \beta o + \beta_1 DER_{it} + \beta_2 PROF_{it} + + \mu_{it}$ - - - - eq (i)

Where :
ED = Emission Disclosure
DER = Debt to Equity Ratio
PROF = Profitability

Consequent upon the adapted model, the following regression equation was constructed:

$ERD_{it} = \beta o + \beta_1 DER_{it} + \mu_{it}$ - - eq (ii)

Where:
β_o = Constant term (intercept)
β_{it}= Coefficients of Debt Financing estimated for firm í in period t
μ_{it} = Error term/unexplained variable(s) of firm í in period t
ERD_{it} = Environmental Remediation Disclosure of firm í in period t
DER_{it} = Debt to Equity Ratio of firm í in period t

Decision Rule
Accept the null hypothesis (H_o) if the p-value of the test is greater than 0.05, otherwise reject and accept the alternate hypothesis (H_1).

Data Analysis

	ERD	DER
Mean	0.674545	4.755455
Median	0.730000	4.560000
Maximum	0.910000	10.58000
Minimum	0.370000	1.460000
Std. Dev.	0.185761	2.787190
Skewness	-0.492973	1.014000
Kurtosis	2.077613	3.033318
Jarque-Bera	0.835490	1.885536
Probability	0.658530	0.389548
Sum	7.420000	52.31000
Sum Sq. Dev.	0.345073	77.68427
Observations	99	99

Source: E-Views 10.0 Output, 2025

Table 1 shows the descriptive statistics of study variables. The observation of 99 in table 1 is as a result of the panel data set with the combination of time series data and cross sectional data (11years x 9 firms) . The involvement of sampled firms in the disclosure of environmental remediation activities is averagely 67.45% , a maximum of 91% percent and a minimum of 37% environmental remediation disclosure level with a standard deviation of 18.5. The observed average for DER is 4.755455, with a maximum of 10.58000, minimum of 1.460000 and standard deviation of 2.787190.

Table 2 Pearson Correlation Matrix

	ERD	DER
ERD	1.0000	
DER	-0.4333	1.0000

Source: E-Views 10.0 Correlation Output, 2025

From the findings on the correlation analysis between ERD and the other study variables in table 2, the study found that there a negative correlation coefficient between DER (-0.4333), and ERD.

Test of Hypothesis

Ho_1: Debt to equity ratio has no significant effect on environmental remediation disclosure of listed oil and gas firms in Nigeria.

H_1: Debt to equity ratio has significant effect on environmental remediation disclosure of listed oil and gas firms in Nigeria.

Table 3: Panel Least Square (PLS) Regression Analysis testing the effect of Debt to Equity Ratio on Environmental Remediation Disclosure

Dependent Variable: ERD
Method: Panel Least Squares
Date: 12/19/25 Time: 15:36
Sample: 2014 2024
Periods included: 11
Cross-sections included: 9
Total panel (balanced) observations: 99

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.811811	0.033230	24.43019	0.0000
DER	-0.028870	0.006101	-4.731983	0.0000

R-squared	0.187548	Mean dependent var	0.674545
Adjusted R-squared	0.179172	S.D. dependent var	0.178018
S.E. of regression	0.161283	Akaike info criterion	-0.791313
Sum squared resid	2.523195	Schwarz criterion	-0.738886
Log likelihood	41.16998	Hannan-Quinn criter.	-0.770101
F-statistic	22.39166	Durbin-Watson stat	0.528030
Prob(F-statistic)	0.000008		

Source: E-Views 10.0 Panel Regression Output, 2025

Interpretation of Regression Result

Table 3 reveals R^2 value of 0.187548. The R^2, which represents the coefficient of multiple determinations, implies that 18.75% of the total variation in the dependent variable (ERD) of the listed oil and gas firms in Nigeria is explained by the explanatory variable (DER). The R^2 of 18.75% did not constitute a problem to the study because the F- statistics value of 22.39166 with an associated Prob.>F = 0.000008 indicates that the model is fit to explain the relationship expressed in the study model. The value of R^2 of 18.75% also shows that 81.25% of the variation in the dependent variable is explained by other factors not captured in the study model. This suggests that apart from debt to equity ratio, there are other factors that mitigate environmental remediation disclosure of listed oil and gas firms in Nigeria. The results in table 3 illustrated that debt to equity ratio has a negative but significant effect on ERD measured with a beta coefficient and t- value of -0.028870 and -4.731983 respectively and p- value of 0.0000 which is statistically significant at 5%:

ERD = 0.811811 - 0.028870DER

This beta coefficient revealed that if debt to equity ratio increases by one unit, then the sampled firms' environmental remediation disclosure would decrease by 2.89%. In addition, Durbin-Watson test is implied to check the auto correlation among the study variables. The Durbin-Watson value is 0.528030 which is less than 2 provide an evidence of no auto-correlation among the variables.

Decision

Based on the empirical evidence that suggests that debt to equity ratio has a significant negative effect on sampled oil and gas firms in Nigeria at 5% level of significance, thus, the alternative hypothesis of the study is accepted.

Discussion of Findings

The regressed coefficient of hypothesis 1 reveals R^2 value of 0.187548 which implies that 18.75% of the total variation in the dependent variable (ERD) of the listed oil and gas firms in Nigeria is explained by the explanatory variable (DER). The R^2 of 18.75% did not constitute a problem to the study because the F- statistics value of 22.39166 with an associated Prob.>F = 0.000008 indicates that the model is fit to explain the relationship expressed in the study model. The value of R^2 of 18.75% also shows that 81.25% of the variation in the dependent variable is explained by other factors not captured in the study model. The results of hypothesis I illustrated that debt to equity ratio has a negative but significant effect on ERD measured with a beta coefficient and t- value of -0.028870 and -4.731983 respectively and p- value of 0.0000 which is statistically significant at 5%:

The findings of this study corroborates the results of Nguyen, Pham, Truong, Phi, Le and Vu (2023); Chang, Hsiou-Wei Lin, Wen-Hsien Tsai, and Cheng-Tsu (2021); Giannarakis (2021) but contradicts the findings of Pereira, Monteiro, Silva and Lima (2023); Kurawa (2021).

Conclusion

This study examined the effect of debt financing on environmental sustainability disclosure of listed oil and gas firms in Nigeria. This study obtained panel data from annual reports and account and publications of the listed oil and gas firms that operated during 2014-2024. In addition, the study specifically examined the effect of debt to equity ratio on environmental sustainability disclosure. Panel least square regression estimate were employed. This study revealed that Debt to equity ratio has a significant but negative effect on environmental remediation disclosure ($\beta 1 = -0.028870$; p-value = 0.0000).

Based on the negative relationship between debt to equity ratio and environmental sustainability disclosure, this study recommends that, firms should lever on the amount of debt they undertake to finance their undertakings, as it enhances firms' bottom line. Also, those firms should operate with a capital structure mix that would minimize the cost of capital and reducing the reputational risks associated with the company's operations.

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