

ENVIRONMENTAL ACCOUNTING AND FIRMS VALUE OF MEDIUM SCALE ENTERPRISES IN NIGERIA

ASHU FABRICE ENOW (Ph.D)

Department Of Accounting, Faculty Of Management Sciences, University Of Calabar,
Calabar, Cross River State

E.MAIL: ashufabriceenow@gmail.com/ashconsultingltd2018@gmail.com

Abstract

*The study investigated how environmental accounting practices could impact firm value of medium scale enterprises in Nigeria emphasizing the effects of environmental accounting disclosure and the moderating influence of corporate ethics. The study employed a panel multiple regression analysis. Information was gathered from medium scale enterprises that are listed on the Nigerian Exchange Group, specifically looking at their annual reports and their adherence to the Global Reporting Initiatives (GRI) framework for environmental accounting practices. From the research analysis the findings revealed that the correlation between environmental accounting disclosure (EAD) and firm value, suggesting that greater transparency and reporting on environmental practices could impact how investors view a company and improve its valuation. Although the moderating role of corporate ethics (measured by GW) demonstrated a positive link, it did not reach statistical significance. Nevertheless, the research showed a notable beneficial interaction effect (EAD*GW) on company worth, indicating that when environmental accounting disclosure and corporate ethics are aligned, they can have a combined positive impact on firm valuation. It was determined that environmental accounting practices and corporate ethics play a crucial role in influencing the firm value of chosen Medium Scale Enterprises in Nigeria. It was recommended that Medium Scale Enterprises improve transparency in environmental reporting, foster a robust ethical culture, and align environmental accounting disclosure and corporate ethics strategically to optimize their impact on firm value.*

Keywords: *Environmental Accounting Practices/Disclosures, Corporate Ethics, Global Reporting Initiatives, Goodwill.*

Introduction

Many countries around the world have mandated enterprises to establish green accounting and to disclose environmental information for the reference of interested parties (Jui-Che & Hsieh-Shan, 2015). The exploitation of natural resources and ongoing release of greenhouse gases by industries worldwide are growing. This can be attributed to the industrial revolution of the late 18th century, during which economic activities shifted from agriculture to manufacturing in many regions. Manufacturing moved from home and thatched workshops to factories as its traditional sites changed. The industrial revolutions resulted in better economic conditions for the majority of individuals in industrialized societies. There are expenses associated with these economic advances. Industrialization, which necessitated the exploitation of natural resources, including energy, led to increased factory emissions and extensive land use, thereby adversely affecting the natural environment (Dibua & Onwuchekwa, 2015). This is manifested in the widespread environmental degradation and atmospheric pollution observed globally, with Nigeria being a notable example. Nevertheless, sustainable development, as widely recognized, emphasizes the generation of wealth

and prosperity while concurrently addressing the critical significance of social and environmental factors. This approach enables businesses and public organizations to achieve the triple bottom line in sustainable management (Eze et al., 2016).

The environment serves as a benefactor for the entrepreneur, offering abundant resources for their business endeavors. It is the responsibility of the entrepreneur as a member of society to safeguard and conserve the environment, thus reciprocating the benefits received. In the 21st century, corporate ethics and the environment are of utmost importance. Both of them have been expanding and maturing worldwide (Kaur, 2019). Corporate ethics are guidelines for making decisions that dictate how an individual should behave within a business entity. A person cannot exist on their own, therefore they reside in a community, with businessman being an integral member of that community. Society plays a key role in the business environment. There is a connection between human and environment when it comes to ethics. Ethics concerns the manner in which we can lead a virtuous life without causing harm to other beings. According to Franklin D. Roosevelt, a country that ruins its land ruins itself. Forests act as the Earth's respiratory system, cleaning the air and revitalizing the people. Therefore, corporate entities should view it as their responsibility to safeguard the environment at this crucial moment, as efforts to protect nature directly benefit businesses.

Corporate entities must align their practices with consumer preferences by enhancing the quality and quantity of their products. However, in increasing production, companies often face challenges related to economic, technological, social, and environmental sustainability. These challenges include optimizing production costs and managing waste. To address these issues, companies must develop integrated, comprehensive, and efficient sustainable and environmentally-friendly industrial concepts. Notably, some corporations in developing countries are becoming more aware of international market demands and are making significant efforts towards better environmental and social practices. For instance, studies indicate that a few companies in Nigeria are adopting environmentally friendly practices, although many still neglect their environmental responsibilities (Okafor, 2018).

The disclosure of high-quality environmental practices reflects the degree to which organizations adhere to ethical and legal standards. In Nigeria, the utilization of natural resources is essential, along with its associated consequences. Firm value, an economic model, measures the interests of all shareholders and stakeholders within an organization. The use of environmental resources and the implementation of environmental accounting practices significantly influence the performance and value of firms. According to reports from Global Reporting Initiatives (GRI) and KPMG, approximately 80% of the world's largest 250 companies now issue sustainability reports to provide information on their environmental practices. However, there remains a debate regarding whether investors value the disclosure of environmental and sustainability practices (Chamaiporn et al., 2017). This uncertainty arises partly from the costs associated with such disclosures, including data collection, information compilation, report writing, and publication. These costs can divert management's attention from maximizing shareholder wealth. Environmental changes have compelled stakeholders in the corporate sector to incorporate corporate ethics. The interdependence of business and the environment is undeniable, as businesses cannot thrive while harming the environment. Nonetheless, the corporate sector continues to grapple with the integration of environmental accounting into their practices and the disclosure of related costs and benefits.

Most research on environmental disclosure focuses predominantly on how environmental accounting affects financial performance (Ezeagba et al., 2017; Oyedokun et al., 2019; Falope et al., 2019), with

less emphasis on its impact on firm value. Exceptions include Akinlo and Iredele (2014), who examined the effect of environmental information disclosures on the market value of fifty publicly listed companies in Nigeria from 2003 to 2011 Fabian et al. (2022) who investigated the impact of environmental accounting practices and social responsibility disclosures on the value of oil and gas firms in Nigeria using net assets per share as a proxy for firm value; and Adegbe et al. (2021) who studied the effect of environmental accounting practices on the firm value of quoted medium-scale enterprises in Nigeria. However, to the best of our knowledge this study is unaware of any research that considers corporate ethics as a moderator in examining the relationship between environmental accounting and firm value of medium-scale enterprises in Nigeria. This study aims to fill this gap.

Literature Review

Concept of Environmental Accounting Practices

Environmental accounting practice involves prioritizing efficiency and effectiveness in resource use during production processes to align company development with environmental functions and provide societal benefits. The implementation of green accounting emphasizes conserving land, materials, and energy, based on ecosystem principles. The objective of green accounting is to enhance the efficiency of environmental management by evaluating environmental activities in terms of costs (environmental costs) and benefits (economic benefits), as well as producing positive environmental protection outcomes. In essence, green accounting provides information on the extent to which an organization or company contributes positively or negatively to the quality of human life and the environment (Endiana et al., 2020). According to Ijeoma (2015), environmental accounting practices focus on controlling emissions and effluents, and involve using materials, processes, or practices to reduce, minimize, or eliminate the creation of pollutants or wastes, including reducing the use of toxic or hazardous materials, energy, water, and other resources.

Environmental accounting disclosure practices (EADP) involve the guidelines, frameworks, and models that comply with accounting rules and principles to recognize, measure, present, and disclose environmental issues in the preparation of environmental financial statements. There are two types of environmental reporting practices: (i) Mandatory disclosure, which is a minimum prescribed disclosure requirement expected from a reporting entity, and (ii) Voluntary disclosure, where the entity decides what to disclose and may choose not to disclose at all (Makori & Jagongo, 2013; Dibia & Onwuchekwa, 2015). In Nigeria, environmental reporting is voluntary, allowing companies to choose what to disclose or not disclose (Dibia & Onwuchekwa, 2015). This research utilizes environmental accounting disclosures (EAD) as a metric for evaluating environmental accounting methods. EAD includes recognizing and managing environmental costs and benefits from the past, present, and future to assist with decision-making, control, and public disclosure. According to ACCA (2015), environmental accounting disclosure encompasses the production of financial and non-financial information regarding an organization's environmental impact or footprint for a particular accounting period.

Gatimbu and Wabwire (2016) stated that corporate environmental disclosure involves reporting on the impact of an organization's activities on the natural environment, including waste management, recycling, repackaging, energy and material saving and conservation, carbon management, emission, pollution, wetland and wildlife conservation, among others.

Concept of firm value

Investors observe a firm based on its value; hence, firm value is relevant to stock price. Firm value represents the prosperity of business owners. The management of firms has the responsibility of maximizing the wealth of shareholders optimally (Oyedokun *et al.*, 2019). The firm value is an indicator of how successful the shareholders are; thus, high firm value represents wealthy firm and maximization of shareholders' wealth.

A company's performance is evaluated using firm value as a measure. Investors also judge the company based on its market capitalization, which is directly linked to the stock price. According to Ftouhi *et al.*, a high stock price leads to an increased firm value.

Bhabra opines that firm value is the price paid by the wealthy buyer when a company is sold, and he also sees firm value as the objective value from the public and the orientation of company's survival (Bhabra, 2007). It is evident from the previous information that the value of a company is determined by how investors view its level of success, which is often linked to the price of its stocks. Price to book value (PBV) is usually used as an indicator of firm worth. A high PBV indicates that the going concern principle is in effect, resulting in increased shareholder wealth. Nevertheless, this research employs Tobin Q as a indicator of company worth.

Concept of business ethic

As a matter of corporate policy, every organization strives to operate in an ethically transparent manner. Ethical behavior is considered part of an organization's social responsibility, rooted in the philosophy that organizations should positively impact society beyond merely maximizing profits. Ebitu and Beredugo (2015) describe ethics as a set of moral principles or values guiding an organization's conduct and that of its employees, both internally and in their external interactions. Turyakira (2018) asserts that ethics is the core of an organization.

Ethics encompass the values and principles that govern the actions of individuals or groups regarding what is right and wrong. Consequently, ethics establish standards for good and bad conduct and decision-making within organizations (Sexty, 2011).

In a business context, being ethical involves applying principles of honesty and fairness in relationships with coworkers and customers (Daft, 2001). Business or corporate ethics, a form of applied or professional ethics, examines ethical principles and moral issues that arise in a business environment (Stanwick & Stanwick, 2009). It serves as an umbrella term covering all ethics-related issues in the business context. Business ethics are defined as the rules, standards, codes, or principles that guide morally appropriate behavior in managerial decisions concerning corporate operations and relationships with society (Sexty, 2011).

Business ethics are part of environmental philosophy, which extends ethical considerations beyond humans to the non-human world. This perspective influences various disciplines, including environmental law. Emphasizing workplace ethics helps managers and staff maintain a strong moral compass. A useful external indicator of a corporate entity's ethical standards is its volume of loyal and satisfied customers, achieved through the goodwill a company has built over the years. For this research, corporate goodwill will be used as a proxy for corporate or business ethics.

Conceptual model of environmental accounting practice and firm value

The conceptual model is a diagram that visually and logically connects variables to illustrate the relationships among constructs in the proposed framework. This model is essential for understanding the extent to which environmental accounting practices influence firm value. To

elucidate this relationship, the study uses environmental accounting disclosure as a proxy for environmental accounting practices. It posits that these practices impact firm value, with goodwill serving as a proxy for corporate ethics and acting as a moderating variable. Figure 1 below depicts the direction of the assumed relationships among these variables under study.

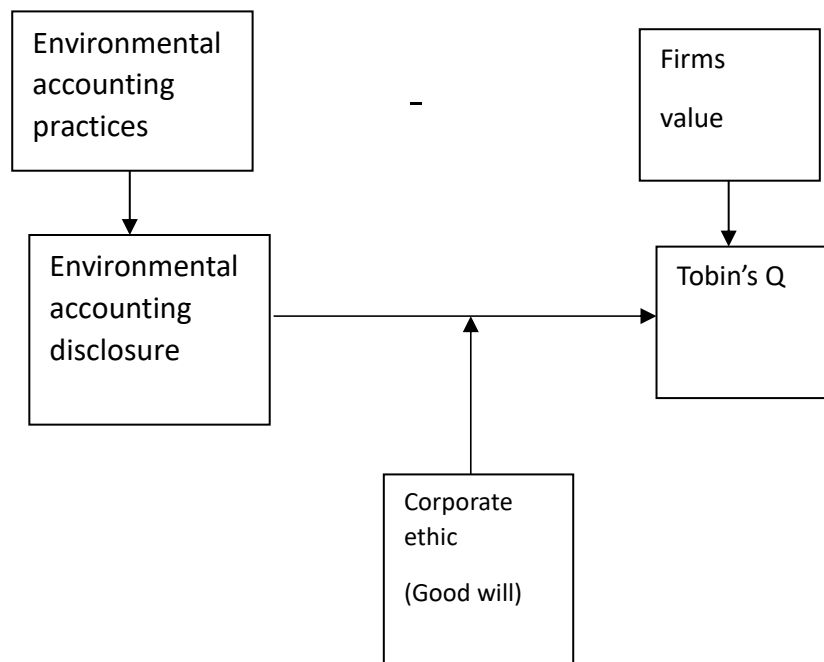


FIG. 1 Conceptual model of environmental accounting practice and firm value Source: Researchers model linkage, 2024

Empirical Review

Ogbonna *et al.* (2020) investigated the link between environmental accounting and sustainable development in Nigeria spanning from 2007 to 2016. Oil spillage cost, oil drilling waste disposal cost, and degradation cost represented environmental accounting proxies, whereas human development index and human poverty index served as sustainability development indicators. The study utilized a correlational research design as chosen by the researchers. The research utilized secondary data gathered from annual reports of the Nigeria National Petroleum Corporation, CBN Statistical Bulletin, National Bureau of Statistic Bulletin, and United Nations Development Program (UNDP) Report 2016. The hypotheses of the research were tested and other data were analyzed using Pearson Product Moment Correlation and simple linear regression tools with the assistance of SPSS version 22. The results of this research showed that there was no significant connection between sustainability development and the environmental accounting variables (OSC and ODWDC) in Nigeria during the time frame of the study. Nevertheless, there was a notable correlation between Degradation cost and both human development index and human poverty index.

Endiana *et al.* (2020) determined how green accounting through the application of CSMS can improve the financial performance of Medium Scale Enterprises in Indonesia. Purposive sampling was utilized as the sampling technique, with the research sample comprising 38 companies listed on the IDX. The data were analyzed utilizing Partial Least Square (PLS) method in Structural Equation Modeling (SEM) analysis. The findings of this research showed that Medium Scale Enterprises in Indonesia could practice green accounting by assigning suitable environmental expenses and setting aside a portion for implementing CSMS to enhance financial outcomes.

Akinlo and Iredele (2014) examined the impact of environmental information disclosures on market value of fifty quoted companies in Nigeria for the period 2003-2011. The aggregate and individual impact of corporate environmental disclosure (CED) was regressed on market value (Tobin's Q). Their empirical analysis revealed that CED has a significant positive impact on market Value when considered in aggregate.

Omaliko *et al.* (2018) examined the comparative analysis of environmental disclosure in oil and gas industries in Nigeria. The research evaluated the environmental reporting guidelines of Global Reporting Initiatives (GRI) against the environmental data shared in the yearly reports of five Listed Oil and Gas companies in Nigeria over a five-year span (2012-2016). The research design chosen was content analysis. The study used secondary data from the audited financial statements of five Nigerian Listed Oil and Gas firms to create a disclosure compliance index for the period analyzed. The compliance index and the Friedman Analysis of Variance (ANOVA) were the statistical methods utilized. The study's results showed a strong and positive correlation between the oil and gas companies in Nigeria meeting the Global Reporting Initiative (GRI) disclosure standards and their compliance behavior.

The study of Fabian *et al.* (2022) studied the effects of environmental accounting practices and disclosures of social responsibility on the value of Oil and Gas Companies in Nigeria through empirical research. To establish the connection between environmental accounting practice, social responsibility disclosures, and firms' value, the study utilized the GRI G4 content index to measure both environmental accounting practice and social responsibility disclosure, while net assets per share (NAPS) represented firms' value. Two theories were developed to steer the research, and the estimation of parameters was analyzed through a statistical test with OLS regression model on STATA V.15. The study utilized an Ex Post Facto design and gathered data from the annual financial reports of all oil and gas firms listed on the Nigerian Exchange Group (NGX) for the years 2016-2020. The results of the research showed that environmental accounting practice and social responsibility disclosures positively impact the value of firms, as measured by net assets per share (NAPS), at a significant level of 1%.

Ezeagba *et al.* (2017) examined the effect of environmental accounting disclosure on corporate performance of food and beverage firms in Nigeria. The research discovered that disclosing environmental accounting has a noteworthy impact on earnings per share and return on equity, while it has a minor impact on return on capital employed and net profit margin.

Oyedokun *et al.* (2019) measured environmental accounting disclosure with non-financial indicators, financial indicators and performance indicators. The research investigated how the measures impacted the firm value of industrial goods companies in Nigeria. The research indicated that non-financial indicators positively impact firm value, performance indicators negatively impact firm value, and financial indicators have no significant impact on firm value.

Adegbie *et al.* (2021) examined the effect of environmental accounting practices on firm value of quoted Medium Scale Enterprises in Nigeria. The research used an ex-post facto design and focused on 34 Medium Scale Enterprises listed on the Nigerian Stock Exchange as of December 31, 2019. The research chose 11 companies for the sample group using purposive sampling method. Both descriptive and inferential statistics were conducted. The pooled OLS analysis was the most suitable method for estimating the model, and it showed that environmental accounting practices, along with the control of company size, significantly impact the firm value of Medium Scale Enterprises in Nigeria.

Falope *et al.*, (2019) adopted ex-post facto design to examine the effect of environmental cost disclosure on corporate performance. The research discovered that the cost of environmental recycling, environmental prevention, and environmental protection all have a notable impact on company performance.

Methodology

The study used ex-post facto research design and content analysis tool to investigate how environmental accounting practices impact firm value. The research utilized Medium Scale Enterprises that were listed on the Nigerian Exchange Group. Medium Scale Enterprises were investigated for their high usage of environmental resources like materials, water, and energy, as well as their frequent discharge of waste, emissions, and effluents. The sample size was selected using purposive sampling technique. The method was utilized to identify the firms that fit the specified requirements: (1) the company should have been listed on Nigerian Exchange Group between 2012 and 2021 and (2) it should have its yearly report available on its website for the time frame being reviewed, including information on environmental actions.

Data was gathered from sources like the published yearly reports of the chosen companies and the Global Reporting Initiatives (GRI) framework. A list of environmental accounting practices was created by analyzing content from the Global Reporting Initiatives (GRI) framework. The practice of environmental accounting encompasses water management, waste management, product and service responsibility, emissions, compliance, environmental grievance mechanisms, and energy. A checklist containing 40 items based on the Global Reporting Initiative (2006/2008/2011/2013) was created to analyze the environmental accounting disclosure practices of listed Medium Scale Enterprises in Nigeria. Content analysis, currently the most popular method for evaluating annual report information, rated companies as "1" for complete disclosure, "1/2" for partial disclosure, and 0 for non-disclosures.

The hypotheses were tested using the OLS models (functional form and econometrical) that are presented below. $FV = f(EAP)$ Equation 1

Model A, being the model without the moderating variable is presented in econometrics form as:

$$TQ_{it} = \beta_0 + \beta_1 EAD_{it} + \epsilon_{it} \dots \dots \dots \text{Equation 3}$$

Model B With moderating variable included

The model with business ethic (Goodwill) included as moderating variable is presented as follows:

$$TQ_{it} = \beta_0 + \beta_1 EAD_{it} + \beta_2 LGW_{it} + \epsilon_{it} \dots \dots \dots \text{Equation 3}$$

Model C With moderating variable and interactive variables

The model with business ethic and *interactive variables* is presented as follows:

$$TQ_{it} = \beta_0 + \beta_1 EAD_{it} + \beta_2 LGW_{it} + \beta_3 EAD * LGW_{it} + \epsilon_{it} \dots \dots \dots \text{Equation 3}$$

Where FV= Firm value and it proxy with Tobin's Q.

EAP = environmental accounting practices proxy by environmental accounting disclosure. Three models where is further represented by the proxy for firm value and environmental accounting practices with the moderating variable. Environmental accounting disclosure is influenced by the total of environmental financial accounting disclosures, environmental management cost disclosures, environmental energy reporting (physical environmental accounting) disclosures, and environmental

Multi collinearity test

Table 2

Pearson Correlation matrix of proxies to environmental accounting, firm value and corporate ethic

	TQ	EAD	GW
TQ	1.0000		
EAD	0.4080	1.0000	
GW	0.0247	0.1480	1.0000

Source: STATA Output version 14

Since the distribution is normal the correlation coefficient was used to investigate the level of correlation amongst the variables. The Pearson correlation coefficient between TQ and EAD is 0.4080. The positive correlation coefficient suggests that there is a weak positive monotonic relationship between the variables TQ and EAD. As EAD values increase, TQ values tend to increase as well. The correlation coefficient indicated that the relationship is strong. The Pearson correlation coefficient between TQ and LGW is 0.0247. The positive correlation coefficient indicates a weak positive monotonic relationship between TQ and LGW. However, the coefficient is close to zero, suggesting that the relationship is very weak and not practically significant. The Pearson correlation coefficient between EAD and GW is 0.1480. Similar, the positive correlation coefficient suggests a weak positive monotonic relationship between EAD and LGW.

Table 3
Heteroscedascity test

Variables	Statistics	Prob.
Mean vif.	0.931	
Hetttest Chi2	0.0510	0.05809

Test for multicollinearity and heteroscedascity test

The Variance Inflation Factor (VIF) is a measure used to detect multicollinearity among predictor variables in a regression model. It quantifies how much the variance of an estimated regression coefficient is increased due to collinearity with other predictors. A VIF value greater than 1 indicates the presence of multicollinearity, and higher VIF values suggest more severe collinearity issues. Overall, the mean VIF (0.931) indicates that there is no degree of multicollinearity present in the model. This implies the variables does not exhibit multicollinearity.

The Breusch-Pagan / Cook-Weisberg test was applied to the fitted values of the dependent variable TQ. The fitted values represent the predicted values of TQ obtained from the regression model. The test statistic (chi2) was 0.0510, and it follows a chi-square distribution with 1 degree of freedom. The p-value associated with the test statistic was 0.05809 and extremely large, much greater than the conventional significance level of 0.05. As a result, we have strong evidence to accept the null hypothesis of constant variance. In this case, there is no presence of heteroskedasticity indicated in the model.

Regression analysis

Table 4

OLS fixed effect of regression coefficient of environmental accounting, firm value and corporate ethic

Variables	Coefficient	Prob.
EAD	.2442194	0.024
GW	.2534755	0.067
EAD*GW	.1345674	0.032
Con_	6.544673	0.445
R ²	0.610	
		0.0210
F-Stat. (2.11)	3.84	0.1755
Hausman test		

Source: STATA Output version 14

The goal of the Hausman test was to make a decision between using the FE and RE options in the third model. The outcome showed a p-value of 0.1755 (Prob>chi2 = 0.1755). The p-value exceeds the usual significance threshold of 0.05, meaning that we cannot reject the null hypothesis. Hence, there is insufficient evidence to indicate that the coefficients vary consistently between the fixed effects (FE) and random effects (RE) models. In this instance, the random effects (RE) model was deemed more suitable. The data yielded an R-squared value of 0.610. The independent variable, moderating variable, and interactions (EAD, LGW, Ead*GW) accounted for 61.0 percent of the total variation (100%) in the dependent variable (TQ) in the model. In this instance, they clarified a significant portion of the overall variability in TQ. The EAD coefficient equals 0.2442194. The research demonstrates that as the size of the audit firm increases, the value of Medium Scale Enterprises in Nigeria studied during the period decreases by 24.42 percent. The coefficient representing corporate ethic as measured by LGW is 0.2534755. An increase in the ethic percentage of a company leads to a 25.34% rise in the firm value of Medium Scale Enterprises in Nigeria during the research period. Furthermore, the interaction coefficient (EAD*LGW) of 0.1345674 suggests that a rise in the interaction equates to a 13.45% growth in the firm value of the chosen Medium Scale Enterprise in Nigeria during the investigated timeframe. The constant term (cons) coefficient is 6.544673. It means that when all other factors remain constant, the value of the chosen Medium Scale Enterprises will increase by 6.544673.

Discussions

The following hypotheses were tested

Hypothesis one

Ho: Environmental accounting disclosure has no significant affects firm's value of listed selected Medium Scale Enterprises in Nigeria.

The p-value for audit firm is 0.024 and is less than 0.05. This show that it is not statistically significant at the 5% level. Thus, there is enough evidence to reject the null hypothesis conclude that environmental accounting disclosure has significant effect on firm value of selected Medium Scale Enterprises in Nigeria.

Hypothesis two

Ho: Corporate ethic does not significantly moderate the relationship between environmental accounting practices and firm's value of listed selected Medium Scale Enterprises in Nigeria.

The p-value for Audit tenure is 0.032 and is less than 0.05. This show that it is statistically significant at the 5% level. Thus, there is enough evidence to conclude that corporate ethic significantly moderates the relationship between environmental accounting practices and firm's value of listed selected Medium Scale Enterprises in Nigeria.

Above all, the F-statistic is 2.11 with a corresponding p-value (Prob > F) of 0.0210 is less than 0.05 significance level. This means that the overall model may be statistically significant at the 5% level.

Conclusions

This study sought to examine the effect of environmental accounting practices on the firm value of selected Medium Scale Enterprises in Nigeria, with a specific focus on the effect of environmental accounting disclosure with the moderating role of corporate ethics. The findings of this study contribute valuable insights to the understanding of the relationship between environmental accounting practices and firm value. The coefficient for environmental accounting disclosure (EAD) revealed a significant positive relationship with firm value. This finding implies that greater transparency and disclosure of environmental accounting practices could impact investor perceptions and potentially influence firm valuation. Furthermore, the study revealed a positive relationship though non-significant between the moderating variable, corporate ethics as proxied by GW, and firm value. The positive relationship underscores the importance of ethical considerations in influencing investors' perceptions and decisions regarding firm valuation. Nevertheless, the interaction term (EAD*LGW) also demonstrated a significant positive relationship with firm value. This suggests that when environmental accounting disclosure and corporate ethics aligned together, the bond can create a synergistic effect that positively influences firm valuation.

In conclusion, this study's results highlight the significance of environmental accounting practices and corporate ethics in influencing the firm value of selected Medium Scale Enterprises in Nigeria. These insights have implications for companies seeking to enhance their firm value and improve their performance by aligning their environmental practices and ethical conduct with stakeholder expectations.

Based on the conclusion drawn from the study's findings, here are some recommended actions for companies to consider:

- i. Manufacturing or producing companies in Nigeria should prioritize improving their transparency and reporting of environmental practices. They should implement robust environmental accounting practices and providing clear and detailed disclosures. This can foster investor confidence and positively influence firm valuation.

- ii. Manufacturing or producing companies should actively cultivate a strong ethical culture. Doing this can lead to better stakeholder trust and enhance the overall reputation of the company, which could eventually contribute to higher firm valuation.
- iii Manufacturing or producing companies in Nigeria should consider aligning environmental accounting disclosure and corporate ethics factors strategically to maximize their positive influence on firm value. This will help generate a synergistic effect that amplifies the can impact on firm valuation

Research Gap Filled

The empirical review presented various studies that have explored the relationship between environmental accounting practices and firm value in different contexts. While these studies provide valuable insights into the potential impact of environmental accounting on firm value, there is a research gap that calls for further investigation, particularly with an emphasis on the adoption of corporate ethics as a moderator in studying the relationship between environmental accounting and firm value. This research gap emerges from the need to better understand how ethical considerations can shape and potentially amplify the effects of environmental accounting practices on firm value.

Introducing corporate ethics as a moderating factor introduces a new dimension to the existing research, shedding light on the interplay between ethical considerations and environmental accounting practices in shaping firm value. This exploration can provide insights into whether the alignment between ethical considerations and environmental practices enhances or diminishes the impact on firm value. Additionally, it can shed light on whether companies with stronger ethical foundations are more likely to realize higher firm value benefits from their environmental accounting efforts.

Suggestions for further Study

Recognizing certain constraints in the study is crucial, including the impact of unobservable variables that were not accounted for and the potential differences in the analyzed relationships across varying industries and economic situations. Further investigation in the future could delve deeper into these areas to gain a more thorough comprehension of the intricate relationship between environmental accounting practices, corporate ethics, and firm value.

References

- Acti, I. M., Lyndon, M. E. & Bingilar, P. F. (2013). The impact of environmental cost on corporate performance: *A study of oil companies in Niger Delta States of Nigeria. Journal of Business & Management, 2(2), 1-2.*
- Adegbie, F.F., Ekpeni, K. & Owolabi B.A. (2021). Environmental accounting practices and firm value of quoted Medium Scale Enterprises in Nigeria. *Uniport Journal of Business, Accounting & Finance Management, 12(1),*
- Adjound, L., & Amar, T. (2015). Effect of non financial information disclosure on performance of Medium Scale Enterprises' in France, *International Journal of Management Business Research, 6, 93–101.*
- Akinlo, O., & Iredele, O. (2014). Corporate environmental disclosures and market value of quoted companies in Nigeria. *Business and Management Review, 5(3), 171-184*
- Amran, A., & Siti-Nabiha, A. (2017). Corporate social reporting in Malaysia: A case of mimicking the West or succumbing to local pressure. *Social Responsibility Journal, 5(3), 358–375.*

- Azar, S., Shahbazi, R., Saleheh, A., Seyed, N. (2014). The impact of environmental accounting and reporting on organizational performance of selected oil and gas companies in Niger *Delta Region of Nigeria. Research Journal of Finance and Accounting*, 4(3), 57-73
- Brockman, T. (2015). Social corporate disclosure and firms performance, evidence from list Medium Scale Enterprises' in Italy, *Journal of Science*, 4(9), 45-52.
- Brooks, C., & Oikonomou, I. (2018). The effects of environmental, social and governance disclosures and performance on firm value: A review of the literature in accounting and finance. *The British Accounting Review*, 50(1), 1-15.
- Chamaiporn, R., Parichart, R. & Sampan, N. (2017). Sustainability reports and its effect on firm value in Thailand. *Proceedings of 41st International Business Research Conference, 20 - 21 April 2017, Imperial College, London, UK.*
- Che-Ahmad, A., Osazuwa, N. P., & Mgbame, C. O. (2015). Environmental accounting and firm profitability in Nigeria: Do firm-specific effects matter?. *IUP Journal of Accounting Research & Audit Practices*, 14(1), 43-55.
- Chukwuka, E. J., & Eboh, E. A. (2018). Effect of green business practices on organizational performance of selected Medium Scale Enterprises in Nigeria. *International Journal of Development and Management Review*, 13(1), 1-26.
- Deswanto, R. B., & Siregar, S. V. (2018). The associations between environmental disclosures with financial performance, environmental performance, and firm value. *Social Responsibility Journal*.
- Dibua, N. O., & Onwuchekwa, J. C. (2015). Determinants of environmental disclosures in Nigeria: A case study of oil and gas companies. *International Journal of Finance and Accounting*, 4(3), 145-152
- Dike, W. J. & Leyira, C. M. (2018). Environmental accounting practices and sustainable development in Nigeria. *Scholars Journal of Economics, Business and Management (SJEBM)*, 5(6), 505-512.
- Endiana, M., Dicriyani, M., Adiyadnya, P., & Putra, S. (2020). The effect of green accounting on corporate sustainability and firm performance. *Journal of Asian Finance, Economics and Business*, 7(12), 731-738
- Eze, J. C., Nweze, A. U & Enekwe, C. I. (2016). The effects of environmental accounting on a developing nation: *Nigerian experience. European Journal of Accounting, Auditing and Finance Research*, 4(1), 17-27.
- Ezeagba, E. C., John-Akamelu, C. R. & Umeoduagu, C. (2017). Environmental accounting disclosures and financial performance: A study of selected food and beverage companies in Nigeria (2006-2015). *International Journal of Academic Research in Business and Social Sciences*, 7(9), 162-174.
- Ezejiofor, R. A., John-Akamelu, R. C. & Eucharia, E. C. (2016). Effect of sustainability environmental cost accounting on financial performance of Nigerian corporate organizations. *International Journal of scientific research and management (IJSRM)*, 4(8), 4536-4549.
- Fabian. O., Onuora, J. K. J, & Okoye Obianuju, C (2022). Environmental accounting practices, social responsibility disclosures and firm value: Evidence from listed Oil and Gas Firms in Nigeria. *IIARD International Journal of Economics and Business Management*, 8(1), 29-42
- Falope, F. J., Offor, N. T., & Ofurum, D. I. (2019). Environmental cost disclosure and corporate performance of quoted construction firms in Nigeria. *International Journal of Advanced Academic Research*, 5(8), 17-31.
- Freeman, E. (1984). Stakeholders theory; theoretical perspective, New York: Harper and Row Inc.

- Gunathilaka, L. F. D. Z., Gunawardana, K., & Pushpakumari, M. D. (2015, December). An impact of environmental practices on financial performance: *A literature review*. In *12th International Conference on Business Management (ICBM)*.
- Guthrie, M., Cuganesan, S., & Ward, L. (2016). Social and environmental reporting and its effect on performance of food and beverage firms, *Journal of Financial Economics*, 3, 1–40.
- Haryono, U., Iskandar, R., Paminto, A., & Ulfah, Y. (2016). Sustainability performance: It's impact on risk and value of the firm. *Corporate Ownership & Control*, 14 (1), 278- 286.
- Ijeoma, N. B. (2015). Evaluation of companies environmental practice based in Nigeria. *Social and Basic Sciences Research Review*, 3(7), 349-364.
- Jimoh, A. O., Mukaila, A. A. & Azeez, T. L., (2015). Corporate social responsibility expenditure and profitability: *A study of listed deposit money banks in Nigeria*. *Journal of Sustainable Development in Africa*, 17(8), 44-64.
- Jui-Che, Tu., & Hsieh-Shan, Huang (2015). Analysis on the relationship between green accounting and green designs for enterprises. *Sustainability*, 7, 6264-6277
- Kanwal, M., Khanam F., Nasreen S., & Hameed S. (2013). Impact of corporate social responsibility on the firm's financial performance. *IOSR Journal of Business and Management*, 14(5) 67-74.
- Kaur, J. (2019). Business ethics and environmental accounting with special reference to Indian corporate sector. *International Journal of Science and Research (IJSR)*, 162-166.
- Khavesh, T., Nikhashemi, S., Yousefi, B., & Haque. (2014). Effect of non financial disclosures on corporate performance in France, *Australian Journal of Business and Management Research*, 1(12), 33–41.
- Kowaleski, M. (2014). Effect of non financial information on shareholders' investment decision making, *Journal of Empirical Literature*, 5, 4-11.
- Lee, D., Lee, S., & Cho, N. E. (2019). Voluntary disclosure and market valuation of sustainability reports in Korea: *The case of Chaebols*. *Sustainability*, 11(13), 3577.
- Li, Y., Gong, M., Zhang, X. & Koh, L. (2018). The impact of environmental, social, and governance disclosure on firm value: The role of CEO power. *The British Accounting Review*, 50(1).60-75.
- Morelli, J. (2011). Environmental sustainability: A definition for environmental professionals. *Journal of Environmental Sustainability*, 1(1), 1-9.
- Odetayo, T., Adeyemi, A. & Sajuyigbe, A. (2014). Impacts of corporate social responsibility on profitability of banks. *International Journal of Academic Research in Business and Social Sciences*, 4(8), 252-263
- Ogbonna, G., Onuora, E., Chioma, I., & Friday, O. (2020). Environmental accounting and sustainability development in Nigeria. *West African Journal of Business and Management Sciences*, 9(4), 62-89
- Okafor, M. (2018). Firms liquidity and environmental disclosures. *European Journal of Business and Management*, 5(7), 13-19.
- Olowolaju, P., & Adelola, F. (2020). Effect of corporate social responsibility on profitability of selected quoted banks in Nigeria. *International Journal of Economics, Business and Management Research*, 4(7), 15-29
- Omaliko, E., & Nwadiakor, E., & Nweze, A. (2020). Effect of non-financial disclosures on performance of non-financial firms in Nigeria. *Journal of Accounting and Financial Management*, 6(1), 16-39.
- Omaliko, E., & Nweze, A., & Nwadiakor, E. (2020). Effect of social and environmental disclosures on performance of non-financial firms in Nigeria. *Journal of Accounting and Financial Management*, 6(1), 40-58

- Omaliko, E., & Okpala, E. (2022). Impact of corporate diversification on sustainability of listed health care firms in Nigeria. *Asian Journal of Economics, Business and Accountancy*, 22(4), 59-69
- Omaliko, E., Okeke, P., Obiora, F. (2021). Impact of covid-19 pandemic on liquidity and profitability of firms in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 11(3), 1331-1344
- Omaliko, E., Uzodimma, A., & Ogbuagu, N. (2018). Comparative analysis of environmental disclosures in oil and gas industries in Nigeria: *A study of selected oil and gas industries on the Nigerian stock exchange*. *World Educators Forum*, 10(1), 1-13
- Oyedokun, G. E., Egberioyinemi, E., & Tonademukaila, A. (2019). Environmental accounting disclosure and firm value of industrial goods companies in Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 10(1), 7-27.
- Popa, A., Blidisel, R. & Bogdan, V. (2009). Transparency and disclosure between theory and practice, A case study of Romania. Retrieved on 14th September, 2019 from <http://www.kgk.bmf.hu/fikuszon>
- Pratten, I & Mashat, B. (2014). Relevance on non financial information for shareholders investment decision making in Canada. *Social Responsibility Journal*, 4(2), 11–22.
- Ramin, G., Klaus, M., & Frank, V. (2016). Effect of non financial disclosures on corporate performance empirical evidence from Germany. *Rev Manag Sci*, 5,233–262.
- Sanni, M., Olayiwola, K., & Abdul-Baki, Z. (2014). Corporate social responsibility and profitability of selected deposit money banks in Nigeria: *A panel analysis*. *Ilorin Journal of Management Sciences*, 1(1), 221-235.
- Shruti, S. (2014). Impact of corporate social responsibility disclosure on the financial performance of firms in the UK. Department of Business Administration - Financial Management, Faculty of School of Management and Governance, University of Twente, Netherland.
- Taiwo, O. J. & Owolabi, B. A. (2019). Environmental sustainability and corporate performance: *The shareholders` perception*. *International Journal of Scientific and Research Publications*, 9(10), 482-495.
- Tuhim, H. (2014). Corporate social responsibility expenditure and profitability: An empirical study of listed banks in Bangladesh. *International Journal of Scientific Footprints*, 2(1), 107-115
- Wibowo, M. (2015). Effect of non financial disclosures on performance of Italian listed firms. *Journal of Financial Economies*, 8(3), 23-29.