

## EFFECT OF ENVIRONMENTAL PRACTICES ON ECONOMIC PERFORMANCE OF MANUFACTURING FIRMS IN NIGERIA AND GHANA

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### ABSTRACT

*This study assessed the effect of environmental practices on economic performance of manufacturing firms in Nigeria and Ghana. The study employed Ex-Post Facto research design. The population of the study comprised all manufacturing firms in both Nigeria and Ghana listed on the Exchange Group and Stock Exchange respectively, and a sample of eleven (11) manufacturing firms in both Nigeria and Ghana was taken. Data were sourced from the various annual reports of the sampled manufacturing firms deposited in the libraries and website of the NGX ([www.ngxgroup.com](http://www.ngxgroup.com)) and GSE ([www.gse.com](http://www.gse.com)) spanning from 2012-2023. Data were analyzed with descriptive statistics, and the hypothesis was tested with inferential statistics panel regression analysis. The evidence provided by the regression result showed that environmental disclosure had a negative coefficient of -571106.7 and a p-value of 0.000 which was significant at 5% level for Nigeria manufacturing firms; while a positive coefficient of 3586.402 (p-value 0.133) for Ghanaian manufacturing firms, but has no significant effect. Based on the outcome of the study, the study recommended that environmental disclosure shows negative significant for Nigerian firms and positive insignificant for Ghanaian firms. Nigerian government agencies should improve on the Environmental performance evaluation system. Compared with Western developed countries Ghanaian Environmental disclosure system is not yet comprehensive, and the quality of Environmental disclosure varies.*

**Key words:** Environmental practices, Economic performance, Ghana, Nigeria.

### 1. INTRODUCTION

Environmental, social and governance (ESG) indicators have become relevant for both companies and investment fund managers or shareholders (Orsato et al., 2015). Investors are increasingly considering environmental, social, and governance issues when selecting their portfolios. This information allows them to steer towards investments that can be socially and environmentally beneficial (Orsato et al., 2015). It is recommended for companies aiming to implement integrated reporting (IR) using the International Integrated Reporting Council

(IIRC) Framework to use company-specific determinants to encourage IR adoption (Tiron-Tudor et al., 2022). The criteria used by financial and management professionals to differentiate between various potential investments include environmental, social and corporate governance indicators. All these are arguments for firms to consider non-monetary objectives in their activities (Noja, et al, 2024). On the other hand, finding a balance between increasing financial performance and the complex and high expectations of different stakeholders is a challenge for business managers. They must prioritize long-term and short-term objectives and sometimes forego maximizing short-term financial performance to meet urgent corporate social and environmental objectives. This balance is often achieved when the cost of minimizing the negative environmental and social impact of company operations do not lead to compromising corporate financial performance (Busch et al., 2011). Therefore, an increasingly relevant subject and research theme is the analysis of the link between ESG and organizational performance reported by companies.

The movement towards environmental reporting initiatives has therefore become particularly apparent within the developing nations like Nigeria and Ghana due to demands from stakeholders and other interested parties for information regarding environmental accounting initiatives. Investors and other stakeholders are demanding more for the disclosure of company's environmental information. This is because of their concerns about the magnitude of costs and liabilities associated with environmental issues and also, its impacts on various investors' decision and the activities of other stakeholder's groups. Onoja, Okoye, and Nwoye (2021b) noted that natural resources constantly being explored and exploited by oil and gas companies are not without their imminent environmental impact such as emissions, hazardous waste, soil contamination, biodiversity loss (wildlife, agro diversity) and global warming. A problem therefore arises where insufficient environmental information is disclosed to enable users make meaningful investment decisions. In other words, where the information that is provided is less than users' requirements, an expectation gap therefore arises.

The need for consistent, decisive environmental accounting principles has been argued in professional circles for some time, but perhaps never better illustrated than right now as thick black oil continues to gush out in several parts of the world including Nigeria and Ghana. The environmental effect has obviously been calamitous as television screens record images of marine wildlife floating in a brown blob of oil around many areas of the world. This represents a loss of nature's carrying capacity, which also entails damage from an accounting perspective. Interesting research gaps concerning ESG relationships remain unresolved. The

relationship between ESG and effects on economic performance (EP) is still controversial, a matter for further inquiry (Nasrallah & El Khoury, 2021). However, these prior studies mainly proxied corporate performance with return on assets (ROA), return on equity (ROE), earning per share (EPS) and Tobin's Q, more so there is a dearth study on cash value added by the prior related studies as another variable for economic performance. This however, creates a variable gap which this present study intends to fill.

### **1.1 Objective**

The study assesses the effect of Environmental practices on cash value added of firms listed on Nigeria and Ghana Exchange Group.

### **1.2 Hypothesis**

Ho<sub>a</sub>: Environmental practice has no significant effect on cash value added of firms listed on Nigeria Exchange Group

Ho<sub>b</sub>: Environmental practice has no significant effect on cash value added of firms listed on Ghana Stock Exchange

## **2. LITERATURE REVIEW**

### **2.1 Conceptual Review**

#### **2.1 Environmental Practices**

Recently internal and external stakeholders are showing increasing interest in the environmental performance of private organizations due to the impact of pollution that being created (Jasch, 2006). Internal stakeholders such as employees might be affected by pollution in the work environment while external stakeholders include communities affected by local pollution, environmental activist groups, government regulators, shareholders, investors, customers, suppliers and others (Jasch, 2006). Accordingly, it is imperative that company uses the best management practices to lessen air emissions (greenhouse gasses, ozone-depleting substances, carbon dioxide, etc.), waste, hazardous waste, water discharges, spills or its impacts on biodiversity. Where the embrace of these by corporate organisations is minimal, Onoja, Okoye, and Nwoye (2021) fear that these activities will have future impact on the society, ecosystem and the economy which might affect the chance of future generations meeting their needs. In view of this, the company's management should also ensure that natural resources in the production process are excellently used. The support of the advance technology and product innovation could enhance the environmental performance as it reveals

a company's capacity to lessen the environmental costs and burdens for its customers and thereby creating new market opportunities through new environmental technologies and processes or eco-designed, dematerialized products with extended durability (Thomson Reuters, 2015). Melnyk, Sroufe and Calantone (2003)“claimed that stronger environmental performance can improve the value of the firm and attract new stakeholders. A good environmental practice on operational activities can generate reasonable costs saving as well as keeping away from the business effect of the contamination issue (IFAC, 2005).

In accordance with the above issues, the number of research on the environmental performance has increased tremendously, in the accounting literature. Al-Tuwaijri, Christensen, and Hughes, (2004) analyzed the environmental impacts generated in the conduct of business, such as hazardous wastes recycled toxic release, pollution level in discharged water, non-compliance with environmental statutes, or environmental ratings of firms developed by external groups. Some researchers; Jalaluddin, Sulaiman, and Nik Ahmad (2010); Henri, and Journeault, (2010), have tested various methods to assess the environmental performance of the scope of pollution control efficiency and it enhance the organization performance. On the other hand, Elsayed and Paton (2005) used three alternative measures of firm performance or economic performance, i.e., Tobin’s q, return on assets and return on sales.

## **2.2 Environment and performance**

The interplay between the environment (viewed from an environmental perspective) in which business organizations operate and their financial performance is also disputed in literature, with diverging results from various studies over time. According to the neoclassical theory, improved environmental performance leads to increased costs. The idea stems from the fact that by reducing pollution and improving the environment, one can achieve a marginal decrease in net benefits. Porter (1991), however, argues that compliance with environmental regulations can benefit all implicated parties. Thus, both social welfare and private benefits of companies are on an upward trend. In the same paradigm Ambec et al. (2013) suggested that it can be considered that pollution is equated to a waste of resources, a reduction of which can lead to an improvement in the resources use efficiency. In other words, we can state that innovation is a catalyst for the sustainable activities of business organizations (Noja, et al. 2024).

Wagner et al. (2001) have presented a third line of thought that challenges the two conventional views regarding the relationship between economic and environmental performance. They propose that the relationship between these two variables is an inverted U-shaped curve ( $\cap$ ), which means that there is a positive correlation between environmental and financial performance until the point where the economic benefits of environmental performance are maximized. At that point, the relationship between the two variables starts to decline (Noja, et al. 2024). Their study provides evidence that environmental performance has less impact on financial performance.

### **2.3 Economic performance**

Typically corporate environmental management practices relate to economic performance. By adopting new environmental practices such as reduce pollution source, more environmentally friendly ways of operation, etc., it can reduce waste disposal costs and penalty, thus, bringing about effective economic benefits for enterprises (Aragón-Correa, et al 2008). However, inconsistent findings were found in the empirical literature on the relationship between the environmental, social and economic performance. There is little evidence of a weak relationship and some for a weak but statistically significant positive relationship, negative to insignificant to moderately or even strongly positive relationships of environmental and economic performance (Orlitzky, Schmidt, & Rynes, 2003). According to Margolis and Walsh (2003), most studies support a positive correlation between the environmental performance and economic performance.

### **2.4 Empirical review**

Cao, Duan, and Ibrahim (2024) conducted a study titled ‘Corporate underinvestment and its effects on environmental, social, and governance performance’. The sample comprised of Chinese A-listed companies from the period 2011 to 2020. The data were analysed using OLS and two-stage least squares methods. The results revealed a negative correlation between underinvestment and ESG ratings, particularly in the environmental and social dimensions.

Ogunmola, Nwoye, and Okafor (2024) examined the role of carbon and energy management practices in fostering sustainable innovation among 38 listed manufacturing firms in Nigeria. Using data extracts from the firms’ 2013 – 2023 annual reports, it was discovered that there is a significant and positive effect of carbon management practice on research and development (R & D) innovation expenditures while a no significant and negative effect of

energy management practice on research and development (R & D) innovation expenditures was recorded. The study concluded that the practice of carbon management will obviously lead to the reduction in carbon emissions and improvement in energy efficiency thereby resulting in a lower operational cost.

Kim and Lee (2023) conducted a study titled ‘Association between Earnings Announcement Behaviors and ESG Performances’. The final sample comprised of 17,370 firm-quarters of firms listed in Korean stock markets, including the KOSPI (Korea Composite Stock Price Index) and the KOSDAQ (Korea Securities Dealers Association Automated Quotation). The study period was from 2012 to 2018 in Korea. The data were analysed using OLS technique. The results showed a negative association between earnings announcement and ESG scores (i.e., earnings announcement on Friday and firms that omit preliminary earnings announcements).

Fizzah, Fangjun, Jiyuan and Muhammad (2023) focused on the impact of environmental disclosure on financial performance. This study used a sample dataset comprising Chinese firms listed on Shanghai and Shenzhen stock exchange for the period of 2005–2016. In their measurement model, green innovation is the partial mediator between the positive relationship of environmental disclosure and firm performance. Empirical results show that environmental disclosure affects firm financial performance directly and positively influences it through green innovation in Chinese firms. The study suggests that Chinese firms have implications for improved performance by increasing environmental disclosure and green practices.

Habib (2023) conducted a study titled ‘Does real earnings management affect a firm's environmental, social, and governance (ESG), financial performance, and total value?’. The study employed PLS-SEM and moderation-mediation analysis. The results confirm that firms adopting the REM were more likely to have lower ESG and total enterprise value, whereas those adopting the ESG strategy are likely to have higher total enterprise value and financial performance. Using moderated mediation analysis, we also find that ESGP and FP mediate the relationship between REM strategies and TEV.

Lawrence and Bernard (2023) carried out research on the moderated regression analysis approach to environmental costs and financial performance of Nigerian industrial goods firms for the period of eleven (11) years from 2011 to 2020, both years inclusive. Environmental costs are independent variables proxied by waste management costs (WMC) and community development costs (CDC) with the moderated variable of firm size (FS), while financial

performance is a dependent variable proxied by net profit margin (NPM). The ex-post facto research design and panel data were used for the data collection. The panel estimates of generalized least squares and unit root tests were analyzed using e-views statistical software. The regression result indicates that waste management costs (WMC) and community development costs (CDC) have a significant positive effect on net profit margin (NPM), while the moderated variable of firm size on both waste management costs (WMC) and community development costs (CDC) has a significant negative effect on the net profit margin (NPM) of the selected industrial goods firms in Nigeria.

Adeneye and Kammoun (2022) undertook a study titled 'Real earnings management and capital structure: Does environmental, social and governance (ESG) performance matter? The sample comprised of 116 listed firms across ASEAN countries for the period 2014-2019. The data were analysed using fixed effects panel data estimator. The results showed that REM has a significant positive effect on leverage. Also REM from abnormal production costs and abnormal discretionary expenses have positive and significantly affect leverage. In contrast, abnormal cash flows from operating activities negatively influence leverage. Also, REM significantly and positively affects leverage in firms with low ESG performance and across ESG pillar scores. However, REM does not affect leverage in high- ESG performing firms, except for the governance pillar score.

Nwanwu (2022) evaluated the environmental management expenses and financial performance of Nigerian oil and gas firms for the period of nine (9) years from 2011 to 2018, both years inclusive. The explanatory research design of secondary data was used for the study. The linear regression model and e-views statistical software were also adopted for the study. The environmental management cost is an independent variable proxied by pollution cost (PC), while financial performance is a dependent variable proxied by net profit (NEP). The regression result indicated that pollution costs have a positive and significant impact on the net profit of Nigerian oil and gas firms.

Ekpose and Enidiok (2021) researched the influence of environmental costs on the financial performance of quoted Nigerian oil and gas firms for the period of eleven (11) years from 2009 to 2019, both years inclusive. The ex post facto research design, panel data, purposive sampling technique, and linear regression model were adopted for the study. The environmental cost is an independent variable measured by health-related costs (HRC), infrastructural development costs (IDC), and education program costs (EPC), while financial

performance is a dependent variable measured by profit margin (PM). The SPSS version 20 statistical software was used for the analysis. The findings show that health-related costs (HRC) have a positive and significant influence on profit margin (PM), while infrastructural development costs (IDC) and education program costs (EPC) have a positive but insignificant influence on the profit margin (PM) of quoted Nigerian oil and gas firms.

Fazle, Ruzlin and Jeaneth (2021) explored the impact of sustainability (environmental, social and governance or ESG) practices on the financial performance (FP) of the Nordic financial industry. The study covers a sample selection of observations for a total of 152 firm years for 39 financial companies within the Nordic region (Sweden, Denmark, Finland and Norway) for the business years including 2015–2019. Data regarding ESG and FP indicators were extracted from the Thomson Reuters Eikon database in July 2020. This is a quantitative study using regression and a generalized method of moments. Using static and dynamic estimators, the authors found both positive and negative impacts of sustainability practice on FP. The authors identified a negative relationship between ESG practices and FP (return on invested capital, return on equity and earnings per share). The authors identified a positive relationship between governance and return on assets.

Chiamogu and Okoye (2020) adopted the ex-post facto research design for the impact of environmental costs on the financial performance of Nigerian oil and gas companies for an eleven (11) year period from 2008 to 2018, both years inclusive. The study used the purposive sampling technique for the selection of sample size and E-views version 9.0 statistic software for the running of the panel regression analysis. The environmental cost is an independent variable measured by community development cost (CDC) and environmental remediation cost (ERC), with two control variables as firm size (FSZ) and leverage (LEV), while financial performance is a dependent variable measured by Tobin's Q (TQ). The regression analysis results revealed that community development costs (CDC) and environmental remediation costs (ERC) have a positive and significant effect on Tobin's Q of listed oil and gas companies in Nigeria.

### **3. MATERIALS AND METHOD**

The study employed a longitudinal research design because it involves the evaluation of the behaviour of the same variables over an extended period of time. The panel nature of the data implies that the cross sectional research design is also applied because the sample objects of the study cover different firms for various years in order to determine their relationships and

how significant one variable affects another. The population of the study comprised all manufacturing firms in both Nigeria and Ghana listed on the Exchange Group. As at year ended December 2023, there were a total of sixty four (64) manufacturing firms listed on the Nigeria Exchange Group (NGX). Similarly and at the same period, there were a total of eleven (11) manufacturing firms listed on the Ghanaian Stock Exchange.

Considering the limited number of manufacturing firms listed on the Ghanaian Stock Exchange with availability of Data which fall into eleven firms and the need to adopt an equal sample size for the purpose of the comparative analysis, the purposive sampling method was employed in selecting eleven (11) manufacturing firms listed on the Ghanaian Stock Exchange and Nigeria Exchange Group (NGX). The study used secondary data which were sourced from the various annual reports of the sampled manufacturing firms deposited in the libraries and website of the NGX ([www.ngxgroup.com](http://www.ngxgroup.com)) and GSE ([www.gse.com](http://www.gse.com)). The research covered a period of twelve (12) financial years (2012-2023). The twelve-year period was used for the estimations in order to use information from the same accounting reporting regime (that is, IFRS) – especially since Nigeria adopted IFRS in 2012.

Table 1: Summary of the variables, definitions and means of measurement

Variable	Expression	Measurement	Author/Year
Cash value added	CVA	Gross cash flow- depreciation - capital charge	Andrew (2021); Chip (2021)
Environmental Disclosure	EVD	Dummy variable (1 or 0) Environmental Disclosure Index: generate E_DSCO = ((E1 + E2 + E3 + E4 + E5..... EN )/n)*100	Nina & Cyrielle (2014);
Firm Size	FSIZ	Natural logarithm of total assets at the end of fiscal year	Nisan, (2014)

Source: Field Study, (2024)

This study modified the model proposed by Yasin and **Evren (2021)**. The model specified by, Yasin and **Evren (2021)** are as follows:

$$FRQ_{it} = \alpha + \beta_1 ESG_{it} + \beta_2 SIZE_{it} + \beta_3 ROA_{it} + \beta_4 LEV_{it} + \beta_5 FIRM\_AGE_{it} + \Sigma YEAR + \Sigma INDUSTRY + \Sigma COUNTRY + \epsilon_{it} \dots \dots \dots Eqn 1.$$

Where:

$FRQ_{it}$  = separately represents the models FRQ1, FRQ, FRQ 3 and FRQ 4

$ESG_{it}$  = separately represents ESG, ENV, SOC, and GOV

$SIZE_{it}$  = the natural logarithm of the market value of equity

$ROA_{it}$  = Return on assets

$LEV_{it}$  = Total liabilities/total assets

$FIRM\_AGE_{it}$  = The natural logarithm of 1 + age of firm

The model was modified as follows:

$$CVA_{i,t} = \beta_0 + \beta_1EVD_{i,t} + \beta_2FSIZ_{i,t} + e_{it} \dots\dots\dots Eqn 2..$$

Where:

$ENV_{it}$  = environmental-related disclosures of firm  $i$  at period  $t$ .

$FSIZE_{it}$  = Natural logarithm of total assets of firm  $i$  at period  $t$ .

$B_0$  = Intercept

$\beta_1 - \beta_2$  = are the parameters to be estimated in the equation

$e$  = Stochastic error term.

Data were analyzed with descriptive statistics, and the hypotheses were tested inferential statistics (Pearson correlation, and multiple regression analysis). Since the focus of the study is to determine the significant effect, regression analysis becomes appropriate tool for it.

- i. Descriptive statistics employed to summarily describe the mean, median, standard deviation, kurtosis and skewness of the study variables. Inferential statistics will also be utilized with the aid of E-Views 9 using:
- ii. Regression analysis: Regression analysis predicts the value the dependent variable based on the value of the independent variable and explains the impact or effect of changes in the values of the variables.

The decision for the hypotheses is to accept the alternative hypotheses if the p-value of the test statistic is less or equal than the alpha and to reject the alternative hypotheses if the p-value of the test statistic is greater than alpha at 5% significance level.

#### 4. RESULT AND DISCUSSIONS

##### 4.1 Data Analysis

Table 2 Descriptive Statistics

<b>NIGERIA</b>	<b>CVA</b>	<b>EVD</b>	<b>LFZS</b>
Mean	3419741.	20.83333	7.588763
Median	762306.5	25.00000	7.635208
Maximum	19826949	25.00000	7.776074
Minimum	-431601.0	12.50000	7.439775
Std. Dev.	6060259.	5.915004	0.096110
Skewness	1.914513	-0.707107	-0.101770
Kurtosis	5.121068	1.500000	2.366286
Jarque-Bera	105.3821	23.37500	2.436622
Probability	0.000000	0.000008	0.295729
Sum	4.51E+08	2750.000	1001.717
Sum Sq. Dev.	4.81E+15	4583.333	1.210061
Observations	132	132	132
<b>GHANA</b>	<b>CVA</b>	<b>EVD</b>	<b>LFSZ</b>
Mean	1808407.	56.25000	7.333749
Median	1816765.	62.50000	7.275292
Maximum	2277558.	62.50000	7.792330
Minimum	1211591.	37.50000	7.032656
Std. Dev.	345791.8	10.86656	0.214734
Skewness	-0.145956	-1.154701	0.702632
Kurtosis	1.890220	2.333333	2.633564
Jarque-Bera	7.242528	31.77778	11.59973
Probability	0.026749	0.000000	0.003028
Sum	2.39E+08	7425.000	968.0549
Sum Sq. Dev.	1.57E+13	15468.75	6.040491
Observations	132	132	132

**Source: E-views 9 (2025)**

From Table 2, it could be observed that the mean values of the cash value added (CVA) stood at 3419741.0 and 1808407.0 for the Nigerian and Ghanaian samples respectively. Considering that the scientific value of Nigerian firms greater than Ghanaian firms 1808407.0. It implied that the Nigerian CVA was more cash value added than their Ghana counterparts.

Furthermore, the mean value of environmental disclosure (EVD) run using the dummy value of GRI showed an average value of 20.833 for Nigerian and 56.25 for Ghanaian EVD respectively. It meant that the Ghanaian firms had more disclosure than the Nigerian firms.

Similarly, the mean values of the control variable, firm size (LFSZ) showed that about 7.589% of Nigerian firms and 7.334% for Ghanaian firms. It also meant that the Nigerian firms have higher firm size than Ghanaian firms countries sampled. On the Jarque–Bera test of goodness-of-fit, the result suggested that only the data on firms in the Nigerian and Ghanaian sample firms followed a normal distribution.

**4.2 Test of Hypotheses**

Ho<sub>1a</sub>: Environmental practice has no significant effect on cash value added of firms listed on Nigeria Exchange Group

Ho<sub>1b</sub>: Environmental practice has no significant effect on cash value added of firms listed on Ghana Stock Exchange

**Table 3a: Regression analysis between EVD, LFSZ and CVA (Nigeria)**

Dependent Variable: CVA

Method: Panel Least Squares

Date: 02/16/25 Time: 21:39

Sample: 2012 2023

Periods included: 12

Cross-sections included: 11

Total panel (balanced) observations: 132

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.69E+08	28501182	-5.916751	0.0000
EVD	-571106.7	59921.32	-9.530943	0.0000
LFZS	24240077	3687809.	6.573029	0.0000
R-squared	0.626817	Mean dependent var		3419741.
Adjusted R-squared	0.621031	S.D. dependent var		6060259.
S.E. of regression	3730724.	Akaike info criterion		33.12457
Sum squared resid	1.80E+15	Schwarz criterion		33.19009
Log likelihood	-2183.221	Hannan-Quinn criter.		33.15119
F-statistic	108.3372	Durbin-Watson stat		2.293892

Prob(F-statistic) 0.000000

**Table 3b: Regression analysis between EVD, LFSZ and CVD (Ghana)**

Dependent Variable: CVA

Method: Panel Least Squares

Date: 02/16/25 Time: 21:47

Sample: 2012 2023

Periods included: 12

Cross-sections included: 11

Total panel (balanced) observations: 132

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8043112.	874133.0	9.201245	0.0000
EVD	3586.402	2372.240	1.511821	0.1330
LFSZ	-877646.6	120046.7	-7.310879	0.0000
R-squared	0.294348	Mean dependent var		1808407.
Adjusted R-squared	0.283408	S.D. dependent var		345791.8
S.E. of regression	292718.9	Akaike info criterion		28.03428
Sum squared resid	1.11E+13	Schwarz criterion		28.09980
Log likelihood	-1847.262	Hannan-Quinn criter.		28.06090
F-statistic	26.90484	Durbin-Watson stat		1.073855
Prob(F-statistic)	0.000000			

In Tables 3a, and 3b a simple least square regression analysis was conducted to test the effect between environmental disclosures (EVD) and cash value added (CVA) for Nigerian and Ghanaian manufacturing firms respectively. The R-squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the Table 3a, Nigerian value of R squared was 0.62, an indication that there was variation of 62% on EVD due to changes in CVA. This implies that 62% changes in EVD could be accounted for by CVA, while 38% was explained by unknown variables that were not included in the model. However, Table 3b, Ghanaian value of R squared was 0.28, an indication that there was variation of 28% on EVD due to changes in

CVA. This implies that 28% changes in EVD could be accounted for by CVA, while 72% was explained by unknown variables that were not included in the model.

The Durbin-Watson Statistic of 2.29 and 1.07 for Nigeria and Ghana respectively suggests that the both model does not contain serial correlation. The F-statistic of the regression is equal to 108.337 and 29.905. The associated F-statistic probability is equal to 0.000, for both countries.

The hypothesis of this study stated that environmental practice has no significant effect on cash value added of listed manufacturing firms in Nigeria ( $H_{01a}$ ) and Ghana ( $H_{01b}$ ). The evidence provided by the regression result of model 1 showed that the variable of environmental disclosure had a negative coefficient of -571106.7 and a p-value of 0.000 which was significant at 5% level for Nigeria manufacturing firms; while the outcome of model 2 showed a positive coefficient of 3586.402 (p-value 0.133) for manufacturing firms in Ghana, but has no significant effect. It meant that there was a significant effect between environmental disclosure and cash value added in Nigerian while there was no significant effect between environmental disclosure and cash value added in Ghanaian manufacturing firms, howbeit negatively and positively respectively.

The evidence from hypothesis tested showed that the environmental disclosure had a negative coefficient of -571106.7 and a p-value of 0.000 which was significant at 5% level for Nigeria manufacturing firms; while a positive coefficient of 3586.402 (p-value 0.133) for manufacturing firms in Ghana, but has no significant effect. This result is in line with Omoye, and Wilson-'Oshilim, (2018) who found that firm size have significant and positive relationship with environmental disclosure. But Nur, Suganthi and Yuen (2023) results showed that individual Environmental score has a negative impact on ROA but a positive impact on ROE and Tobin's Q. Also the study of Kim and Lee (2023) results showed a negative association between earnings announcement and ESG scores (i.e., earnings announcement on Friday and firms that omit preliminary earnings announcements).

## **CONCLUSION AND RECOMMENDATIONS**

This study assessed the environmental practices on economic performance of manufacturing firms in Nigeria and Ghana, Data were analyzed with descriptive statistics, and the hypotheses were tested inferential statistics (regression analysis). From the hypothesis results, environmental disclosure had a negative coefficient but statistically significant at 5% level for

Nigeria manufacturing firms; while a positive coefficient for Ghanaian manufacturing firms, but has no significant effect. While the significance of specific Environmental practices varies, they all contribute to the creation of long-term shareholder value. Companies that embrace environmental practices concerns not only align with changing societal expectations, but they also stand to improve their reputations, attract ethical investors, and ultimately contribute to the long-term increase of shareholder value.

Based on the outcome of the study, the study recommended that environmental disclosure shows negative significant for Nigerian firms and positive insignificant for Ghanaian firms. Nigerian government agencies should improve on the Environmental performance evaluation system. Compared with Western developed countries Ghanaian Environmental disclosure system is not yet comprehensive, and the quality of Environmental disclosure varies.

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