

ESGs PRACTICES AND ECONOMIC PERFORMANCE OF MANUFACTURING FIRMS: A COMPARATIVE STUDY OF NIGERIA AND GHANA

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ABSTRACT

This study assessed the effect of environmental, social and governance practices on economic performance of manufacturing firms in Nigeria and Ghana. Specifically, the study compared the degree of effect of each of the elements of ESG on cash value added of firms listed on Nigeria and Ghana Exchange Group. 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 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. 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) and GSE (www.gse.com) which covered a period of twelve (12) financial years (2012-2023). Data were analyzed with descriptive statistics, and the hypotheses were tested with inferential statistics panel regression analysis. The evidence provided by the regression result showed that ESGs had a negative coefficient of -100528.7 and a p-value of 0.000 but was significant at 5% level for Nigeria manufacturing firms; while the outcome showed a positive coefficient of 1842.176 and p-value of 0.090 for Ghanaian manufacturing firms, but has no significant effect on cash value added. Based on the findings, the study recommended that the management of both countries manufacturing firms needs to adequately be aware of the importance of environmental, social and governance which may improve the performance of the firms, and spend extensively in it as this will be a great catalyst for their growth, productivity, and development. This will result in an increase in management efficacy.

Key words: Environmental, Social, Governance practices, and Economic performance, Nigeria and Ghana

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INTRODUCTION

Environmental, Social and Governance (ESG) credentials have become a global trend nowadays and are increasingly important for companies due to spreading awareness of their responsibility for sustainable growth and their multi-dimensional impact on society (Kaakeh & Gokmenoglu, 2022). Sustainable development in all fields of activity is ever more demanded to become a compulsory requirement at the global level (Chien, 2023) and

companies are increasingly using sustainability strategies and this has led to notable shifts in business models and management practices (Chang & Lee, 2022). Firms are implementing optimal strategies focused on maximizing stakeholder value while also achieving the company's financial goals (Al Amosh et al., 2022). The practical implementation of this new paradigm is reflected in the increasing efforts companies are making to properly assess their commitment to sustainability and global long-term development goals (Chang & Lee, 2022). Onoja, Okoye and Nwoye (2021a) noted that sustainability report can be used for assessing corporate sustainability performance over time, benchmarking against other organizations, and demonstrating how the organization influences, and is influenced by, expectations about sustainable development. Firms are keener to publish information on their environmental, social and corporate governance principles engagement and use ESG as a means to share information on business sustainability with their stakeholders (Chang & Lee, 2022). Among the directions of this approach is a focus on indicators to measure results related to an organization's involvement in addressing environmental and social issues or implementing policies with an impact on corporate governance. These indicators are grouped in the ESG (Environment – Social – Governance) categories that integrate the results of companies' environmental, social and governance activities (Veenstra & Ellemers, 2020).

Environmental, Social and Governance (ESG) information is getting gradually more included into corporate communication (Arvidsson, 2010; Ihlen, 2008). ESG can also be known as 'extra financial' information that help investors make investment decision by better assessments of risks and opportunities (Bassen & Kovacs, 2008). Prior studies (for example, Clark, Feiner, & Viehs, 2015; Servaes & Tamayo, 2013; Wang, Lu, Kweh, & Lai, 2014) have extensively examined the effect of ESG on corporate performance. According to Onoja, Okoye and Nwoye, (2021b), large companies in particular have set up their reporting in such a way as to take account of the information needs of relevant stakeholders inside and outside the company, in terms of the company's social and ecological performance, as well as to provide a more complete and future oriented picture. Consistent with the government's aspiration in the Economic Transformation Programme (ETP) to achieve its developed status, this study considers a contemporary measure of financial performance which is multidimensional. In contrast to single-dimensional measures of corporate performance, Data Envelopment Analysis (DEA), a mathematical-programming method that incorporates multiple variables (Cooper, Seiford, & Tone, 2006), provides a comprehensive performance measure. Various attributes can be evaluated simultaneously to calculate an efficiency score for a decision-making unit (DMU). In other words, a holistic performance evaluation that

provides aggregated activities information can be done via DEA (Homburg, 2001). Taken together, this study ascertains the effect of ESG on efficiency, which is considered in a holistic manner. Companies applying ESG measures have been found to gain long-term improvements in efficiency, customer loyalty, corporate reputation, access to capital, cost savings and innovation capacity (Arrive et al., 2019; Ferrero-Ferrero et al., 2016). Ensuring the trust of different stakeholder groups beyond the stockholders is critical. ESG information has become extensively reported, and the area has inspired much research, but the empirical findings are mixed and research and practice in a nascent stage (Semenova and Hassel, 2016).

Adeneye and Kammoun (2022) undertook a study titled ‘Real earnings management and capital structure: Does Environmental, Social and Governance (ESG) performance matter?’. Velte (2019) conducted a study titled ‘The bidirectional relationship between ESG performance and earnings management—empirical evidence from Germany’. Fazle, Ruzlin and Jeaneth (2021) Purpose – The purpose of this study is to explore 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. Marco, Christian and Antonio (2019) empirically analyzed the impact of non-financial results (assessed through sustainability indicators) on economic (financial and market) performance in the timespan 2014–2017. Qian et al (2017) examined the impacts of ESG on the corporate performance government-linked companies (GLCs) in Malaysia. Ferrero-Ferrero, Fernández-Izquierdo and Muñoz-Torres (2016) explore how environmental, social and governance (ESG) consistency impacts the firm performance.

There are no prior studies in Nigeria, to the best of the researcher’s knowledge, which analyzed the effect of environmental, social and governance (ESG) on economic performance and distinguished between two different countries. A cross-country analysis is becoming indoctrinated into mainstream accounting research but it is largely sparse in the area of the

drivers of ESG. Thus, in addition to closing the earlier observed gaps in previous studies, this study equally proposed the adoption of a cross-country comparative approach between Nigerian and Ghanaian firms in a bid to expanding the existing horizons on ESGs research.

Objective

The broad objective of this study is to assess the effect of environmental, social and governance practices on economic performance of manufacturing firms in Nigeria and Ghana. Specifically, the study intends to compare the cross boarder effect of ESG on cash value added of firms listed on Nigeria and Ghana Exchange Group.

The effect of Environmental, Social and Governance (ESG) on economic performance of manufacturing firms listed on Nigeria and Ghana Exchange Group. However, there is no study without constraints, the major limitation of the study is unavailability of firms data more especially that of Ghanaian companies. The study thus narrowed the study to the firms which their data were made available.

LITERATURE REVIEW

Environmental, Social and Governance (ESG)

Tending Environmental, Social and Governance (ESG) issues have turned into a state of enthusiasm for speculators, shareholders and governments as a risk management concern while for firms it has transformed into an emerging part of their competitive strategy (Galbreath, 2013). The role of ESG information has been discussed in the academic literature more than 35 years demonstrating the huge of the quality pertinence of the ESG exposure (Eccles & Viviers, 2011).

In recent years, there has been expanding utilization of ESG information by stakeholders, particularly investor. Initially, there is limited information on non-financial data such as ESG disclosures. For the most part, they are referring to traditional extraction data for yearly report and website of the company. Nowadays companies are moving to data stream based to remain competitive as pressures from stakeholder on environmental issues such as climate change, pollution and waste are growing significantly. The role of ESG information much transformed changed the business adequately and effectively (Indarawati, Ruhanita & Nor, 2016). Companies are aware that ESG disclosure is critical to portray their good reputation and image in meeting the challenge of green issues to their stakeholders. Trends on disclosing ESG practices in the global data stream are colossally expanded throughout the years as an exertion

of the companies to remain sustainable. At present, there are three leading international financial service agencies, namely Bloomberg, MSCI and Thomson Reuters. These three platforms provide integrated ESG score that indicates companies that score highly on ESG principles are focused on creating long-term shareholder value. However, ESG information is still largely ignored by many companies, investors and represents an untapped source to remain competitive (Greenwald, 2010).

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. Their study provides evidence that environmental performance has less impact on financial performance.

The indicator for the company to be socially responsible is related to product responsibility, community, human rights, diversity and opportunity, employment quality, health and safety and training and development (Thomson Reuters, 2015). Barnett, and Salomon (2012) appealed that firms with low CSP have higher financial performance than firms with moderate CSP, but firms with high CSP have the highest financial performance. While in the view of CSP and economic performance, Wagner (2010) found that there is no direct relationship between CSP on economic performance. Corporate social performance seems only to associate positively with economic performance through advertising. It shows the significant of communicating socially-related activities to relevant stakeholders such as consumers, non-governmental groups or a regulatory agency for the firm's to remain competitive. Corporate governance assumes the fundamental part in organization execution is to help the board's performance in controlling their business operations (Ponnu, 2008). Board of directors is one of the most important elements of corporate governance mechanism in overseeing the conduct of the company's business (Said, Zainuddin & Haron, 2009). The best practice of the corporate governance principles related to competitive and equitable management compensation to attract and retain executives and board members. The shareholders should be treated equally

and given certain privileges. The vision and strategy be shared with the entire stakeholder and coordinated with the economic (financial), social and environmental measurements into its everyday choice making procedures.

Economic Performance

The impact of environmental management activities on competitiveness and corporate economic success has been debated actively for many years. Financial and non-financial indices can directly reflect economic performance. Financial indices refer to sales, profitability, inventory turnover and return on equity while non-financial indices refer to market share, sale region and the number of customers (Earnhart & Lizal, 2010). The Economic indicator used in ASSET4 ESG is non-financial based. The economic performance measures a company's capacity to produce feasible development and a high return on investment through the efficient use of all its resources. It demonstrates a company's ability to improve its margins by increasing its performance (production process innovations) or by maintaining a loyal and productive employee and supplier base. The company's capacity is also to maintain a loyal shareholder by creating reasonable returns through a focused and transparent long-term communications strategy with its shareholders. The customer fulfillment and dependability produce feasible and long-term revenue growth (Thomson Reuters, 2015).

Empirical Review

Noja, Baditoiu, Buglea, Munteanu and Gligor Cimpoiu (2024) examined the impact of ESG reporting on company performance. The study involved analyzing financial and non-financial data from 2,400 companies extracted from the Refinitiv Eikon database. The study provides a new perspective on the current and the potential impact of ESG reporting, based on systematic theoretical and empirical analyses, with multiple implications for business administration and management.

In the study conducted by Ogunmola, Nwoye, and Okafor (2024) to examine the role of carbon and energy management practices in fostering sustainable innovation in Nigeria, analysis carried out on data extracts from the 2013 – 2023 annual reports of 38 listed manufacturing companies, it was observed that a significant and positive effect of carbon management practice on research and development (R & D) innovation expenditures persist while a no significant and negative effect of energy management practice on research and development (R & D) innovation expenditures was prevailed.

Hong, Ting and Ooi (2023) investigated the relationship between corporate environmental, social, and governance performance and financial performance of listed companies in the Chinese manufacturing industry. The results of the study show that corporate environmental, social, and governance performance are all significantly and positively related to corporate financial performance. Further, the test distinguishes the nature of property rights and finds that there is a difference in the impact of ESG performance on financial performance between non-state-owned manufacturing firms and state-owned manufacturing firms, specifically, the economic effect of ESG performance is more pronounced in non-state-owned manufacturing firms. The findings of this study help companies, investors and other market participants to better understand the relationship between corporate ESG performance and financial performance.

Nur, Suganthi and Yuen (2023) analyzed the effect of ESG on corporate performance in terms of the value of Malaysian listed firms. A total of 45 companies listed on Bursa Malaysia that have complete ESG data from 2011–2021 were selected from Bloomberg’s ESG database. Corporate value was measured using three indicators – return on assets (ROA), return on equity (ROE) and Tobin’s Q. According to the results, the ESG scores have an insignificant positive influence on ROE and Tobin’s Q. However, the ESG scores have a negative but insignificant impact on ROA. The individual Environmental score has a negative impact on ROA but a positive impact on ROE and Tobin’s Q. Meanwhile, Social on its own has an insignificant negative impact on all variables, and Governance has a positive but insignificant impact on all variables. Based on the inconsistencies between the results of this study and those of previous research, the conclusions on whether ESG criteria promote business value and performance cannot be reached. ESG practices have become increasingly important, not only for policymakers but for governments and stakeholders.

Rahmatulloh, and Suranta (2023) elucidated the influence of Environmental, Social, and Corporate Governance (ESG) performance on a company's overall performance. The research employs the ESG level as the independent variable for evaluation, which is the novelty of the study. The performance of the corporation is evaluated using various indicators, including financial performance (ROA), profitability (ROE), and Tobin's Q, which are regarded as reliance variables. The analytical approach encompasses the application of multiple linear regression techniques. To ensure a representative sample, the study purposive sampling to select 120 observations from manufacturing companies listed on the Indonesian Stock Exchange that consistently maintained their ESG index during the period spanning from 2018

to 2022, including the turbulent period of the COVID-19 pandemic. The findings of this research reveal that the ESG index exerts a positive and statistically significant influence on ROA, ROE, and Tobin's Q. Furthermore, it is noteworthy that earnings management does not possess the capacity to moderate the relationship between ESG and company performance.

Okoye and Erinugha (2023) ascertained the effect of environmental disclosure on the financial performance of listed Oil and Gas companies in Nigeria for a period of eleven (11) years spanning from 2011 to 2021. Specifically, this study determined the effect of employee health and safety disclosure, waste management disclosure, and environmental protection disclosure on cash value added. This study employed Panel data which were extracted from audited annual reports and accounts of eleven (11) listed Oil and Gas companies for the periods 2011-2021. *Ex-Post Facto* research design was employed. Descriptive statistics was used to analyze the data and inferential statistics was employed using Pearson correlation coefficient and Panel least square regression analysis to test the hypotheses of the study. The results showed that there is a significant and positive relationship between employee health and safety disclosure, waste management disclosure, environmental protection disclosure and cash value added.

Helmi (2020) evaluated the effect of firm size, leverage, manufacturing type, family ownership and government ownership on corporate social and environmental voluntary disclosure in Saudi Arabia listed firms. The study employed regression model to run the analysis. The result shows that Saudi companies' corporate social and environmental voluntary disclosure has improved over time when compared to previous studies to about 68% disclosure due to new corporate governance principles and IFRS application.

Nwaimo (2020) looked into how quoted enterprises' performance was impacted by environmental costs in Sub-Saharan Africa (2007–2016). As substitutes for environmental costs (an independent variable), the study included employee health and safety, waste management, and community development costs. Return on capital employed, earnings per share, and return on equity were used as substitutes for performance (dependent variables). Industrial enterprises on the stock exchanges in South Africa, Nigeria, Ghana, and Tanzania provided the data for this study. From 2007 through 2016, inclusive, the researcher used an ex-post facto study approach, random sampling, and quantitative secondary data. The Granger causality analysis for this study was conducted using panel data analysis and ordinary least squares (OLS) regression. The results indicate that employee health and safety, waste management, and community development expenses have no appreciable impact on a

company's return on equity, earnings per share, or return on capital employed in Nigeria or South Africa, but they do in Tanzania. In Ghana, however, these costs have a sizable impact on these metrics.

Okezie, Ibe, and Kanu (2019) examined the financial performance and environmental costs of Nigerian listed companies. The study divided financial performance, the dependent variable, into independent variables such as environmental costs and dependent variables such as earnings per share, dividend per share, net profit margin, and return on capital used. Data collection took place over a period of four (4) years, inclusive of the years 2014 and 2017, using the ex-post facto study approach. For the analysis, the multiple regression model was used. The findings show that there is very little correlation between environmental costs and the financial success of listed companies in Nigeria.

MATERIAL AND METHODS

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) and GSE (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.

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

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

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:

$$CVA_{i,t} = \beta_0 + \beta_1 EVD_{it} + \beta_2 SPD_{it} + \beta_3 GVD_{it} + \beta_4 FSIZE_{i,t} + e_{it} \dots \dots \dots \text{Eqn 2.}$$

Where:

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

SPD_{it} = social-related practices disclosures of firm i at period t .

GOV_{it} = governance-related disclosure of firm i at period t .

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

B_0 = Intercept

$\beta_1 - \beta_4$ = are the parameters to be estimated in the equation

e = Stochastic error term.

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 $E_DSCO = ((E1 + E2 + E3 + E4 + E5 \dots \dots \dots EN)/n) * 100$	Nina & Cyrielle (2014);
Social Practices Disclosure	SPD	Dummy variable (1 or 0) Social Disclosure Index: generate $S_DSCO = ((S1 + S2 +$	Nina & Cyrielle (2014)

		$\frac{S3 + S4 + S5 + \dots + SN}{n} * 100$	
Governance Disclosure	GVD	Dummy variable (1 or 0) Governance Disclosure Index: generate G_DSCO = ((G1 + G2 + G3 + G4 + G5 + G6 + GN)/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)

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. Coefficient of correlation: which is a good measure of relationship between two variables that tell us about the strength of relationship and the direction of the relationship as well?
- iii. 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.

RESULT AND DISCUSSIONS

Univariate Analyses

This sub-section presents the preliminary analysis of the data using descriptive statistics and correlation analysis of all the variables used in the study. The description was analyzed based on mean, maximum, minimum and standard deviations. The Skewness-Kurtosis (Jarque-Bera) statistics was also analyzed for the purposes of the normality test of the data and preclusion of outliers. The result was presented in a comparative form to reflect the sample

characteristics of both countries as regards all the variables of interest. Thereafter, regression analyses were presented, and the results were then interpreted and discussed.

Table 2 Descriptive Statistics

NIGERIA	CVA	EVD	SPD	GVD	LFZS
Mean	3419741.	20.83333	65.00000	48.33333	7.588763
Median	762306.5	25.00000	60.00000	60.00000	7.635208
Maximum	19826949	25.00000	90.00000	60.00000	7.776074
Minimum	-431601.0	12.50000	50.00000	20.00000	7.439775
Std. Dev.	6060259.	5.915004	11.22293	17.30581	0.096110
Skewness	1.914513	-0.707107	0.715542	-0.912527	-0.101770
Kurtosis	5.121068	1.500000	2.920000	1.968119	2.366286
Jarque-Bera	105.3821	23.37500	11.29920	24.17580	2.436622
Probability	0.000000	0.000008	0.003519	0.000006	0.295729
Sum	4.51E+08	2750.000	8580.000	6380.000	1001.717
Sum Sq. Dev.	4.81E+15	4583.333	16500.00	39233.33	1.210061
Observations	132	132	132	132	132
GHANA	CVA	EVD	SPD	GVD	LFSZ
Mean	1808407.	56.25000	562.5000	38.33333	7.333749
Median	1816765.	62.50000	625.0000	20.00000	7.275292
Maximum	2277558.	62.50000	625.0000	80.00000	7.792330
Minimum	1211591.	37.50000	375.0000	20.00000	7.032656
Std. Dev.	345791.8	10.86656	108.6656	25.20653	0.214734
Skewness	-0.145956	-1.154701	-1.154701	0.915178	0.702632
Kurtosis	1.890220	2.333333	2.333333	2.060917	2.633564
Jarque-Bera	7.242528	31.77778	31.77778	23.27644	11.59973
Probability	0.026749	0.000000	0.000000	0.000009	0.003028
Sum	2.39E+08	7425.000	74250.00	5060.000	968.0549
Sum Sq. Dev.	1.57E+13	15468.75	1546875.	83233.33	6.040491
Observations	132	132	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. Also, the mean values of corporate social responsibility disclosure (SPD) showed that Nigerian SPD were jointly 56.00 while Ghanaian SPD with the average firm disclosure of 56.00 and 562.00 respectively. It showed that Ghanaian firms social disclosure is higher than, the Nigerian disclosure.

On the variable of governance disclosure (GVD), the mean values stood at 48.333 and 38.333 for Nigerian and Ghanaian firms respectively which implied that firms in both countries maintained optimum disclosure. The mean values of GVD suggested that the Nigerian

sampled firms had more number of disclosures than the Ghanaian 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.

The kurtosis of 5.121068, 1.500000, 2.920000, 1.968119, and 2.366286, for Nigerian firms CVA, EVD, SPD, GVD and LFSZ showing a distribution that is strong, suggesting a concentration of values around the mean with potential outliers, while 1.890220, 2.333333, 2.333333, 2.060917, 2.633564 for Ghanaian firms CVA, EVD, SPD, GVD and LFSZ showed similar results. The Jarque-Bera probability of 0.000000 0.000008 0.003519 0.000006 0.295729 confirms that the CVA, EVD, SPD, GVD and LFSZ data is significantly non-normally distributed showed that traditional parametric analyses may need to be approached with caution. The Jarque-Bera probability of 0.026749, 0.000000, 0.000000, 0.000009, and 0.003028 confirms that the CVA, EVD, SPD, GVD and LFSZ data is significantly non-normally distributed showed that traditional parametric analyses may need to be approached with caution.

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. However, the departure from normality of the other variables did not pose any major problem in the panel data since the Central Limit Theorem revealed that the violation of the normality assumption posed no major problem in panel data analysis, especially with large firm-year observations (Ghasem and Zahediasl, 2012).

Multivariate Analyses

This sub-section presented the analysis and interpretation of the two (2) panel regression models built for the purpose of this study as specified in the third chapter. The cross-country comparative nature of the study necessitated the splitting of the sample into two in order to accommodate separate analyses of Nigerian versus Ghanaian firms. For the panel regressions, both fixed and random effects procedures were estimated for both models. However, the standard procedure for panel data analysis requires the Hausman test for the selection of the most appropriate model for statistical inference between the fixed and random effects models. The decision rule for the Hausman tests is to accept H_1 when the p-value is less than 5%. The alternative hypothesis (H_1) is that the Fixed Effect Model is consistent while the null hypothesis (H_0), that is the Random Effect Model is consistent. The Hausman test results of the models were presented in Table 3.

Table 3 Hausman Test Results

(Nigeria)	Model 1			(Ghana)	Model 2		
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	4	1.0000	Cross-section random	0.000000	4	1.0000

Source: Eviews 9 Output (2025)
 desirability of the random effect models

NOTE: *insignificant, showing

As could be observed from Table 3, the corresponding probability values of the chi-squared statistic in both models were both higher than 5% (p-value=1.0000). This showed the suitability of the random effect models. It implied that the random effect model was preferred to the fixed effect model in the insignificant results while the latter was considered suitable in capturing the relationships and drawing inferences in both model.

Test of Hypotheses

Ho_{4a}: Environmental, social and corporate governance practices (ESGs) have no significant effect on cash value added of firms listed on Nigeria Exchange Group

Ho_{4b}: Environmental, social and corporate governance practices (ESGs) have no significant effect on cash value added of firms listed on Ghana Stock Exchange

Table 4a: Regression analysis between NESG, LFSZ and CVD (Nigeria)

Dependent Variable: CVA

Method: Panel Least Squares

Date: 02/11/25 Time: 11:51

Sample: 2012 2023

Periods included: 12

Cross-sections included: 11

Total panel (balanced) observations: 132

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.88E+08	33484267	-5.605658	0.0000
NESG	-100528.7	16279.77	-6.175068	0.0000
LFZS	26962064	4283745.	6.294041	0.0000
R-squared	0.509128	Mean dependent var		3419741.
Adjusted R-squared	0.501517	S.D. dependent var		6060259.
S.E. of regression	4278744.	Akaike info criterion		33.39868
Sum squared resid	2.36E+15	Schwarz criterion		33.46420
Log likelihood	-2201.313	Hannan-Quinn criter.		33.42531
F-statistic	66.89869	Durbin-Watson stat		2.387704
Prob(F-statistic)	0.000000			

Table 4b: Regression analysis between GESG, LFSZ and CVD (Ghana)

Dependent Variable: CVA

Method: Panel Least Squares

Date: 01/28/25 Time: 08:04

Sample: 2012 2023

Periods included: 12

Cross-sections included: 11

Total panel (balanced) observations: 132

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6607879.	1224903.	5.394614	0.0000
GESG	1842.176	1078.221	1.708533	0.0899
LFSZ	-691173.1	152646.7	-4.527925	0.0000
R-squared	0.297737	Mean dependent var		1808407.
Adjusted R-squared	0.286849	S.D. dependent var		345791.8
S.E. of regression	292015.2	Akaike info criterion		28.02946
Sum squared resid	1.10E+13	Schwarz criterion		28.09498
Log likelihood	-1846.945	Hannan-Quinn criter.		28.05609
F-statistic	27.34589	Durbin-Watson stat		1.094053
Prob(F-statistic)	0.000000			

In table 4a, and 4b a simple least square regression analysis was conducted to test the effect between environmental, social and governance practices disclosure (ESGs) and cash value added (CVA) for Nigerian and Ghanaian manufacturing firms respectively. The adjusted R-squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variables. From the findings in the Table 4a, Nigerian value of Adjusted R-squared was 0.50, an indication that there was variation of 50% on GVD due to changes in CVA. This implies that 50% changes in GVD could be accounted for by CVA, while 50% was explained by unknown variables that were not included in the model. However, Table 4b, Ghanaian value of Adjusted R-squared was 0.29, an indication that there was variation of 29% on GVD due to changes in CVA. This implies that 29% changes in GVD could be accounted for by CVA, while 71% was explained by unknown variables that were not included in the model. The Durbin-Watson Statistic of 2.388 and 1.094 for Nigeria and Ghana respectively, suggests that the both model does not contain serial correlation. The F-statistic of the regression is equal to 66.899 and 27.346. The associated F-statistic probability is equal to 0.000 for both countries.

The hypothesis of this study stated that environmental, social and governance has no significant effect on cash value added of listed manufacturing firms in Nigeria (H_{01a}) and Ghanaian manufacturing firms (H_{01b}). The evidence provided by the regression result of model 1 showed that the variable of ESGs had a negative coefficient of -100528.7 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 1842.176 (p-value 0.090) for manufacturing firms in Ghana, but has no significant effect. It meant that there was a significant effect between ESGs and cash value added in Nigerian manufacturing firms, while there was no significant effect between ESGs and cash value added in Ghanaian manufacturing firms, howbeit negatively and positively respectively.

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. This implies that in Nigeria, when companies disclose (share information about) their environmental and governance practices, it tends to negatively impact their financial performance. However, this effect is still important (statistically significant). In Ghana, while these disclosures have a positive effect, they do not significantly impact financial performance, this means that Nigerian companies might be investing more in environmental and governance practices, but these investments may be costly in the short term, affecting profits. In Ghana, these practices might not be as emphasized, so they do not strongly impact financial performance.

Social Practices The evidence provided by the regression result of model 1 showed that the variable of social practice disclosure had a positive coefficient of 119262.6 and a p-value of 0.001 which was significant at 5% level for Nigeria manufacturing firms; while the outcome of model 2 showed a positive coefficient of 8535.624 (p-value 0.107) for manufacturing firms in Ghana, but has no significant effect. This implies that in Nigeria, social practices (such as fair wages, good working conditions, community engagement, and employee training) have a positive and significant impact on financial performance. While in Ghana, social practices also have a positive effect, but it is not strong enough to significantly impact financial performance. What this means is that Nigerian companies that focus on social responsibility tend to perform better financially. This suggests that treating employees well, engaging with communities, and maintaining good corporate relationships are beneficial for business success.

General Implications: Nigerian firms seem to be more committed to ESG practices compared to Ghanaian firms. This means they are more likely to adopt advanced technology and innovation that can reduce environmental harm, improve efficiency, and create new business opportunities.

Good social practices pay off in Nigeria; meaning companies that invest in their employees, community, and ethical business conduct see financial benefits. Corporate governance is better structured in Nigeria, which helps attract and retain skilled executives and board members. This stability can contribute to long-term business success. From the findings, the evidence provided by the regression result showed that environmental disclosure and governance practices disclosure had a negative coefficient but was significant at 5% level for Nigeria manufacturing firms; while a positive coefficient but has no significant effect for Ghanaian manufacturing firms. However, the social practice disclosure had a positive and was significant at 5% level for Nigeria manufacturing firms; while a positive coefficient for Ghanaian manufacturing firms, but has no significant effect. This implies that Nigerian manufacturing firms are more environmentally, socially and governance friendly more than the Ghanaian manufacturing firms. It means that there is support of the advance technology and product innovation that could enhance the environmental performance as it reveals a company's capacity to lessen the environmental costs and burdens for its customers, thereby creating new market opportunities. In addition, Nigerian manufacturing firms are socially responsible related to product responsibility, community, human rights, diversity and opportunity, employment quality, health and safety and training and development, thus, employed the best practice of the corporate governance principles related to competitive and equitable management compensation to attract and retain executives and board members.

CONCLUSION AND RECOMMENDATIONS

This study assessed the environmental, social and governance practices on economic performance of manufacturing firms in Nigeria and Ghana, using environmental practices, Social practices and corporate governance practices as the independent variables and cash value added for dependent variable. Data were analyzed with descriptive statistics, and the hypotheses were tested inferential statistics (Pearson correlation, and regression analysis). From the hypotheses results, the variable of ESGs had a negative coefficient, but was significant at 5% level for Nigeria manufacturing firms; while Ghanaian manufacturing firms found a positive coefficient but has no significant effect. While the significance of specific ESG components varies, they all contribute to the creation of long-term shareholder value. Companies that embrace ESG 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. It is therefore safe to conclude that ESG variables and shareholder wealth emerges as a fundamental need for firms seeking long-term success in today's dynamic corporate market in Nigeria than Ghana.

Based on the outcome of the study, the following are our recommendations:

1. The study shows a negative significant and positive insignificant for Nigerian and Ghanaian firms. The management of both countries manufacturing firms needs to adequately be aware of the importance of environmental, social and governance which may improve the performance of the firms, and spend extensively in it as this will be a great catalyst for their growth, productivity, and development. However, they ought to place more of an emphasis on the recognition of social and legal environmental cost for business and environmentally friendly for aggressive ideals by making use of existing assets in order to generate additional wealth for stakeholders. This will result in an increase in management efficacy.

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