
Moderating Effect of Ownership Concentration on Environmental, Social and Governance Disclosures and the Value of Listed Manufacturing Companies in Nigeria

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Abstract

The harmful consequence from global financial scandals were not only causing financial losses to the stakeholders but it similarly caused systemic consequence to the environment and society at large. Thus, the main objective of this study is to examine the moderating effect of ownership concentration on environmental, social and governance reporting and the value of quoted manufacturing companies in Nigeria. The study adopted ex post facto research design. The population of the study comprised of the Sixty (60) manufacturing companies listed on the Nigeria Stock Exchange as at 31st December, 2022. Data was extracted from the published audited accounts of the quoted manufacturing companies in Nigeria from 2013-2022. The study employed multiple regression analysis to test the hypotheses and the result of the random effect model showed that ownership concentration has a positive and significant moderating effect on the relationship between environmental reporting disclosure and firm value, ownership concentration has a positive and insignificant effect on the relationship between social disclosure, reporting disclosure and firm value and that ownership concentration has positive and significant moderating effect on the relationship between governance reporting disclosure and the value of quoted manufacturing companies in Nigeria. From the findings, the study concluded that ownership concentration is a viable monitoring mechanism for influencing the disclosure of ESG practices for firms aiming for high valuation in the manufacturing sector. Therefore, the study recommended that the manufacturing sector should be mandated by the Financial Reporting Council of Nigeria to report on the ESG practices since their activities have far more devastating effects on the environment.

Keywords: Environmental, Social, Governance, Firm Value, Ownership Concentration.

1. Introduction

The demand for increased disclosure of information in the financial statements required for economic decision making and other social needs by various stakeholders around the globe has increased to unprecedented levels. This change in stakeholder's attitude is propelled by the series of corporate reporting scandals at the start of the 21st century, the financial crisis in 2007 and other recent failures of giant companies especially in Europe and Asia. These corporate malpractices have been considered as proof of the failure of the then prevailing models of corporate governance, and of the dangers of lack of adequate disclosures. Thus, a new

investment development has emerged due to stakeholders' information pressure and concern. This concern is built on the growing uneasiness that a firm's wealth valuation frequently relies on partial information, as a result of not valuing information on non-physical assets, as well as on other non-financial information (Ahmed & Hadri, 2018). Since then, regulators in Europe and across the Atlantic, have responded by attempting to impose new mechanisms of governance and by requesting from firms more information obligations and better controls of information. In Nigeria, these corporate failures have drawn attention to the need for better corporate governance and transparent reporting practices among Nigerian companies which informed the release of the code of corporate governance 2018 by the financial reporting council of Nigeria.

Presently, stakeholders act as risk adverse and are more likely to invest at the lowest level of risk but expecting high returns. Thus, corporations are expected by their stakeholders to be more informative in providing crystal clear and valued information. Moreover, the informational content requirements of these stakeholders are diverse and as such companies must not only disclose information about the financial performance in their investment analysis, but similarly encourage the inclusion of non-financial performance elements like environmental, social and governance (ESG) practices that the company engage in. ESG has become a key indicator of management competence, risk management, and non-financial performance (Wu et al., 2022). In particular, ESG covers a variety of issues related to the environment (for instance, climate change, and energy and water use), social responsibility (e.g. human rights, gender equality), and corporate governance (e.g. corruption and bribery, shareholder protection) and for this reason ESG disclosures Practices have emerged.

Environmental, social, and governance practice (ESG), collectively is a term used in the capital markets to denote a company's non-financial performance. Environmental Social and Governance (ESG) is classified as a set of processes associated with an organization's relationship with its ecological surroundings, its coexistence and interaction with human organisms and other populations, and its incorporate system of internal controls and procedure to direct, administer and manage all the affairs of the organization, in order to serve the interests of stakeholder (Wu et al., 2022). Thus, the company should have a governance that is socially responsible.

Specifically, environmental practices therefore, consider how a company performs as a supervisor of nature. Such issues have taken, inter alia, the form of global warming, soil and water pollution caused by industrial activities; and the quick decline of forest areas, noise pollution and chemical wastes being dumped into oceans and rivers (Dowell et al., 2018). Social reporting practices have also been one of the contemporary issues that have gathered momentum in the world. In recent time the global competitive business environment has created additional challenges for businesses due to growing global public awareness concerning the role of corporations in society. The governance reporting signifies how a company is led, its internal controls, and its general adherence to all applicable laws. Events like the Enron scandal, Worldcom, Lehman Brothers and Rank Xerox are examples of companies that collapsed due to the bad governance practices by the top management (Lawal, 2012). The takeaway from those incidents is that the ability of the firm to compete is determined by its governance reporting (Kyereboah-Coleman & Biekpe, 2016). Therefore, investors have turned their attention toward investing in firms with best governance practices and company transparency.

Additionally, the monitoring capacity of a company can be facilitated through the structure of ownership since owners can exert pressure on management to act in a manner that aligns with the core objectives of the company. Specifically, ownership concentration which are characterized as owners who hold a significant amount of interest in companies exceeding 5% of its total share capital are viable monitoring mechanism towards managerial opportunistic

behaviour. These set of owners are undeniably heavily involved in the communication process with stakeholders, where material information about companies are shared. This is because concentrated owners connect the enterprise with the wider community in which it operates; they have to balance the demands of various interested parties (Galbreath, 2013).

In the long run, the goal of the company is to maximize the firm value. A higher firm value shows the prosperity level of the company owner as it has become the main concern for the investors (Ntim, 2018). The prosperity level of shareholders and investors are reflected from the firm value. In other words, the firm value becomes the performance indicator for finance managers (Ngwakwe, 2018). The conclusion as to whether adequate voluntary disclosure by companies sway firm value is still debatable. However, from a theoretical perspective, disclosure, whether it is imposed on the firm by regulation or supplied voluntarily by the firm, is beneficial for shareholders if it creates value.

In literature, several studies have been conducted on the association between ESG disclosures and firm value with results suggesting mixed findings. For example, Chen et al. (2023), Wu et al. (2022), Harjoto and Jo (2015); Marlene et al. (2016) found positive relationship while Utomo et al. (2020); Ahmed and Hadri (2018); Hassan (2016) argued that corporate, environmental, social and governance disclosures negatively affect firm value. Therefore, this field of study still yawns for further investigation to be carried out on the topic. Furthermore, most of these studies are investigating these disclosures in developed contexts (for instance, Harjoto & Jo, 2015; Plumlee et al., 2015; Yadav et al., 2016), and very few studies focused on emerging markets (see Malarvizhi & Matta, 2016). Consequently, emerging markets, with their idiosyncrasies in terms of cultural specificity and political volatility, need special interest.

In Nigeria, most of the studies focused predominantly on financial performance and normally, focus on a single dimension as against adopting the entire ESG reporting practices. Basically, Omaliko and Okpala (2020); Oyedokun et al. (2019); Uwuigbe (2018); Fodio et al. (2013); Oti and Mbu-Ogar (2019) and many more have made formidable attempts at investigating this topic. However, a common phenomenon with these studies is that they all adopted a single dimension of corporate disclosure using either environmental, social, economic or governance while this current study considers that a gap which needs to be filled by holistically, studying the combination of all the dimensions of environmental, social and governance disclosure practices. Hence, the combined effect of these dimensions in this current study is expected to yield an effective result dissimilar to prior researches.

Unlike the previous studies, this current study considered the entire manufacturing companies quoted on the Nigerian Exchange Group (NXG), which is unique compared to others as they are sub-sector based. This gives this study the advantage of having recommendations that can be applied to all companies within the manufacturing sector. Accordingly, this study fills the gaps mentioned above by examining the moderating effect of ownership concentration on ESG disclosures and the value of quoted manufacturing companies in Nigeria.

2. Literature Review

2.1 Concept of Environmental, Social and Governance (ESG) Disclosure

ESG is an acronym commonly used by investors to evaluate companies from the point of view of environmental, social, and corporate governance aspects. ESG criteria are considered non-financial performance indicators and are used to identify good corporate practices in the fields of ethics, social responsibility, and corporate governance. In other words, the ESG issue identifies a parameter for assessing the performance of companies, together with traditional economic parameters, by the financial world (banks and institutional investors) but also by the so-called "supply chain leaders", that is companies that lead of the supply chain by asking its

suppliers to adapt their governance standards to the principles of sustainable development. In terms of ESG investments, a key concept emerges, among others, namely "ESG integration"; in this regard, the UN Principles (Principles for Responsible Investment - PRI) define it as follows: "The explicit and systematic inclusion of ESG factors in the analysis and investment decisions". In other words, ESG integration recalls the application of ESG factors in traditional financial analysis. ESG or ESG factors are increasingly being paid attention to by finance professionals, individual investors, institutional investors, and professional fund buyers. With the intention of being recognized and labeled socially responsible, recent years have seen an ever-increasing number of companies engaged in ESG activities.

The foundation of the ESG concept is grounded in the field of socially responsible investment where socially responsible investors encourage companies to engage in environmentally and socially responsible practices. Contrary to the traditional reporting practices, socially responsible investments do not only take into account the economic aspects, but also environmental, social, and governance (ESG) issues. ESG practices are often overlap with various concepts or terms such as sustainability and triple bottom line and are regarded as the three pillars of sustainability (Capelle & Petit, 2017).

Comparable to the concept of sustainability and triple bottom line, sustainability outlines three dimensions of social, environmental and economic performance while the Triple Bottom Line comprises of People, Planet, Profit. The concept of 'Planet' refers to a company's environmental responsibility, the term 'People' signifies a company's social responsibility towards their employees and the community it is operating in. The third element, 'Profit', represents the economic value and benefits a company is creating (Elkington, 1997). In both concepts above, one can see that the notion of corporate governance is omitted. Recent studies claim that good governance and sustainability cannot be treated separately and that corporate governance should be included in the concept of sustainability (Galbreath, 2013; La Torre et al., 2020).

Also, a larger discussion among industry leaders began with sustainability, however, the importance of ESG's practices, scope and its relevance to capital opportunities have led to a substantial shift in the way companies measure and disclose their performance. The transition from sustainability to ESG performance indicates a maturation of business practices to a more precise measurement of a portfolio's performance. This means that, ESG has become the preferred term for capital markets when it comes to disclosure and these provides the opportunities for companies to collect, report and act on ESG data.

More so, Investopedia (n.d.) defined environmental, social and governance (ESG) practices as a set of criteria for a company's operations that socially mindful investors use to screen potential investments. Moreover, environmental criteria consider how a firm performs as an overseer of nature. Social criteria examine how it manages relationships with employees, suppliers, customers, and the communities where it operates. Governance deals with a company's leadership, executive pay audits, internal controls, and shareholder rights.

Furthermore, Whitelock (2015) defined ESG as a set of activity or processes related with a firm's relationship with its ecological surroundings, its existence and relations with human organisms and other populations, and its corporate system of internal controls and procedures (such as processes, customs, policies, laws, rules and regulations, etc.) to direct, administer and manage all the affairs of the organization, in order to serve the interests of investors and other stakeholders. Therefore, ESG practice refers to investment of resources in routines, processes, practices or activities for the continuous improvement of firm performance in the area of environment, society and corporate governance concerns. These routines, processes, practices or activity are implemented to minimize potential negative impacts on the environment, on society and on corporate governance. This dimension addresses how a company manages a broad range of ESG operational issues in their company. It expresses actually what the firm

does, regarding its ESG activity.

Jin and Lei (2023) believe that the ESG is a product that can be qualified as strategic and, therefore, a source of greater profits for the company. Particularly interesting is the study conducted by Sharfman and Fernando (2008) which demonstrates how the disclosure of non-accounting information and ESG reporting are valid tools to support the management and control of business risks; therefore, companies with higher ESG ratings are considered less risky. Therefore, ESG is broken down into three main categories: environmental, social, and governance.

2.2 Firm Value

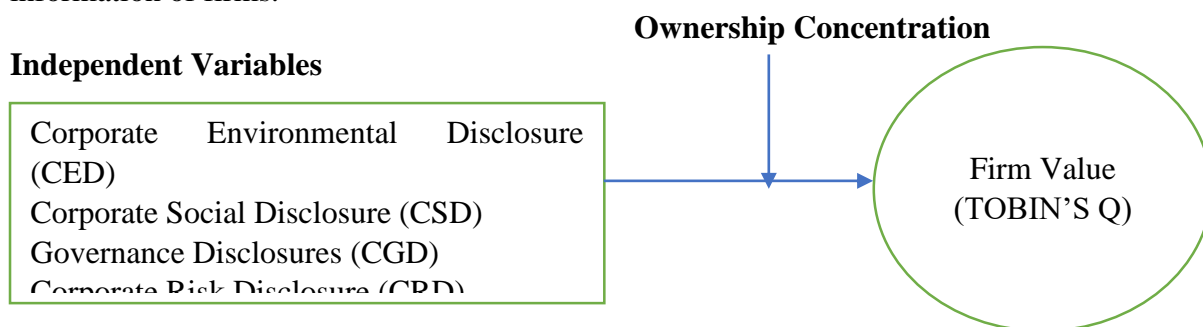
In the long run, the goal of the company is to maximize firm value. A higher firm value shows the prosperity level of the company owners therefore, the higher the firm value, the higher the prosperity of the shareholders. Firm value therefore becomes the major concern of the investors. The prosperity level of shareholders and investors are reflected in an entity's firm value. In other words, firm value becomes the performance indicator for finance managers (Salvatore, 2005). Firm value represents the assets owned by the company and is considered as a crucial thing since it describes the prosperity of the company's owners. Therefore, a manager, as the representative of the company, is responsible for achieving the optimal firm value (Nugroho, 2018). A good firm value is able to arouse the interest of other parties in joining the company. Modigliani and Miller (1958) as cited by Plumlee et al. (2015), stated that firm value is determined by company's asset earnings power. The positive impact of asset earning powers shows that if a company has higher earning powers, then the asset turnover will be more efficient and the profit will be higher. As a result, firm value will also increase. Besides assets and profit, the company debt policy also influences changes in firm value. The higher the debt, the higher the stock price. However, it will be the opposite in certain conditions when the benefit of debt utilization is less than the cost incurred. The debt policy can create the expected firm value, but it depends on the firm size. This means firm size will influence the competition in the stock exchange.

2.3 Ownership Concentration

Block-holder ownership is the proportion of ordinary shares owned by substantial shareholders with equity of 5% or more (Eng & Mak, 2003 as cited by Darko et al., 2016). In this research the same definition of block-holder ownership as Eng and Mak (2003) is employed. The literature suggested the presence or absence of a block-holder shareholder with material interest in the firm can affect substantially the way in which the ends toward which a corporation will be governed (Damagun et al., 2014). Two major arguments have, accordingly, been adduced to support the presence of dominant/largest shareholder in an enterprise. First is, if ownership starts as diffuse, the presence of a dominant shareholder might mitigate the free-rider problem (Dar et al., 2019). The free-rider problem emerges in highly dispersed shareholder structure, due to the unbalance existing between the effort required to control management behavior and the benefits such monitoring entails (Jensen, 1986). Second, the block-holder of shares has the potential to curb tunneling a term that is used to describe the transfer of resources out of the firm for the benefit of the controlling shareholders (Debnath et al., 2021). It is argued that since tunneling is not healthy for the firm as a whole, the existence of a block holder whose interest of the firm cohere, may have little incentive to engage in tunneling.

Ownership concentration refers to the spreading of the shares owned by a certain number of individuals or institutions; the ownership mix on the other hand, is related to certain institutions or groups such as government, private company or foreign partners among the shareholders (Andriani, 2021). The role of ownership structure in the setting of concentrated ownership is to assess the cash flow contents with regards to block holder's role in the perspective of diffused ownership. The accounting literature contains extensive research on how the agency problem

between owners and managers affects earnings quality as well as the quality of accounting information of firms.



Quintiliani (2022) investigated the correlations between ESG score and firm value. The study verifies the hypothesis that there is a positive correlation between ESG score and firm performance, as indicated by levered free cash flow, ROE, current ratio, and quick ratio; also, the study aimed to investigate the relationship between ESG score and firm value improvement, as indicated by stock price of firm. The study applied linear regression to a panel data using Bloomberg ESG disclosure scores from a sample of 115 companies listed in Europe. The time under study was from 2016 to 2020. Findings suggested a positive and significant relationship between environmental disclosure and firm value. The study was conducted in the European countries and as such the findings cannot be used for effective decision in the Nigerian context. Wu et al. (2022) determined the relationship between Environmental, Social and Governance (ESG) performance and firm value of Chinese manufacturing listed companies. The moderating role of ownership structure on the relationship between ESG performance and firm value is also tested. Sino-Securities ESG Rating is adopted in this study to measure ESG performance and ownership structure is measured in four aspects, which include ownership concentration, equity balances, executive shareholding and institutional investor shareholding. The study found that (1) ESG performance is important in improving firm value, (2) executive ownership and institutional ownership positively and significantly affect firm value, while ownership concentration and equity balance have no impact and (3) executive ownership and institutional ownership moderate the link between ESG performance and firm value, whereas the moderating role of ownership concentration and equity balance is not significant. Findings from the Chinese context cannot be used for effective decision in the Nigerian context due to ontological and behavioural complexities.

Aydogmus et al. (2022) assessed the impact of environment, social, governance (ESG) performance on firm value and profitability. Sample data covers 1720 firms from 2013 to 2021. The used panel data fixed effects model for both firm value and profitability as dependent variables. Findings suggest that overall ESG combined score is positively and significantly associated with firm value. Individual Social and Governance scores have a positive and significant relationship while Environment score does not have a significant relationship with firm value. On the other hand, ESG combined score, environment, social, and governance scores have positive and significant relationships with firm profitability. These findings suggest that investing in high ESG performance promises financial return for the firm in terms of both value and profitability. The current study focused on the manufacturing sector and finding from as study from a variety of sectors cannot be used for effective decisions in the Nigeria manufacturing sector due to sectorial peculiarities.

Dinca et al. (2022) explored the relationship between non-financial sustainability, measured by ESG scores, and firm value in the automotive industry, where empirical evidence is scarce. A structural equation modelling (SEM) approach has been taken on a novel dataset of 131 listed companies worldwide across 6 years. Our results indicate a mixed influence of the E, S, G scores on firm value in the analyzed period, with some inconclusive effects, especially from

the social score. This current study utilized the multiple regression analysis technique which considered the most viable statistical tool for exploring relationships involving multiple independent variables and one dependent variable.

Atanda et al. (2021) examined the effect of sustainability disclosure on firm value, drawing data from ten randomly selected listed deposit money banks, covering the period 2014-2018. We employ qualitative content analysis, using the information obtained from audited reports and accounts, to measure overall sustainability disclosure index and its three dimensions (environmental, social and economic) and use descriptive tools and ordinary least square fixed-effects regression for analysis. We find consistent and strong evidence that banks with high overall sustainability and environmental sustainability disclosure tend to have low firm value. However, social sustainability disclosure exerts a more pronounced positive impact while the insignificant effect of economic sustainability disclosure suggests that its increase will not enhance firm value. These results indicate that overall sustainability and environmental sustainability disclosures were detrimental, rather than beneficial, to firm value. The current study focused on manufacturing companies as findings in the banking sector may not be used for effective decision in the manufacturing sector.

Emeka-Nwokeji and Osisoma (2019) investigated how overall sustainability disclosures and its dis-aggregated dimensions of environment, social and governance affect market value of firms in Nigeria as an emerging economy using company's specific disclosures. Tobins Q was used to proxy firm market value. The study selected 93 out of 120 non-financial firms listed on the Nigerian Stock Exchange as at 2015. Ex Post Facto research design was adopted and the secondary data was collected from annual reports of sampled firms from 2006 to 2015 through content analysis. The data were analysed with descriptive statistics, correlation analysis, principal component analysis while pooled ordinary least squares regression was employed to test formulated hypotheses. The study also revealed that social disclosures have negative and insignificant effect on market value of firm. Although, done in Nigeria, the emergence of the new Code of Corporate Governance (2018) where issues on reporting are extensively featured there is need for a study into the new inclusions.

Fortune and Khazamula (2018) examined impact of carbon emissions on corporate financial performance of 63 South African companies in 2015. The study used multiple regression estimation technique to assess impact of carbon emissions on companies' financial performance; and found that carbon emissions have negative relationship with companies' performance. The study concludes that companies that try to lower carbon emissions can effectively manage financial performance.

In a related study, Okafor (2018) assessed effect of environmental costs on performance of quoted oil and gas companies in Nigerian from 2006 to 2015. The results indicate that environmental performance positively impacts value of organizations. Moreover, environmental accounting provides organizations with opportunities to reduce environmental and social costs, thereby improving their performance. The study observed that most of the companies investigated do not explicitly publish their environmental costs in their annual reports.

2.4 Agency Theory

This theory was developed by Jensen and Meckling in 1976 who claimed that the theory indicates the nexus between the principals, such as shareholders and agents such as the company executives and managers. In this theory assumed that, shareholders who are the owners or principals of the company, hire the agents to perform work. Principals delegate the running of businesses to directors or managers, who are the shareholder's agents. The agent has decision making authority so, he or she could transfer wealth in a certain manner from the principal to the agent if the principal intervenes and the managers, as the agents of shareholders, could act in their own business. In reality agency problems sometimes occur when the

shareholders have interest to maximize the firm’s value, but the managers have more knowledge, understanding and information about the company than the shareholders. According to agency theory, voluntary disclosure of firms, mainly on social and environmental aspects, is a means to reduce agency costs or future agency costs that may occur in the form of legislation and regulation (Cormier et al., 2015; Galani et al., 2012). This reduction in the costs will affect the risk profile and profitability of companies and thus affect the market value. Agency theory therefore, anchors this study because it reflects the variables in the study.

3. Methodology

This study adopted the ex post facto research design and aligned with the positivist philosophy to examine the possible causes and effects between the variables of interest. The population of this study included the entire 60 manufacturing companies listed on the Nigeria Exchange Group as at December 31st, 2022. However, filters were employed to arrive at a sample size of 41 companies. Data collected for this study came solely from secondary sources extracted from the published audited accounts and financial statements and of the listed manufacturing companies in Nigeria from 2013-2022. Therefore, the panel dataset comprised 410 firm years’ observations which were subjected to different tests for analysis. Secondary data are factual and verifiable thus, the validity of inferences drawn from its use in analysis is ensured. The study employed multiple regression as the procedure of analysis with aid of STATA version 16 as a tool for analysis. The crux of the model is to test the effect of environmental, governance and social disclosure disclosures on firm value of listed manufacturing companies in Nigeria: moderated by ownership concentration. The econometric model is stated as follows:

$$FV_{it} = a_0 + \beta_1END_{it} + \beta_2SOD_{it} + \beta_3GOVD_{it} + \beta_4OC_{it} + \beta_5END_{it}*OC_{it} + \beta_6SOD_{it}*OC_{it} + \beta_7GOVD_{it}*BFE_{it} + \epsilon_{it}.....(i)$$

Where:

FV= Firm Value, OC= Ownership Concentration, END= Environmental Disclosure
SD= Social Disclosure, GOVD= Governance Disclosure, β = Constant, ε_{it}= Error Term

Table 1: Measurements of Variables

S/N.	Variable	Type	Measurement	Source
1.	Firm Value	Dependent	Firm value was measured by Tobin’s Q, which is defined as the ratio of the firm’s market value to its accounting (book) value	Carter et al., 2013
2.	Environmental Disclosure	Independent	GRI (2018) indicators measured by as an index to the proportion of the number of items disclosed to the total number of items expected to be disclosed.	Chen et al., 2023
3.	Social Disclosure (CSD)	„	GRI (2018) indicators measured by as an index to the proportion of the number of items disclosed to the total number of items expected to be disclosed.	Wu et al., 2022
4.	Governance Disclosures	„	GRI (2016) indicators measured by as an index to the proportion of the number of items disclosed to the total number of items expected to be disclosed.	Chen et al., 2023
5.	Ownership Concentration	Moderator	The proportion of shares held by certain number of block holders, exceeding 5%.	Dar et al., 2019

Source: Researcher’s Compilation, 2024

4. Results and Discussions

This study is panel in nature and as such the data were extracted from the annual reports and accounts of 410 listed manufacturing companies for a period 10 years (2013 to 2022) culminating into 410 financial year observations.

Table 2: Descriptive Statistics

variable	mean	sd	min	max	skewness	kurtosis
fv	.1752444	.2263082	-.3801242	.8869405	.7619621	3.029141
env	.3837029	.1941741	.0833333	1.7790964	3.314744	
sod	.3461077	.1460791	.0588235	.7647059	-.3395619	2.70909
gov	.2146299	.052985	.1176471	.7547059	5.269142	47.08444
envoc	.0947779	.1299379	-.1020821	.5583118	1.224051	4.006566
sococ	.1626498	.0871588	.0131441	.3920765	.2889156	2.40428
govoc	.1051002	.050447	.0231904	.4602151	1.774415	12.28629

Source: Summary Statistics from STATA 16 Output, 2024

The descriptive statistics in table 2 shows that the average firm value which is the measure of Tobins Q is .1752 with a standard deviation of .2263. These figures indicate a low ratio of the manufacturing companies’ market value to their accounting (book) value. This is substantiated by the values of the minimum and maximum which stands at -.3801 and .8869 respectively indicating a high level of variability in the data. Regarding the independent variables, environmental reporting practice has a mean value of .3837 with standard deviation of .1941. This implies that environmental reporting practice deviates significantly across the sampled manufacturing firms. The minimum values of .0833 and maximum of 1 also shows a significant inconsistency in the data. In addition, social disclosure practice has an average mean value of .3461 and standard deviation of 0.1460. This indicates that on average 34.6% of the social reporting practices are made within the studied companies. This result agrees with the value of the standard deviation which is close to mean. However, the minimum and maximum values stand at .0588 and .7647 signifying a high level of dispersion in social reporting practices of companies in the area covered by the study. Furthermore, the descriptive statistics reveals an average of .2146 and a standard deviation of .0529 with a range of values from .1176 to .7547. The significant difference in the value of minimum and maximum is an indication of high level of differences in governance disclosure practices of companies in the manufacturing sector. This affirms that other companies make higher disclosures with respect to governance practices than others.

Also, the interaction between environmental reporting practices and ownership concentration produces a mean of .0947 and a standard deviation of .1299 with an accompanying minimum and maximum which value of -.1020 and .5583 respectively. Furthermore, the descriptive statistics show that the presence of block holders stimulate the disclosure of social practices by 16% given the mean value of .1626 and a corresponding standard deviation of .0871. The maximum value is .3920 while the minimum is .0131 which is a confirmation of this assertion. The presence of block holders has stimulated the highest disclosure of 39%. Again, the descriptive statistics show that the interaction between governance disclosure practices and ownership concentration produced an average disclosure level of 10.5%. This is evidenced from the mean value which stands at .1051. The corresponding standard deviation shows 5% which is relatively close to the mean and substantiates weak disclosure potentials from this combination. This is substantiated by the minimum and maximum values which ranges from .0231 and .4602 respectively.

Table 3: Correlation Matrix

	fv	env	sod	gov	envoc	sococ	govoc
fv	1.0000						
env	-0.0162	1.0000					
sod	-0.0398	0.2524	1.0000				
gov	0.0447	-0.0321	-0.0617	1.0000			
envoc	0.0314	-0.0598	-0.0746	0.0635	1.0000		
sococ	0.1468	-0.0544	0.6685	-0.0095	0.2486	1.0000	
govoc	0.2073	-0.2328	-0.2054	0.6565	0.3691	0.3912	1.0000

Source: STATA 16 Output, 2024

Table 3 shows the correlation between the dependent variable (firm value), the independent variables (environmental, social and governance (ESG) disclosure practices) and moderator variable (ownership concentration) on one hand, and among the independent variables on the other hand. From Table 3, it can be seen that all the correlation coefficients among the independent variables are below 0.80 (80%) and thus, indicating the absence of the problem of multicollinearity as posited by Gujarati (2004).

Table 4: Multicollinearity Test

Variable	VIF	1/VIF
govoc	1.07	0.933429
sococ	1.00	0.995901
sod	1.06	0.940892
gov	6.35	0.157523
envoc	1.25	0.802722
env	1.21	0.825862
Mean VIF	1.05	

Source: STATA, 2024.

Based on the evidence presented in Table 4, it can be concluded that there is no multicollinearity problem. This is because the mean VIF values for the set of models are less than 10 and the tolerance values for all the variables are greater than 0.10 (Gujarati, 2004). This is substantiated by Baltagi (2015), that mean VIF below 10 and greater than 10% for tolerance values indicate that there is no multicollinearity problem among the series in the distribution, rather it is an indication that the series are not unhealthily related.

Table 5: Test for Heteroscedasticity

Heteroskedasticity	Chi2	Prob>Chi2
Variables	0.27	0.1223

Source: STATA OUTPUT, 2024

Basically, the presence of heteroskedasticity signifies that the variation of the residuals or term error is not constant which would affect inferences in respect of beta coefficient, coefficient of determination (R²) and F-statistic of the study. Based on the results, it can be concluded that there is no problem of heteroscedasticity as the F-statistics and probability presents values of 0.27 and 0.1223 respectively which is insignificant, implying absence of heteroscedasticity in the model.

Table 6: Hausman Specification Test

	F	R	Difference	S.E.
env	.0240777	.0198482	.0042295	.0039067
sod	-.1226579	-.1341227	.0114647	.0142837
gov	.9088784	.9174976	-.0086192	.0357072
envoc	1.782174	1.783607	-.0014332	.0139951
sococ	.1889446	.2144427	-.0254981	.0261316
govoc	-1.64691	-1.65288	.0059695	.0653546

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\text{chi2}(6) = (\mathbf{b}-\mathbf{B})'[(\mathbf{V}_b-\mathbf{V}_B)^{-1}](\mathbf{b}-\mathbf{B})$$

$$= 1.89$$

$$\text{Prob>chi2} = 0.9294$$

Source: STATA, 2024

The Hausman Speciation Test is conducted to choose between the fixed and random effect

models which is more appropriate for interpretation. The result of the Hausman Test reveals chi2 values of 1.89 with a corresponding probability of 0.9294. The insignificant value presented by result suggests that the random effect is more appropriate. Given this result, the Lagrangian multiplier test is recommended.

Table 7: Lagrangian Multiplier Test

	Var	sd = sqrt(Var)
fv	.0512154	.2263082
e	.0026524	.0515013
u	.0026665	.0516383

Test: Var(u) = 0
 chibar2(01) = 387.25
 Prob > chibar2 = 0.0000

Source: STATA 16 Output, 2024

The result reveals that the prob>chi2 value of 0.0000. From this result, the best model to be interpreted is the random effect regression models since the prob>chi2 is less than 0.05. The general rule is that once the probability of LM test is equal to 0.05 and below the preferred model is the random effect otherwise the appropriate model would be the pooled independent OLS.

Table 8: Random Effect Regression Result

Random-effects GLS regression	Number of obs	=	410		
Group variable: id	Number of groups	=	41		
R-sq: within = 0.8746	Obs per group: min	=	10		
between = 0.9202	avg	=	10.0		
overall = 0.9034	max	=	10		
	Wald chi2(6)	=	2975.96		
corr(u_i, X) = 0 (assumed)	Prob > chi2	=	0.0000		
fv	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
env	.0198482	.0168861	1.18	0.240	-.0132479 .0529444
sod	-.1341227	.0648987	-2.07	0.039	-.2613217 -.0069236
gov	.9174976	.1408911	6.51	0.000	.6413561 1.193639
envoc	1.783607	.0330095	54.03	0.000	1.71891 1.848304
sococ	.2144427	.1218918	1.76	0.079	-.0244608 .4533462
govoc	-1.65288	.2216342	-7.46	0.000	-2.087275 -1.218485
_cons	-.0130806	.0195629	-0.67	0.504	-.0514232 .0252621

Source: STATA 16 Output, 2024

The regression result reveals an overall R² of 0.9034. This signifies that ESG reporting practices and ownership concentration jointly explain 90% variations in firm value of listed manufacturing companies in Nigeria while the remaining 10% of the total variation in firm value is caused by factors not explained by the model. Accordingly, the value of F-statistic is 2975.96 with a corresponding p-value of 0.0000 which signify the fitness of the model. This serves as substantial evidence to conclude that the choice of the variables is fit for the study.

4.1 Test of Hypotheses

HO₁: Environmental Reporting Disclosure and Firm Value

The regression results as shown on the table 8 depicts that environmental reporting practice has a coefficient of 0.0198 a z-value of 1.18 and a p-value of 0.240. This suggests that environmental reporting practice has a positive relationship with the value of listed manufacturing companies in Nigeria. Thus, a unit increase in the environmental reporting practice of companies will lead to a corresponding increase in firm value by 2% while holding

social and governance reporting practices constant. However, given the p-value, which is greater than 0.05, the study aligns with the assertion that environmental reporting practice has no significant effect on the value of listed manufacturing companies in Nigeria. This finding is supported by the agency theory which states that enhanced information is a sign of good news and as such would add value to the company and further bridges information gap between shareholders and management. This finding is in tandem with Quintiliani (2022); Yang et al. (2020) and contradicts that of Utomo et al. (2020) and Omaliko and Okpala (2020).

HO₂: Social Reporting Disclosure and Firm Value

Furthermore, the study found that social disclosure has a negative and significant effect on the value of manufacturing companies in Nigeria. This is evidenced by a coefficient of -0.1341 and a p-value of 0.039 which is significant at 95% level of confidence. This result inferred that 1% increase social reporting practice will result in 13% decrease in firm value measured by the ratio of Tobins Q while holding environmental and governance reporting practice constant. This is however, significant given the p-value which is less than 0.05 and as such the study rejected in this particular circumstance the hypothesis which states that social reporting practice has no significant effect on the value of listed manufacturing companies in Nigeria. This finding suggests four motives of competitive advantage, developing a reputation and legitimacy, reducing costs and risks and finally achieving a win-win effect through synergistic value creation. This finding is in line with the Agency theory which provides basis of legal, equitable and fair treatment of all stakeholders in the company. The findings align with the previous findings of Wu et al. (2022); Okpala and Iredele (2019) and contradicts that of Ahmed and Hadri (2018) and Stefan and Vintila (2016).

HO₃: Governance Reporting Disclosure and Firm Value

Table 8 shows that governance reporting practice has a significant and positive effect on firm value of companies in Nigeria manufacturing sector, from the coefficient of .9174 and a p-value of 0.000 which is statistically significant at 5% level of confidence. This result suggests that 1% increase in the level of governance reporting practices will increase firm value by 91% while holding environmental and social reporting practices constant. Hence, the study rejects the assertion that governance reporting practice has no significant effect on the value of listed manufacturing companies in Nigeria. The finding of this study aligns with the agency theory because the governance system of any company is designed to incorporate and align the varying interests of the stakeholders with that of the company with a view to specifically reducing information gaps that may exist between owners and managers. The significant finding in this study aligns with that of Dinca et al. (2022); Aydogmus (2022) and contradicts that of Salem et al. (2019); Abdelrazaq et al. (2019).

HO₄: Ownership Concentration, ESG Disclosures and Firm Value

The study finds evidence which suggests that ownership concentration has a positive and insignificant moderating effect on the relationship between environmental reporting practice and the value of quoted manufacturing companies in Nigeria. This is evidenced by the coefficient of 1.7836 and the corresponding probability of 0.000 which is significant at 95% level of confidence. It therefore, means that there is 178% increase in firm value given the interaction between environmental reporting practice and ownership concentration in the area covered by the study while holding other factors constant. Based on this outcome, the study rejects the null hypothesis that, ownership concentration has no significant moderating effect on the relationship between environmental reporting practice and the value of quoted manufacturing companies in Nigeria. This finding is supported by the agency theory which states that enhanced information reporting is a sign of good news and as such would add value to the company and further reduce uncertainties in the minds of both the current and potential investors.

The summary of the regression in table 8 shows that ownership concentration has an

insignificant and positive and moderating effect on the relationship between social reporting practices and the value of quoted manufacturing companies in Nigeria. This assertion is supported by the coefficient of 0.2144 and a p-value of 0.079 which is statistically insignificant given that the p-value is greater than 0.05. This result insinuates that companies that have higher ownership concentration rises their level social reporting practices resulting in 21% increase in the values of companies in the area covered by the study. However, given the p-value, the study, therefore, has no evidence to reject the null hypothesis that ownership concentration has a significant moderating effect on the relationship between social reporting practices and the value of quoted manufacturing companies in Nigeria. This finding is in line with the agency theory which provides basis of ethical, equitable and fair treatment of the company.

Furthermore, the regression result in table 8 shows a coefficient of -1.6528 and a p-value of 0.000. The import of this result is that ownership concentration as a moderator negatively and significantly moderates the relationship between governance reporting practices and the value of the Nigeria manufacturing sector. It means that higher ownership concentration can decrease the predictive power of governance reporting thereby negatively moderating relationship between the independent and dependent variable by 165% while holding other factors constant. However, given that the p-value is less than 0.05, the study rejects the null hypotheses which states that ownership concentration has no significant moderating effect on the relationship between governance reporting practice and the value of quoted manufacturing companies in Nigeria. This finding is supported by the agency theory which posits that improved information disclosure in company annual reports is a sign of good news and an indication of transparency on the part of management which inevitably portends the possibility of adding value to the company.

5. Conclusion and Recommendations

This study examined the moderating effect of ownership concentration on the relationship between environmental, social and governance reporting practices and the value of quoted manufacturing firms in Nigeria. From the findings, the following conclusions were made;

That environmental disclosure is not a necessary reporting dimension capable of influencing the value of manufacturing companies in Nigeria. This could primarily be attributed to the low level of disclosure of environmental related issues in the annual reports and accounts as a result of the enormous cost that is involved in making such disclosure unless mandated by the law. Although, there may be benefits that are accruable for green production, at the early stages of the company, the cost is enough to affect its overall value.

That social disclosures are a significant reporting practice capable of influencing the value of manufacturing companies in the Nigeria context. This could be based on the reasoning that an increasing rate of corporate social activities seem to be able to maintain and to support a better relationship with stakeholders in general. Also, social reporting practices can be used as a device by companies to communicate accountability, by showing their vision for the future and accounting for past performances.

That governance disclosures are viable corporate strategy towards increasing the value of the companies in the manufacturing sector. This conclusion may hold true because corporate governance disclosure practices adopted by a firm can influence the value of the firm and that a transparent, informative and strong system of corporate governance is of vital importance for firms to attract foreign funds. Thus, higher disclosures by the firm improve corporate performance and that disclosures play a significant role in ensuring integrity, transparency and accountability.

That ownership concentration indirectly stimulates the increased disclosure of environmental reporting in the manufacturing sector of the Nigerian economy. This is because such disclosure signal to the stakeholders especially investors that such a company is

environmentally responsible and accountable. Firm value is positively influenced here as ethically responsible companies send the right signals to the capital market attracting more investors to the company.

That ownership concentration is not a corporate governance mechanism that influences corporate social disclosure reporting in the Nigeria manufacturing sector. Basically, block holders may not tilt towards the idea of carrying and reporting corporate social responsibility practices as this involved an outlay of finances that would have been retained in the company. Block holders may therefore vote against managerial decisions of investing in corporate social responsibility activities.

That ownership concentration is viable mechanism indirectly influencing the disclosure of governance disclosure that send positive signals to the capital thereby improving the value of the firm. Block holders in their bid to increase the value of the company would adopt full reporting of governance practices should as whistle blowing, risk management activities, sustainability, human capital and many more to show that the organization is properly managed. This creates confidence in the mind of stakeholders.

From the findings and conclusion, the study recommends that companies in the manufacturing sector should increase the number of concentrated owners as well as establish a separate environmental reporting committee that will collectively provide support to management towards enhancing the disclosure of such practices. The block holders in their own right will pressure management to comply with such disclosure since they are strategy capable improving the value of the firm.

It is also recommended that stakeholders' such as the government, Financial Reporting Council of Nigeria, investors and the civil society should pressure manufacturing companies to compulsorily carry out corporate social responsibilities in their host communities and further disclosure with accounting figures the extent of these activities. These stakeholders may wade off the pressure exerted by block holders who may not want such practices due to the enormous financial outlay to the company.

Finally, the study recommends that manufacturing companies should ensure critical governance practices are instituted and disclosed accordingly in the annual financial accounts and reports of the companies. Policies on sustainability, whistle blowing, human capital development, risk management and ethics must be headed by committees with knowledgeable members and their activities diligently reported in their annual financial reports and accounts.

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