



ENVIRONMENTAL, SOCIAL, GOVERNANCE REPORTING AND MARKET
PERFORMANCE OF LISTED MANUFACTURING COMPANIES IN
NIGERIA

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A B S T R A C T

Environmental, social, governance reporting plays a pivotal role in reporting, yet it has been riddled with mixed findings, having a negative effect on the market value. In order to increase trust, there is the need of reporting the non-financials of firm. To navigate this complex issue, this study investigates the effect of environmental reporting, social reporting, and governance reporting on the market performance of listed manufacturing firms in Nigeria. Using a longitudinal research design where secondary data was collected from the annual reports of 27 listed manufacturing firms over a ten-year period (2013–2022), panel least squares was used to analyse the relationships between the variables. The results revealed a positive and statistically insignificant relationship among environmental reporting, governance reporting and the market performance however, social reporting revealed a negative and insignificant effect on the market performance of listed manufacturing companies in Nigeria. The study concludes that environmental, social, and governance reporting does not significantly affect the market performance of listed manufacturing companies in Nigeria.

Introduction

Reporting has gone past just reporting the financial concerns of an organisation to include the non-financial which is concerned about the environmental, social, and governance reporting also referred to as sustainability reporting. This type of reporting enhances transparency on the part of organizations showing to the users of the report that they are contributing to the goals of sustainable development (Umasabor & Eraghbe, 2023). When firms report on their environment, social, and governance activities, it can attract more investors, since investors are more interested in the transparency of reporting in any organization.

Thus, environmental reporting is concerned with firms reports on the ways and manner firms put efforts to reduce pollution, waste, emission, and depletion of natural resources. As a result, several countries have adopted this sustainability reporting either voluntarily or mandatorily (Ekins & Zenghelis, 2021; Wu et al., 2022) in order to be compliant with what is obtainable around the globe which is centered on sustainable development (Brundtland report, 1987). Social reporting on the other hand is associated with creating a good relationship with the community where the firm is situated by creating social amenities to such communities (Hassan & Musa, 2021).

Governance reporting has to do with having a blueprint of protecting stakeholders and clarity of the responsibilities of the board of directors, shareholders, and management in order to protect investors (Afjei, 2015; Lambe et al., 2023). With a clear picture of the governance reporting, there can be increased foreign investment, hence, report of this magnitude that entails environmental, social, and governance could be an effective transparent tool in the capital market by increasing the market performance of the firm.

Market performance measure such as Tobin's Q is the ratio of the market value of a firm and its asset replacement cost (Umasabor & Ogiedu, 2023; Zhong et al., 2022). Tobin's Q is concerned on how a firm can increase the market value of its assets which can affect the share price, which could be a determinant of the dividend to be paid out to shareholders. From the stakeholders' theory as postulated by Freeman (1984), there is need to meet the expectations of all stakeholders. By reporting environmental, economic, social, and governance activities of the firm, agency conflicts are mitigated (Hahn & Kuhnen, 2013; Jensen & Meckling, 1976). However, several empirical studies have been carried out indicating that this sort of report (environmental, social, and governance) can affect the market performance positively or negatively (Bualay, 2020; Ogunode & Adegbe, 2022; Uwuigbe et al., 2018; Yameen et al., 2019) revealed that sustainability reporting has negative or no effect on firm performance. While some other studies have revealed a mixed effect (Emeka-Nwokedi & Osisioma, 2019; Putri & Pratama, 2023; Thalia & Nuraini, 2023). There is limitation on studies of environmental, social, and governance reporting on the manufacturing companies in Nigeria. For example, several studies (Akinadewo et al., 2023; Ali et al., 2023; Aniagboso & Orjinta, 2023) have been done on single sub-sectors of the manufacturing companies. For example, Aniagboso and Orjinta (2023) dwelt on pharmaceuticals health subsector of the manufacturing firms. Ali et al. (2023) [oil and gas], Akinadewo et al. (2023) [industrial goods], which have revealed a limitation in the previous studies, hence, this study advanced knowledge by focusing on the entire sector of the manufacturing firms listed in Nigeria.

In view of the foregoing, this paper seeks to make new contributions to the extant accounting literature by investigating the effect of environmental reporting. Social reporting, governance reporting on the market performance of listed manufacturing companies in Nigeria. Specifically, this study addresses the following three research questions; What is the effect of environmental reporting on the market performance of listed manufacturing firms in Nigeria? What is the effect of social reporting on the market performance of listed manufacturing firms in Nigeria? What is the effect of corporate governance reporting on the market performance of listed manufacturing firms in Nigeria? The study formulated these null hypotheses: H₀₁: Environmental reporting has no significant effect on the market performance of listed manufacturing firms in Nigeria. H₀₂: Social reporting has no significant effect on the market performance of listed manufacturing firms in Nigeria. H₀₃: Corporate governance reporting has no significant effect on the market performance of listed manufacturing firms in Nigeria.

Literature Review

Market Performance

Market performance are indicators used by investors to assess the company's value. This market performance includes book value used to value unquoted companies, market value used for quoted companies, net worth is usually employed for mergers and acquisition (Umasabor & Ogiedu, 2023). Market value measure such as Tobin's Q is concerned on how a firm can increase the market value of its assets. Tobin's Q ratio measure the effectiveness

with which firm management is capable to use its assets to create value for the shareholders (Zhong et al., 2022). In order to examine the effect of environmental, social, governance reporting on the market performance of the firms under review, Tobin's Q is employed.

Environmental Reporting

Environmental reporting is the disclosure made by firms which reveals their environmental performance by aiding stakeholders to gain confidence in businesses since it provides possible risk assessment associated with such activities and reduce the environmental effects of these activities by considering the effect of their activities on the environment and reports the findings to a variety of stakeholders, including staff, clients, the government, regulators, the media, and shareholders, all of whom are vital to the organisations' long-term viability (Ekins & Zenghelis, 2021). As a result, the United Nations Sustainable Development Goals (UNSDGs, 2015) revealed that goals such as clean water and sanitation: G6, affordable and clean energy: G7, responsible production and consumption: G12, climate action: G13, and life below water: G14) are environmental related goals that can help to achieve sustainable development

Social Reporting

Corporate social responsibility are efforts carried out by firms to provide an enabling relationship between them and the society and being transparent about it by reporting, according to Hassan and Musa (2021) social responsibilities includes provision of health care facilities, good working environment, reasonable employees' remunerations and creating value to host communities. To support this view, the World Bank (2021) asserted that social disclosure is "a process of creating prosperous and long-lasting communities, educating individuals about the requirements they have for their homes and workplaces, and encouraging well-being of all". Corporate social responsibilities are described as the firm's ability to perform and are determined by the interaction of three aspects: people, profit, and the environment (Lambe et al., 2023). Hence, the effect of social reporting on market performance is investigated.

Corporate Governance Reporting

The importance of corporate governance has brought transparency to capital market, whereby investors' confidence is assured. Corporate governance are mechanisms put in place to control firms. The study carried out by Griffin et al. (2014) argued that well-governed governance assist, the management in using the resources efficiently and improve performance, hence increasing the stakeholders' trust in the firm's profitability, continuity and sustainability. Governance improves a firm's reputation and builds community trust, which indeed enables firms to continue and sustain themselves (Buallay, 2020), corporate governance mechanism instills trust and integrity (Altawalbel, 2023). Hence, corporate governance is a sustainability strategy when properly harness would mitigate the stakeholders' conflict of interest and foster confidence among firms and its diverse stakeholders. However, some studies have been carried out to examine the effect of governance reporting on the performance of firms, to this end, the effect of governance reporting on market performance is investigated.

Empirical Review

In a study done by [Yusra and Sulistyowati \(2023\)](#) in Indonesia Stock Exchange which examined the effect of profitability, environmental disclosure, and governance on the firm value (Tobin Q) of mining companies, the result revealed that environmental disclosure had a positive and insignificant relationship with Tobin's Q. Again, [Emeka-Nwokeji and Osisoma \(2019\)](#) revealed that social disclosure had a negative and insignificant relation with Tobin's Q in the study carried out in Nigeria. These findings are inconsistent, it is in this light that this study is investigating the manufacturing sectors in Nigeria.

Again, [Thalia and Nuraini \(2023\)](#) examined the effect of sustainability (ESG) on firm value (price to book value) in Indonesia, governance disclosure was revealed to be positive and significant with price book value. [Buallay \(2020\)](#) examined the level of sustainability reporting and firm performance with the moderating effect of country's sustainability reporting law, the results revealed that governance disclosure had a positive and insignificant effect on Tobin's Q. In the same vein, [Aliyu and Apedzan \(2020\)](#), reported a positive and insignificant effect, [Emeka-Nwokedi and Osisoma \(2019\)](#), reported a positive and insignificant effect. While the study of [Thalia and Nuraini \(2023\)](#) found a positive and significant relationship between governance disclosure and financial performance (TQ). However, the study of [Yusra and Sulistyowati \(2023\)](#) found negative and insignificant effect on governance disclosure and financial performance (TQ). This study focuses on the manufacturing sector because of its sensitivity to environmental hazards associated with production. This has made reporting of sustainability imperative for stakeholders to have a good understanding of the activities of the firm in its operations. In order to have a robust knowledge on the effect of environmental, social, and governance reporting on market value, the study accommodates the manufacturing sectors against the backdrop of sectorial gap created in previous studies ([Akinadewo et al., 2023](#); [Ali et al., 2023](#); [Aniaghoso & Orjinta, 2023](#)).

Methodology

The study employed a longitudinal research design to examine the effect of environmental reporting, social reporting, corporate governance reporting on the market performance of listed manufacturing firms in Nigeria. Longitudinal study allows the examination of several firms over an extended time period. The population of the study is the listed manufacturing firms (consumer goods, industrial goods, healthcare, conglomerate, agriculture, and natural resources sectors in the Nigerian Exchange Group as at December, 2022. However, only 27 firms had complete data relevant to the study. A census was employed in order to avoid the problem of micronumerosity of data, implying the use of all the companies (27) listed as manufacturing firms on the Exchange Group during the period under review. The secondary data was gathered from corporate annual reports. variables environmental, social, and governance) data was sourced, while using the simplified version of [Global Reporting Initiative \(2021\)](#) disclosure index as checklist for disclosure components of the manufacturing companies (consumer goods, industrial goods, healthcare, and natural resources) in the Nigerian Exchange Group spanning from 2013- 2022 financial year. The choice of this data was predicated on the premise that they are valid and reliable.

Theoretical Framework

[Freeman \(1984\)](#) formulated the stakeholders' theory which is premised on meeting the expectations of all a sundry. This theory redefined the firm as value creating to stakeholders and not shareholders alone. This by implication viewed the firm as a social system that cannot exist in isolation. In order to survive, firms must maintain good

relationship with its stakeholders. Environmental, social, and governance reporting is viewed as an ethical conduct of the firm to its stakeholders. These stakeholders are both internal and external with various needs hence, reporting on environmental issues such as waste, emission, pollution and depletion negative and positive impact on the firm, contribution to economic development, having governance structure in place and engaging in social responsibility will strengthen the relationship between the firm and its stakeholders this will enhance the performance of the firm (Aniagboso & Orjinta, 2023; Lambe et al., 2023).

Model Specification

The model comprises of environmental, social, governance reporting and market performance (Tobin's Q) The dependent variable market performance was measured by Tobin's Q (TQ). The independent variables are Environmental reporting (ENVR), Social reporting (SOCR), Governance reporting (GOVR). Where i is the individual firm, t is the time period (10years).

$$TQ = f(ENVR, SOCR, GOVR)$$

$$TQ_{it} = f(ENVR_{it}, SOCR_{it}, GOVR_{it})$$

$$TQ_{it} = \beta_0 + \beta_1 ENVR_{it} + \beta_2 SOCR_{it} + \beta_3 GOVR_{it} + \mu_{it}$$

Operationalisation of Variables: dependent variable, market performance (Tobin's Q) is measured as market value of equity divided by total asset; independent variables: environmental reporting (ENVR) is measured using content analysis (refer to appendix 1) using weighted average [actual score/ expected score (8)] social reporting (SOCR) is measured using content analysis (refer to appendix 1) using weighted average [actual score/ expected score (5)] governance reporting (GOVR) is measured using Content analysis (refer to appendix 1) weighted average [actual score/ expected score (24)].

Results and Findings

Table 1: Descriptive Analysis

	TQ	ENVR	SOCR	GOVR
Mean	0.939115	1.327084	1.483289	2.844713
Median	0.929667	1.609438	1.609438	2.890372
Maximum	4.397566	2.079442	1.609438	3.091042
Minimum	-2.325509	0.000000	0.000000	2.079442
Std. Dev.	1.502295	0.711793	0.237075	0.202603
Skewness	0.197297	-0.749372	-2.552101	-1.921768
Kurtosis	2.355586	2.186286	10.95099	8.036290
Jarque-Bera	6.423460	32.71910	1004.300	451.5412
Probability	0.040287	0.000000	0.000000	0.000000
Sum	253.5609	358.3127	400.4880	768.0726
Sum Sq. Dev.	607.1033	136.2886	15.11909	11.04188
observations	270	270	270	270

Source: Researcher's Compilation (2025)

Descriptive statistics reveals the distribution of the variables in the dataset. The result of the descriptive statistics revealed a mean value of 0.939115 for market performance (TQ). This is an indication that the market performance of the manufacturing firms among the explanatory variables under consideration is relatively high, with ranges from -2.325509 to 4.397566 minimum and maximum respectively. The standard deviation of 1.502295

measures the spread of the distribution. Environmental reporting (ENVR) revealed a mean of 1.327084, minimum of 0.0000, maximum of 2.0794 respectively, and standard deviation of 0.711793. Indicating that environmental reporting is clustered around the mean. Social reporting (SOCR) revealed a mean of 1.4832, minimum of 0.0000 maximum of 1.6094 and standard deviation of 0.2370. Indicating that social reporting is clustered around the mean. Corporate governance reporting (GOVR) revealed a mean value of 2.8447, minimum 2.0794 maximum 3.0910 and standard deviation of 0.2026. Indicating that governance reporting values were clustered around the mean.

Table 2: Correlation Analysis

	TQ	ENVR	SOCR	GOVR
TQ	1.000000	0.333673	0.217867	0.080325
ENVR	0.333673	1.000000	0.550215	0.549184
SOCR	0.217867	0.550215	1.000000	0.323839
GOVR	0.080325	0.549184	0.323839	1.000000

Source: Researcher's Compilation (2025)

Correlation analysis is a measure of the bidirectional relationship between market performance (TQ) and environmental reporting (ENVR), social reporting (SOCR), governance reporting (GOVR). All the variables indicate positive correlation. The coefficients are ENVR (0.33), SOCR (0.21), GOVDR (0.08) with Tobin's Q and the values are below the benchmark of 0.80 which reveals the absence of the problem of highly correlated variables (multicollinearity).

Table 3: Results of the Coefficient Diagnostics of the Variables of Regression

Variance Inflation Factors (VIF)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
ENVR	0.017009	8.872206	1.976432
SOCR	0.130887	67.97968	1.687231
GOVR	0.167196	313.0461	1.574060
C	1.405753	323.6117	NA

The centered VIF of environmental reporting (ENVR) is 1.9764, social reporting (SOCR) is 1.6872, corporate governance reporting (GOVR) is 1.5740, The values of each of the variables are less than 10 which is the benchmark for high collinearity, hence there is absence of the problem of multicollinearity in the predicting variables, indicating absence of distortion in the regression model.

Table 4: Breusch-Pagan-Godfrey Test

F-statistic	1.341659	Prob. F(7,262)	0.2308
Obs*R-squared	9.343454	Prob. Chi-Square(7)	0.2289
Scaled explained SS	6.761947	Prob. Chi-Square(7)	0.4541

The Breusch-Pagan-Godfrey test was carried out on the residuals as a precaution. The results reported probabilities beyond 0.05, which led to the rejection of the presence of heteroscedasticity in the residuals. With a probability value of 0.2308 and an F-statistics of 1.341659 which sustained the null hypothesis of homoscedastic residuals.

Table 5: Hausman Test

Correlated Random Effects - Hausman Test

Equation: Untitled

Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	4.385062	6	0.6247

Table 6: Random effect method

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.238304	0.742082	-1.668689	0.0966
ENVR	0.050119	0.083985	0.596752	0.5513
SOCR	-0.233562	0.250999	-0.930528	0.3531
GOVR	0.060792	0.250848	0.242344	0.8087
TQ(-1)	0.823621	0.036237	22.72862	0.0000

Effects Specification

Period fixed (dummy variables)

R-squared	0.848231	Mean dependent var	0.919419
Adjusted R-squared	0.838912	S.D. dependent var	1.510471
S.E. of regression	0.606240	Akaike info criterion	1.896658
Sum squared resid	83.79604	Schwarz criterion	2.112279
Log likelihood	-215.4440	Hannan-Quinn criter.	1.983508
F-statistic	91.02009	Durbin-Watson stat	2.309533
Prob(F-statistic)	0.000000		

Source: Researcher's Compilation (2025)

The random effect method was best suited for the regression analysis since the Hausman test result revealed a p-value in excess of 0.05 critical level. The coefficient of multiple determination (R^2) is 0.848231, with an adjusted R^2 of 0.838912 indicating the goodness-of-fit of the model. The result indicating that about 83% of the systematic variation in market performance of listed manufacturing firms in Nigeria is accounted for by the explanatory variables of environmental reporting, social reporting, and governance reporting employed in this study. The remaining 17% left unaccounted for is captured by the stochastic variable of the model. F-statistic which measures the overall significance of the model reported that the model is jointly statistically significant when tested at 5% level of significance with a value of 91.02009 and probability value of 0.000.

The Durbin-Watson statistics of 2.309533 indicates that the model does not suffer auto-correlation problem. Environmental reporting (ENVR) had a positive and insignificant effect on market performance as reported by the positive coefficient of 0.050119 which means that a unit increase in environmental reporting will increase the market performance (TQ) of manufacturing firms in Nigeria by about 5%. It was also found to be statistically

insignificant when tested at 5% level of significance, a p- value of 0.5513 ($p > 0.05$). This finding supports the belief that reporting of environmental impacts of firm will assist in promoting firm public image which in turn attract the support of firms' stakeholders and in turn lead to higher valuation of its shares by stakeholders.

Thus, the finding is in tandem with the argument of stakeholders' theory that firms may engage in environmental reporting in order to legitimize their activities as a way of aligning their operations to society norms and rules. The result of this finding is in tandem with those of [Amalia et al. \(2023\)](#), [Buallay \(2020\)](#), [Yusra and Sulistyowati \(2023\)](#) that reported positive and insignificant effect between environmental reporting and financial performance (TQ) and contradicts the findings of [Emeka-Nwokedi and Osisioma \(2019\)](#), [Putri and Pratama \(2023\)](#), [Thalia and Nuraini \(2023\)](#) that found positive and significant effect of environmental reporting on market performance (TQ). Social reporting (SOCR) on market performance (TQ) revealed a negative and insignificant effect on market performance of manufacturing firms in Nigeria with a coefficient of -0.233562 which means that a unit increase in social reporting will lead to almost 23.3 unit decrease in the market performance of manufacturing firms in Nigeria.

It was however not significant at 5% level of significance with a probability value of 0.3531 ($p > 0.05$). This finding contradicts the belief that reporting of corporate social responsibility activities, particularly those relating to gift and charitable disclosure will assist in promoting firm public image which in turn attract the support of firms' stakeholders and in turn lead to higher valuation of its shares by stakeholders. Thus, the finding is not in tandem with the argument of stakeholders' theory that firms corporate social responsibility endeavour as a means of gaining the legitimacy of the society in order to increase market performance. The result of this finding is in line with that of [Emeka-Nwokedi and Osisioma \(2019\)](#) that reported a negative and insignificant effect of social reporting on performance and contradicts the findings of [Buallay \(2020\)](#), [Thalia and Nuraini \(2023\)](#) that found positive and insignificant effect of corporate social responsibility reporting on TQ.

Corporate governance reporting (GOVR) reported a coefficient of 0.060792, a probability value of 0.8087 > 0.05 . Governance reporting was found to have positive and insignificant effect on the market performance (TQ) of the manufacturing firms in Nigeria. The result indicates that a unit increase in governance reporting will lead to a 6units increase in the market performance of listed manufacturing firms in Nigeria. The findings align with the findings of [Buallay \(2020\)](#) and [Emeka-Nwokedi and Osisioma \(2019\)](#) that reported a positive but insignificant effect however, contradicts the findings of [Yusra and Sulistyowati \(2023\)](#) that reported a negative and insignificant effect on governance reporting and financial performance (TQ).

Conclusion

The study examined the effect of environmental reporting, social reporting, governance reporting on the market performance of 27 manufacturing firms in Nigeria for a period of ten years (2013-2022). The study employed panel regression analysis to analyse the dynamic interaction between the variables of the study. The effect of environmental reporting on market performance, governance reporting on market performance, established a positive and statistically insignificant effect, however, social reporting revealed a negative and insignificant effect on the market performance of listed manufacturing firms in Nigeria. Based on the findings, there was evidence that reporting environmental and governance reporting could lead to increase in the market performance but, was insignificant, as Nigeria has made move to implement the sustainability standards, this might lead to a significant effect. The

study therefore, recommends that other performance measures should be employed to investigate the nexus.

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