DIFFERENTIATION STRATEGY: CORPORATE SUSTAINABILITY AND FINANCIAL PERFORMANCE

EGHOSA UMASABOR
Department of Accounting, University of Benin, Edo State, Nigeria
Email: eghosa.umasabel@uniben.edu.com

OGIEDU KILLIAN
Department of Accounting, University of Benin, Edo State, Nigeria

Abstract

The study examines the moderating effect of differentiation business strategy on the nexus between sustainability reporting and financial performance of listed manufacturing companies in Nigeria. The study was a longitudinal study that adopted explanatory research design with an ex-post facto non-experimental research strategy. The population of the study comprises of consumer, industrial, health, agriculture, natural, and conglomerate sub-sectors of the manufacturing firms in Nigeria. Secondary data were collected from the annual reports and accounts of the sampled manufacturing companies. The data analyzed involved descriptive statistics, correlation analysis and multivariate analysis using the generalized method of moment as the estimation technique via EViews software. Differentiation strategy revealed a positive and non-significant moderating effect on environmental reporting and financial performance; differentiation strategy revealed a positive and non-significant effect between social reporting and financial performance; and revealed a negative and non-significant effect between corporate governance reporting and financial performance of listed manufacturing firms in Nigeria, although the result was mixed but was insignificant. The study therefore recommends the use of other generic strategies and financial performance variants.

Keywords: Differentiation Strategy, Sustainability Reporting, Financial Performance

JEL classification: L1, M31, G3

1. INTRODUCTION

The need for the continuous promotion of transparency and accountability is germane in the capital market. This is revealed in the annual reports prepared by management showing both financial and non-financial reports. The financial report reveals both accounting and market variants such as return on equity, return on assets, earnings per share, profit after tax, Tobin's Q, which can be used to determine the financial health of the firm. Financial performance is concerned with how firms use their assets to generate revenue more than cost (Taouab & Issor, 2019; Umasabor & Aruomoaghe, 2021). In this study financial performance is measured in terms of market performance (Tobin's Q). Tobin's Q is a market-based measure, often used as a measure of firm value (Cahan et al., 2016; Selvam et al., 2016; Swarnapali & Le, 2018; Umasabor & Ogiedu, 2023). Tobin's Q is defined as the market value of a firm divided by its asset replacement cost. The non-financial report has to do with disclosures on social, governance, environmental, and economic performance of a firm that affects their activities. This non-financial report is termed sustainability reporting which became popular because of the Brundtland report (1987). The environmental reports places emphasis on reducing the negative effect of firms' operations on the environment by reducing waste, emission, depletion, and pollution (Ekins & Zenghelis, 2021). Social reporting on the other hand became popular because of the work of Carroll (1981), known as the pyramid of social responsibility which are economic, legal, ethical, and philanthropic. The economic responsibility of business is to be profitable in all since without profit no business may survive, hence, economic responsibility is the bedrock of the pyramid. Secondly, business is to comply with the laws of the land for them to operate. Thirdly, the ethical responsibility of business is to do what is right and fair. Lastly, the philanthropic responsibility of business is to contribute some of their resources to the society, by giving back to their host communities (Umasabor & Eragbhe, 2023). Thus, to balance the issue of corporate social responsibilities of firms, there is need for a well-established governance structure to ensure that there is no mismanagement of shareholders resources. Therefore, corporate governance is concerned with rules and mechanisms put in place through which corporations are guided by emphasizing the rights and responsibilities of firms' management, board, shareholders, and stakeholders. The problem therein is that reporting these sustainability practices can affect the financial performance of firms. This has led to the divide in the empirical literatures revealing in consistencies in results.

There are several studies which have revealed that sustainability reporting can reduce the financial performance of a firm (Aliyu & Apedzan, 2020; Haidar & Sohail, 2021; Mawardi et al., 2019; Ramirez & Ferrer, 2021) leading to a negative relationship between sustainability and performance. While some other studies (Abdi et al., 2020; Aniagboso & Orjinta, 2023; Aydogmus et al., 2022; Bala & Ibrahim, 2022; Lambe et al., 2023; Oncioiu et al., 2020; Thalia & Nuraini, 2023; Wong et al., 2020) in this area have revealed the presence of a positive relationship between sustainability reporting and firm performance.

As a result of the foregoing, there are inconsistencies in findings. It is against this backdrop that this study is introducing a moderating variable of differentiation business strategy on the effect of sustainability reporting on financial performance. Differentiation strategy is a generic business strategy (Porter, 1985) concerned on attaining competitive advantage through uniqueness and distinctive features of goods and services offered to customers. As a result, firms are product leaders, by creating value that attracts a premium price to have a competitive advantage (Park, 2022). From the resource-based theory propounded by

Barney (1991), it contends that firms can have superior financial performance when they engage their inner capabilities and uniqueness within, that can be used to harness competitive advantage. Thus, the use of differentiation strategy may cause better financial performance when sustainability report is made (Park, 2022). Furthermore, to the best of the researcher's knowledge, there is a knowledge gap on this literature leading to scarcity of literature in Nigeria on the moderating effect of differentiation business strategy on the nexus.

Therefore, the broad objective of this study is to examine the moderating effect of differentiation business strategy on the relationship between sustainability reporting and financial performance of listed manufacturing companies in Nigeria. The three research questions that link differentiation strategy to sustainability reporting and financial performance in this study are to; what extent does differentiation strategy moderates environmental reporting and Tobin's Q? what extent does differentiation strategy moderates social reporting and Tobin's Q? and what extent does differentiation strategy moderates' corporate governance reporting and Tobin's Q?

The study developed these hypotheses: $H_{01:}$ Differentiation strategy does not significantly moderate the relationship between environmental reporting and Tobin's Q. $H_{02:}$ Differentiation strategy does not significantly moderate the relationship between social reporting and Tobin's Q. $H_{03:}$ Differentiation strategy does not significantly moderate the relationship between environmental reporting and Tobin's Q.

2. LITERATURE REVIEW

2.1. ENVIRONMENTAL REPORTING AND FINANCIAL PERFORMANCE

The need for business to aim at protecting, conserving, and reporting activities about the environment has been heightened because of depletion in the ozone layer due to emission of green-house gas, generation of waste, and depletion of natural resources. Therefore, environmental reporting would be disclosures made by firms regarding its environmental performance or activities in the financial statements or in a standalone report, indicating the firm's performance, standards, or corporate social responsibility reports. Studies have revealed that when firms report on their environment, it makes them responsible which can lead to positive public image.

This also can attract more patronage, which can increase the performance of the firm. Consequently, in a study done by Feneir (2023) in Türkiye, found environmental disclosure to have a positive but insignificant relation with ROA, negative and insignificant relation with EPS and ROE. While Utile et al. (2017) evaluated the effect of corporate environmental reporting on the financial performance of listed manufacturing firms in Nigeria for five years (2011-2015), the findings revealed that erosion control and air pollution had positive and meaningful relationship with EPS. Waste management has a negative but significant effect on

ESP. However, Haidar and Sohail (2021) reported a negative and insignificant relation between environmental disclosure and Tobin's Q in Saudi Arabia. The study of Landi and Sciarelli (2019) reported a significant and negative effect of environmental reporting on financial performance (TQ) which also supported this view. Therefore, it is these inconsistencies in findings that this study is using a moderating variable to strengthen the outcome of the relationship.

2.2. SOCIAL REPORTING AND FINANCIAL PERFORMANCE

Social reporting is concerned with ways of reducing social inequality by protecting human rights which reduces the social negative effect of the firm's operations on society and solves problems associated with social issues (Alhaddi, 2015; Umasabor & Ogiedu, 2023). Firms are doing more for their communities to be socially responsive. Hassan and Musa (2021) posited that firms practice their social sustainability by provision of health care facilities, remunerations that are reasonable are paid to employees and creating value to host communities. This has also been revealed to give society a sense of belonging which influences their performance.

To support this view, the study carried out in Finland by Kooskora et al. (2019), evaluated the effect of corporate social responsibility on firm performance, the result showed that CSR has a significant and negative effect on ROA and EPS. However, Habaragoda (2018) investigated the effect of corporate social responsibility on firm performance, the result revealed that both internal and external CSR have positive and significant relation with financial performance. In Pakistan Malik et al. (2020) examined the effect of corporate social responsibility on firm performance of both financial and non-financial firms, CSR had a negative and insignificant effect on excess stock return and capital return and a positive and insignificant effect on return on asset. Elmassri et al. (2023) examined the effect of corporate social responsibility (CSR) adoption on differentiation and cost leadership strategies of non-financial firms for a period of seven years. Secondary data collected was analyzed using fixed effect, findings revealed that differentiation strategy is weakened by CSR.

Hull and Rothenberg (2008) reported the effect of corporate social performance on financial performance using innovation and the level of differentiation in the industry as moderating role on the nexus and the direct effect on performance. The period was between 1998 and 2001 for the independent and moderating variables while for the dependent variable was for only 2001. Hull and Rothenberg measured innovation as research and development spending, differentiation strategy as advertising intensity cost and return on assets was the measure for performance. The result revealed a positive relationship. The study examined only the social aspect of sustainability.

Galbreath et al. (2020) examined whether firm strategy is linked with corporate social responsibility (CSR) looking at the impact of low-cost and differentiation strategies on CSR in Italy. Findings revealed that low-cost strategy has a negative correlation with ethical and discretionary CSR, while a differentiation strategy has a positive influence with both CSR. The study employed performance management system (PM system) as a moderating influence, which revealed that PM system positively moderates the negative association between a low-cost strategy and ethical and discretionary CSR, while also positively moderating the relationships with respect to a differentiation strategy. This study examined the effect of firm strategy on corporate social responsibility with performance management system as a moderator in Italy but this present study is using differentiation strategy as a moderating variable on sustainability reporting (environmental, social, and governance reporting) and financial performance of listed companies in Nigeria for a period of ten years (10).

2.3. CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE

Corporate governance are machineries that assist stakeholders in evaluating firms' adherence to the laid down rules and regulations as well as sustainable business practices initiatives. Corporate governance instills integrity and trust, by ensuring transparency by resolving conflicts of interest amongst stakeholders. To buttress this role of corporate governance, the Nigerian Code of Corporate Governance (NCCG, 2018) was established by the Financial Reporting Council of Nigeria under Sections 11(c) and 51(c) of the Financial Reporting Council of Nigeria Act 2011 to put in place measures to control and regulate company's affairs in relation to its stakeholders. Several studies have revealed that corporate governance best practices can help Nigerian companies to boost their integrity and by redefining public perception of the Nigerian business environment, thereby leading to increased foreign investment. Studies have revealed the importance of corporate governance in the performance of firms for example, Affes and Jarboul (2023) in their study carried out in the United Kingdom investigated the impact of the implementation of effective corporate governance on financial performance (ROE). The data was analyzed using regressions, the results revealed that the financial performance of firms is improved when good corporate governance is implemented. To support this view, Bala and Ibrahim (2022) examined the relationship between ESG sustainability reporting and firm performance in Nigeria, the study revealed a positive relationship between the variables. Nirino et al. (2022) carried out a study in New York and found that corporate governance as a mediating variable influenced the relationship between social responsibility activities and financial risk and revealed that there is a positive effect. However, Ali et al. (2023) examined the nexus between sustainability and performance using ten different countries found that ESG is negatively related to ROA. Therefore, to address the inconsistencies in findings, differentiation strategy is employed to moderate the nexus between corporate governance reporting and financial performance (Tobin's Q).

2.4. DIFFERENTIATION STRATEGY ON THE NEXUS

The concept of differentiation strategy is attaining competitive advantage through uniqueness and distinctive features of goods and services offered to customers that are seen as such when compared with competing products have distinguished features and attract a premium price. Li et al. (2022) documented that differentiation strategy which is also likened to prospectors' firms is associated with more R & D, availability of new product, producing and selling efficiency, capital intensity, organizational stability, historical growth, and development of new product and service. The prospector firms were more innovative in their behavior with more R&D expenditure while defender firm have less R&D; the efficiency of firms in producing, selling products, and providing services.

Allen and Helms (2006) examined the relationship between strategic practices and organization performance by linking them to Porter's generic strategy (focus, cost leadership and differentiation). The strategic practice linked to product differentiation was revealed to be marketing related activities whereby uniqueness, innovation and creativity of product or service were revealed to improve market growth (performance). The study also revealed that focus differentiation is correlated with performance when high price market segment and special product are concentrated on a market niche. To collaborate the importance of differentiation strategy on performance, several studies have examined differentiation strategy, for example Pulaj et al. (2015) is of the view that differentiation strategy have products with distinguishing features which make the customers more sensitive toward the buying of the products. Differentiation strategy is anchored on value efficiency by generating high profit margins (Wu et al., 2015). Park (2022) documented that research and development is especially important in differentiation strategy, to this end, several empirical studies have used differentiation strategy for example (Azad & Celik, 2018; Hilmiana et., 2020; Islami et al., 2020; Park, 2020).

Hilmiana et al. (2020) investigated the effect of competitive strategies and resource-based uniqueness on performance in the diving tourism sector in Indonesia using a cross-sectional survey method. The performance of business was measured by the dimensions of growth in number of members, realization of diving package sales targets, and growth of profit targets, the uniqueness of resources and competitive strategy were measured by physical assets, natural resources management, human resources and organizational culture while cost-based strategies, differentiation-based strategies, and speed-based strategy measures were employed respectively. The results revealed a considerable influence on business performance.

The study of Islami et al. (2020) using both secondary and primary data to ascertain business strategy on firm performance in Kosovo. Business strategy (differentiation, low-cost and focus) were measured using differentiation strategy proxy (degree of releasing of new products/services in the market; increasing the intensity of advertising and marketing; developing new products/services; differentiation through shortening the project time; development and training of selling power; creation of a good name and image and offering unique products).

The study revealed that differentiation strategy has more effect on firm performance than the other strategies.

Azad and Celik (2018) examined the relationship between generic strategies and organizational performance in selected furniture companies in the Kurdish-inhabited area, using a cross-sectional survey. Business strategy was measured by three generic strategies (differentiation strategy, focus strategy and cost strategy) were revealed to have an optimistic relationship with organizational performance in some furniture companies in the Kurdish-inhabited area.

Further, Banker and Ma (2017) employed textual analysis of emerging dataset of firms' narrative disclosure to develop a three-dimensional measure of business strategy (three-dimensional strategy: innovating differentiation, marketing differentiation, and cost leadership) on firm evaluation in the United States for period between 1995 and 2016. The secondary data were collected and analyzed. The study revealed that marketing differentiation had a significant and positive effect on asset turnover while innovating differentiation and marketing differentiation had a positive and significant effect on gross margin. Again, Ahmed examined the effect of competitive strategy both service and manufacturing firms' performance using a survey, where data was collected from six countries, the findings revealed a positive effect on the performance of the firms.

Abernethy et al. (2019) examined the effect of business strategy (prospector and defender strategy) in the selection of CEO and how it affects firm performance (Tobin q and ROA), using secondary data collected from 2000 to 2013 and analyzed. The result revealed that prospectors' firms improve firm performance and value. The study used ordinary least square (OLS) which is revealed to lack the capacity to control the variables.

Yuan et al. (2020) examined the relationship between business strategy and corporate social responsibility performance using firms listed in the Russell group from 1999 to 2012 from the resource based and organizational theory in the United States. The study revealed that innovation-oriented (prospectors, differentiation) are associated with better CSR performance than efficiency-oriented strategy (defenders).

Maniora (2018) examined the extent to which business strategy affects mismanagement of sustainability in the United States. Mismanagement of sustainability was measured by industry-specific material sustainability issues while business strategy was measured by Miles and Snow's strategy typology (prospectors, analyzers, defenders). The study revealed that mismanage sustainability issues are by prospector-type firms than defender-type firms.

Liu and Kong (2021) examined the effect of business strategy on sustainable development in green innovation in China. The study revealed that prospector strategy engages in less sustainable development behavior than defender strategies and revealed a negative relationship between business strategy and green innovation.

Chege and Oloko (2017) examined the effect of generic strategy on firm performance in Kenya dairy sector. The study's generic strategies were measured by cost leadership, differentiation, cost focus, differentiation focus strategies. The target population of the study were senior and middle level management staff from large dairy firms and were interviewed to collect information on generic strategies indicators for cost leadership strategy (economies of scale, access to cheap supply); differentiation strategy (unique product, brand was revealed to have positive and significant influence on performance (market share, low customer response and improved efficiency). The study revealed that generic strategies lead to reduction in production cost.

Majeed et al. (2018) examined the relationship between generic strategy and firm performance of the banking sector in Ghana. Secondary data were gathered through Journals articles, textbooks, and online libraries while the primary data were through close ended questionnaire. Using differentiation strategy as one of the generic strategies, performance measure was indicated by: increase in market share; increase in revenue; increase in customer loyalty; increased in profit margin; improved customer service. The result revealed a positively significant effect.

Suzan and Revi (2021) investigated the effect of competitive strategy on corporation performance on the sub-division retail corporation listed on the Indonesia stock exchange for 2017-2019 period (3years). The study results revealed that differentiation, cost leadership, and focus strategy had a significant effect on net profit margin while differentiation has a positive effect on net profit margin, cost leadership and focus have no significant effect on net profit margin. This study revealed that differentiation strategy has a superior effect compared to other strategies. To support this view, Wahyuddin et al. (2016) examined the effect of business environment, business strategy measured by cooperative strategy and competitive (differentiation, cost leadership, focus, speed-based) strategy on business performance (sales growth, customer growth, and financial leverage) of shipbuilding sector in Indonesia for a period of one year (cross-sectional). The data were analyzed using the partial least square method and the result revealed that there is a positive relationship between differentiation and business performance.

Farida and Setiawan (2022) carried out a survey to examine the effect of business strategy on competitive advantage of small and medium enterprises (SMEs) with the mediating role of performance and innovation for a period of four months in a population of real estate and construction sector where fifty samples of SMEs were selected. The result showed that business strategy had a positive major influence on business performance and reported a significant positive relationship on competitive advantage while business performance and innovation were revealed to mediate with a strong effect between business strategy and competitive advantage.

Again, Ho et. (2020) reported the relationship between corporate social responsibility, strategy and firm performance in Italy using survey questionnaire. Return on sales and return on assets was used to quantify firm performance. The study revealed a significant and positive effect, the study recommended that firms can better financial performance by ensuring a nexus between their CSR activities and risk preferences using performance measure system to maximize competitive benefits, thus aligning CSR activities with risk preferences alone is insufficient for firms to improve their financial performance.

Contrarily, Li et al. (2022) examined the relationship between business strategy and the quality of disclosure of environment performance of heavy pollution industry in China from 2008 to 2020. The study measured business strategy as prospectors (maximum) and defenders (minimum) was determined by the maximum and minimum score of the indicators. The study revealed a negative and significant effect between business strategy and environmental disclosure quality. Several studies have been carried out in other economies, take for instance, studies carried out in Nigeria.

Kowo et al. (2018) examined the effect of competitive strategy (cost leadership and differentiation) on corporate performance by investigating whether cost leadership strategy assist in reducing the cost of operation of small and medium enterprises (SMEs) and also to determine the effect of differentiation strategy on the sales turnover of SMEs in Nigeria using questionnaires, data was drawn from a sample of 125 SMEs. Regression analysis (SPSS) was employed to analyze the data. The study revealed a positive significant effect on cost reduction of small and medium enterprises indicating that when firms adopt good cost leadership strategy, they tend to reduce their cost of operations. The study concludes that competitive strategies impact positively on the performance of the SMEs and that competitive strategy has significant relationship on company’s market share. The study only focuses on the SMEs in Nigeria.

Furthermore, Suleman et al. (2019) examined the usability and applicability of Porter's generic strategies in the current e-business environment, a case study of three pure online firms (Amazon, e-bay and Google) The findings acknowledged the application of Porter's generic strategies to pure online firms in order to achieve competitive advantage and proved the positive impact of generic strategies on firms' performance.

Amalia et al. (2023) investigated the effect of business strategy and environmental disclosure on firm value from the annual reports of the Indonesia stock exchange for a period of 2018-2021 (four years) and data from Bloomberg. Purposive sampling was employed to arrive at five samples which were the energy sector, basic materials, consumer non-cyclicals, consumer cyclicals, and healthcare sector. Business strategy was measured by cost leadership strategy and a differentiation strategy; the environmental disclosure was the actual score divided by the expected score while firm value was measured by Tobin Q. The secondary data were analyzed using multiple linear regression estimation technique. The study result revealed that differentiation strategy has a positive effect on firm value and as well as environmental disclosure. The study examined only the environmental aspect of sustainability and the effect of cost leadership and differentiation on firm value and for a period of four years, this study examined the moderating role of differentiation strategy on the relationship between sustainability reporting and financial performance From the foregoing, differentiation strategy has been revealed to have direct relationship with performance, however, the moderating effect of differentiation strategy on the nexus between sustainability and performance is scarce, a recent study was carried out by Park (2022) who investigated the relationship between corporate sustainability and firm performance using business strategy as a moderator in the United States. The moderating variable was business strategy measured by cost leadership and differentiation. The result revealed that differentiation strategy has a positive and significant effect on corporate sustainability strength and firm performance while cost leadership does not affect the influence of CS on firm performance. It is therefore on this note, that this study employed the moderating effect of differentiation strategy on the relationship between sustainability and financial performance of listed manufacturing firms in Nigeria from 2013 to 2022 which is the first to be carried out in Nigeria to the best of the researcher's knowledge.

3. METHODOLOGY

The study is a longitudinal study that adopted explanatory research design, The study employed an ex-post facto non-experimental research strategy. The choice is predicated on the fact that longitudinal research approach enables the collection of data from several firms and uses time series (2013-2022). The ex-post facto non-experimental strategy assisted in determining the cause-and-effect relationship using data from past event without manipulation. The population of the study is the listed manufacturing firms (consumer goods, industrial goods, healthcare, conglomerate, agriculture, and natural resources sub-sectors) in the Nigerian Exchange Market as of December 2022. A census was employed to avoid the problem of micro numerosity of data, implying the use of all the listed manufacturing firms on the Exchange Market during the period under review. Secondary data was gathered from corporate annual reports. Sustainability reporting 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, agricultural, and natural resources) in the Nigerian Exchange Market spanning from 2013- 2022 financial year.

4. MODEL SPECIFICATION

$$TQ_{it} = f\,(ENVD_{it}, SOCD_{it}, GOVD_{it}) * DIFS_{it}$$

$$TQ_{it} = \beta_0 + \beta_1\, ENVD_{it} + \beta_2\, ENVD * DIFSit + \beta_3 SOCDit + \beta_4\, SOCD * DIFS_{it}$$

$$+ \beta_5\, GOVD_{it} + \beta_6\, GOVD * DIFS_{it} + \beta_7 FIRS_{it} + \beta_8 FINL_{it} + \mu_{it}$$

Where: Dependent variable FPERF is Financial Performance measured by Tobin's Q (TQ),

Independent Variables: Sustainability Reporting measured by**:** ENVD (Environmental Disclosure), SOCD (Social Disclosure), GOVD (Governance Disclosure), Moderating Variable: Business Strategy measured by: DIFS (Differentiation Strategy), Control variables: firm size (FIRS) and financial leverage (FINL).

Operationalisation of variables

The study employed Tobin's Q measured by market value of equity divided by total assets as proxy for the manufacturing companies' financial performance. Sustainability reporting (environmental, social, governance) was measured using content analysis. Environmental reporting measured by content analysis (refer to appendix) using weighted average [actual score/ expected score (8)]. Social reporting using weighted average [actual score/ expected score (5)]. Governance reporting using weighted average [actual score/ expected score (24)]. Differentiation business strategy measured by Sum of the ratio of EBIT/Revenue + R&D expenditure/ revenue, which is the moderating variable. Firm size measured by total assets and financial leverage measured by total debt divided by total assets which are the control variables.

Univariate analysis

This describes the mean, median, the range, the standard deviation of the individual variables of the study. This statistical technique shows the distribution or characteristics of the variables.

Table 1: *Descriptive Statistics*

	TQ	ENVD	SOCD	GOVD	DIFS
Mean	0.939115	1.327084	1.483289	2.844713	0.035755
Median	0.929667	1.609438	1.609438	2.890372	0.116733
Maximum	4.397566	2.079442	1.609438	3.091042	6.345302
Minimum	-2.325509	0.000000	0.000000	2.079442	-32.27481
Std. Dev.	1.502295	0.711793	0.237075	0.202603	2.080923
Skewness	0.197297	-0.749372	-2.552101	-1.921768	-13.84417
Kurtosis	2.355586	2.186286	10.95099	8.036290	217.4128
Jarque-Bera	6.423460	32.71910	1004.300	451.5412	525819.5
Probability	0.040287	0.000000	0.000000	0.000000	0.000000
Sum	253.5609	358.3127	400.4880	768.0726	9.653727
Sum Sq. Dev.	607.1033	136.2886	15.11909	11.04188	1164.834
Observations	270	270	270	270	270

Researcher's Compilation (2025)

The result of the descriptive statistics in Table 1 revealed a mean value of 0.939115 for financial performance (TQ). This is an indication that the financial performance of the manufacturing firms among the explanatory variables under consideration is 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 disclosure (ENVD) revealed a mean of 1.327084, minimum and maximum values of 0.0000 and 2.0794 respectively, with a standard deviation of 0.711793. Indicating that environmental reporting is clustered around the mean. Social disclosure (SOCD) 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 disclosure (GOVD) revealed a mean value of 2.8447, minimum 2.0794 maximum 3.0910 and standard deviation of 0.2026. Indicating that governance disclosure values were clustered around the mean. Differentiation strategy (DIFS) revealed an average value of 0.035755, with minimum -32.2748 and maximum value of 6.3453, with a standard deviation of 2.0809, indicating a high variation in the differentiation strategy of listed manufacturing firms in Nigeria under review.

Bivariate analysis

This is a statistical technique used to determine the association between two variables. Bivariate analysis is a measure of bidirectional relationship. Thus, correlation analysis checks for such relationship.

Table 2: *Correlation Analysis*

	TQ	ENVD	SOCD	GOVD	DIFS
TQ	1.000000	0.333673	0.217867	0.080325	0.033399
ENVD	0.333673	1.000000	0.550215	0.549184	0.020916
SOCD	0.217867	0.550215	1.000000	0.323839	-0.028493
GOVD	0.080325	0.549184	0.323839	1.000000	-0.031566
DIFS	0.033399	0.020916	-0.028493	-0.031566	1.000000

Researcher’s Compilation (2025)

The Table above is a measure of the bidirectional relationship between financial performance (TQ), environmental disclosure (ENVD), social disclosure (SOCD), governance disclosure (GOVD), and differentiation strategy (DIFS). The coefficients are positive values between financial performance (TQ) and all.

The variables: ENVD (0.33), SOCD (0.21), GOVD (0.08), DIFS (0.03). The correlation coefficients (r) are low with the highest value of 0.333673 between environmental disclosure (ENVD) and financial performance (TQ). This value is below the benchmark of 0.80 which reveals the absence of the problem of highly correlated variables (multicollinearity).

Multivariate analysis

This analysis is used to measure causal relationship between variables.

Table 3: *Random Effect Method*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ENVD	0.382934	0.135609	2.823816	0.0051
ENVD_DIFS	-0.470535	0.437038	-1.076646	0.2826
SOCD	-0.883185	0.366880	-2.407284	0.0168
SOCD_DIFS	1.386237	1.049828	1.320441	0.1878
GOVD	-1.485776	0.408084	-3.640856	0.0003
GOVD_DIFS	-0.437698	0.312063	-1.402597	0.1619
FIRS	0.506794	0.041277	12.27774	0.0000
FINL	-2.164741	0.348979	-6.203077	0.0000
C	-2.378603	1.186384	-2.004919	0.0460

R-squared	0.498508	Mean dependent var	0.939115
Adjusted R-squared	0.483136	S.D. dependent var	1.502295
S.E. of regression	1.080048	Akaike info criterion	3.024654
Sum squared resid	304.4577	Schwarz criterion	3.144601
Log likelihood	-399.3283	Hannan-Quinn criter.	3.072819
F-statistic	32.43083	Durbin-Watson stat	0.430654
Prob(F-statistic)	0.000000		

Researcher's Compilation (2025)

Table 4: *Generalized Method of Moment*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
T_Q (-1)	0.264902	0.067206	3.941645	0.0001
ENVD	-2.478072	2.220866	-1.115813	0.2659
SOCD	-4.308503	2.343091	-1.838812	0.0675
GOVD	4.879098	3.144864	1.551449	0.1224
ENVD*DIFS	4.843435	3.381373	1.432387	0.1536
SOCD*DIFS	3.917997	6.391938	0.612959	0.5406
GOVD*DIFS	-15.28387	9.547505	-1.600823	0.1110
DIFS	5.404114	4.953340	1.091004	0.2766
FIRS	-0.493208	0.607326	-0.812097	0.4177
FINL	-2.673921	1.480341	-1.806287	0.0724

Effects Specification

Cross-section fixed (first differences)

Mean dependent var	-0.058624	S.D. dependent var	0.852019
S.E. of regression	1.110569	Sum squared resid	241.7392
J-statistic	14.66422	Instrument rank	26
Prob(J-statistic)	0.549356		

Findings

The coefficient of multiple determination is 0.498508 with an adjusted value of 0.483136 which indicates that about 48% of the systematic variation in financial performance in the listed manufacturing firms in Nigeria is accounted for by the explanatory variables of environmental reporting, social reporting, and governance reporting. The F-statistic was at 32.43083 and a probability value of 0.000 at the 5% level of significance. The p-value indicates that the model is statistically significant. The result of the Durbin-Watson (DW) statistic 0.430654 implying the presence of autocorrelation problem, therefore the generalized method of moment was employed.

Test of hypothesis one

The moderating effect of differentiation strategy on environmental reporting and financial performance (ENVD*DIFS) with a coefficient of 4.843435, with an associated p-value of 0.1536 ($p>0.05$). The result implies that differentiation strategy was found to be positive and statistically insignificant in its moderating effect on environmental reporting and the financial performance of listed manufacturing companies in Nigeria. The result changed from being negative to positive when moderated. Based on the rule to reject the null hypothesis when the p-value is less than 0.05 ($p< 0.05$), the null hypothesis is accepted since $p> 0.1536$, implying that differentiation strategy does not significantly moderates the relationship between environmental reporting and Tobin's Q of listed manufacturing companies in Nigeria.

Test of hypothesis two

The moderating effect of differentiation strategy on the network between social reporting and financial performance (SOCD*DIFS) revealed that social reporting changed from negative to positive, with a coefficient of 3.917997, and a p-value of 0.54 ($p> 0.05$). The result indicates that differentiation strategy had a positive and statistically insignificant moderating effect on social reporting as a measure of sustainability reporting and the financial performance of listed manufacturing companies in Nigeria. Based on the rule to reject the null hypothesis when the p-value is less than 0.05 ($p< 0.05$), the null hypothesis is accepted since $p> 0.54$, implying that differentiation strategy does not significantly moderates the relationship between social reporting and Tobin's Q of listed manufacturing companies in Nigeria.

Test of hypothesis three

The moderating effect of differentiation strategy on the nexus (GOVD*DIFS) revealed a coefficient of -15.28387, with a p-value of 0.11 ($p>0.05$). The result revealed that differentiation strategy had a negative and insignificant moderating effect on the corporate governance disclosure measure of sustainability reporting and the financial performance of listed manufacturing firms in Nigeria. The result implies that differentiation insignificantly reduces financial performance.

Based on the statistically insignificant effect, the null hypothesis is accepted, supporting that differentiation business strategy does not significantly moderate the relationship between sustainability reporting and the financial performance of listed manufacturing firms in Nigeria.

The result is unexpected because the strategic position taken by a firm will give the firm an advantage over competitors. The finding is not in tandem with that of Ahmed et al. (2021), Amalia et al. (2023), Park (2022) that found positive and significant effect between differentiation strategy and financial performance, therefore the result could not reject the null hypotheses of a non-significant relationship.

5. CONCLUSION

The broad objective of the study is to evaluate the moderating effect of business differentiation strategy on the relationship between sustainability reporting and financial performance of listed manufacturing companies with Nigeria as the focal point. The result from the study revealed that there is a non-significant and positive moderating effect on the relationship between environmental reporting and financial performance implies that environmental disclosure is able to contribute to firms' market performance when companies are able to differentiate their products from that of their competitors using unique capabilities through research and development, however, it is insignificant.

The result of the finding is not in tandem with that of Ahmed et al. (2021), Amalia et al. (2023), Park (2022) that found positive and significant effect between differentiation strategy and financial performance. The moderating effect of differentiation strategy on social reporting and financial performance was found to be positive but with a non-significant effect, which implied that a unit increase in differentiation strategy may lead to an increase in the nexus between social reporting and financial performance, however, was statistically insignificant. Differentiation strategy moderating effect on governance reporting and financial performance was found to be negative and insignificant, implied that an increase in differentiation strategy would reduce the nexus. All the variables were statistically insignificant when moderated by differentiation strategy. From the resource-based theory, it is evidence that firms can use their distinctive capabilities to achieve competitive advantage.

6. RECOMMENDATIONS

The following recommendations were made from the study: differentiation strategy should be employed to strengthen the effect of environmental reporting and social reporting on the financial performance of listed manufacturing firms in Nigeria. However, differentiation strategy moderating effect was negative, therefore recommending the use of other business strategy such as cost leadership strategy and focus strategy on other studies to establish its moderate effect on the relationship between sustainability reporting and financial performance. Again, other financial performance measures should be employed and as well as increasing the scope to include the financial sectors for further studies.

REFERENCES

Abdi, Y., Li, X., & Camara-Turull, X. (2021). Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance (FP) in airline industry: The moderating role of size and age. *Environment, Development and Sustainability, 24,* 5052–5079.

Abernethy, M. A., Kuang, Y. F. & Qin, B. (2019). The relation between strategy, CEO selection, and firm performance. *Contemporary Accounting Research, 36(*3), 1575–1606.

Affes, W., & Jarboui, A. (2023). The impact of corporate governance on financial performance: A cross-sector study. *International Journal of Disclosure and Governance, 20,* 374-394. https://doi.org/10.1057/s41310-023-00182-8.

Ahmed, R., Streimikiene, D., & Zheng, X. (2021). The impact of proactive environmental strategy on competitive and sustainable development of organizations. *Journal of Competitiveness, 13*(4), 5-24. https://doi.org/10.7441/joc.2021.04.01.

Alhaddi, H. (2015). Triple bottom line and sustainability: A literature review. *Business and Management Studies, 1*(2).

Ali, M. K., Zahoor, M. K., & Nosheen, S. (2023). Moderating effect of vertical integration on the relationship between sustainability and performance: Evidence from oil and gas energy sector. *Future Business Journal, 9* (53), 2-11. https://doi.org/10.1186/s43093-023-00236-x.

Aliyu, Y. M., & Apedzan, K. E. (2020). *Sustainability reporting and firm performance of listed non-financial companies in Nigeria*. Accounting and finance, 6th Institute of Chartered Accountant of Nigeria (ICAN) annual international academic conference.

Allen, R. S., & Helms, M. M. (2006). Linking strategic practices and organizational performance to Porter's generic strategies. *Business Process Journal, 12*(4), 433-454.

Amalia, F. P., Aryati, T., & Delfina, C. (2023). The effect of business strategy and environmental disclosure on firm value. *Devotion - Journal of Research and Community Service, 4*(7), 1401-1414.

Aniagboso, I. C., & Orjinta, H. I. (2023). Effect of sustainability reporting on financial performance of quoted pharmaceutical companies in Nigeria. *Journal of Accounting and Financial Management, 9*(7), 37-55. https://doi.org/10.56201/jafm.

Aydogmus, M., Gulay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review, 22*(2), 119–127. http://doi.org/10.1016/j.bir.2022.11.006.

Azad, A., & Celik, S. (2018). The relationship between generic strategies and organizational performance: A study of furniture companies in Kurdistan. *International journal of Engineering, Business and Management, 2*(4), 57-71. https://dx.doi.org/ 10.22161/ijebm.2.5.1

Bala, A. S., & Ibrahim, M. (2022). Does the disclosure of ESG sustainability matter to selected listed firms' performance in Nigeria? *International Journal of Innovative Resources in Accounting and Sustainability, 7*(1), 130-141.

Banker, R. D., & Ma, X. A. (2017). Textual measure of business strategy. Fox School of Business Research (Working Paper). http://dx.doi.org/10.2139/ssrn.3866300

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

Bentley- Goode, K. A., Omer, T. C. & Twedt, B. J. (2019). Does business strategy impact a firm's information environment? *Journal of Accounting, Auditing & Finance, 34*(4), 563-587.

Cahan, S. F., De Villiers, C., Jeter, D. C., Naiker, V., & Van Staden, C. J. (2016). Are CSR disclosures value relevant? Cross-country evidence. *European Accounting Review, 25*(3), 579-611.

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business horizons, 34*(4), 39-48

Chege, P. M., & Oloko, M. (2017). Influence of generic strategies on performance of large dairy firms in Kenya. *European Journal of Business and Management, 9*(30), 131-145.

Ekins, P., & Zenghelis, E. (2021). The costs and benefits of environmental sustainability. *Springer Nature Journal of Sustainability Science, 16,* 949-965.

Elmassri, M., Kuzey, C., Uyar, A., & Karama, A. S. (2023). Corporate social responsibility, business strategy and governance performance. *Management Decision, 61*(10), 3106-3143. https://doi.org/10.110.

Farida, I., & Setiawan, D. (2022). Business strategies and competitive advantage: The role of performance and innovation. *Journal of Open Innovation: Technology, Market and Complexity, 8*(163), 1-16. https://doi.org/10.3390/joitmc8030163.

Feneir, I. M. (2023). Examine the effect of the environmental and social disclosures on profitability: Evidence from the Turkish banking sector. *Finance and Business Economics Review, 7*(1), 248-257.

Galbreath, J., Lucianetti, L., Tisch, D., & Thomas, B. (2020). Firm strategy and CSR: The moderating role of performance management systems. *Journal of Management Organisation, 28*(1),

Global Reporting Initiative. (2021). GRI standards. https://www.globalreporting.org/

Habaragoda, B. S. (2018). Corporate social responsibility (CSR) and firm performance: Impact of internal and external CSR on financial performance. *International Journal of Information, Business and Management, 10*(3), 156-169.

Haidar, H. M., & Sohail, R. M. (2021). Sustainability reporting (SR) disclosure and value relevance on listed Saudi firms. *Open Journal of Business and Management, 9,* 1782-1804. https://doi.org/10.4236/ojbm.2021.94097.

Hassan, A. O., & Musa, W. A. (2021). Sustainability reporting and firm's value; empirical evidence from non-financial sector. In Institute of Charted Accountant of Nigeria Proceedings of the 7th Annual International Academic Conference on *Accounting and Finance Disruptive Technology: Accounting Practices, Financial and Sustainability Reporting.*

Hilmiana, Astina, J., & Wibowo, A. Y. (2020). Resources and competitive strategies to improve the performance of diving tourism business in Indonesia. *European Research Studies Journal, 23*(1), 62-74.

Ho, J. L., Hsu, F. H., & Lee, C. L. (2022). Business strategy, corporate social responsibility activities, and financial performance. *Journal of International Accounting Research, 21* (1), 49–75.

Hull, C. E., & Rothenberg, S. (2008). Research notes and commentaries firm performance: The interactions of corporate social performance with innovation and industry differentiation. *Strategic Management Journal, 29*, 781-789. https://doi.org/10.1002/smj.675.

Islami, X., Mustafa, N., & Latkovikj, M. T. (2020). Linking Porter's generic strategies to firm performance. *Future Business Journal, 6*(1), 1-15. https://doi.org/10.1186/s43093-020-0009-1.

Kooskora, M., Juottonen, M., & Cundiff, K. (2019). The relationship between corporate social responsibility and financial performance (a case study from Finland). In W. L. Filho (ed.), *Social responsibility and sustainability, world sustainability series* (pp. 471-491). https://doi.org/10.1007/978-3-030-03562-4_25

Kowo, S., Sabitu, O., & Adegbite, G. (2018). Influence of competitive strategies on corporate performance of small and medium enterprises: A case from Nigeria. *Agricultural and Resource Economics: International Scientific E-Journal*, *4*(3), 14- 20.

Lambe, I., Arumona, O. J., & Okoli, T. (2023). Firm performance attributes and social sustainability reporting: A case of listed non-financial companies in Nigeria. *International Journal of Business Management and Economic Review, 6*(2), 1-21. http://doi.org/10.35409/IJBMER.2023.3469

Landi, G., & Sciarelli, M. (2019). Towards a more ethical market: the impact of ESG rating on corporate financial performance. *Social Responsibility Journal, 15*(1), 11-27.

Li, Z., Li, P., Zhao, X., & Tu, Z. (2022). Business strategy and environmental information disclosure quality: Empirical evidence from Chinese heavy pollution listed firms. *International Journal of Environmental Research and Public Health, 19*, https://doi.org/10.3390/ijerph19148325.

Liu, C & Kong, D. (2021). Business strategy and sustainable development: Evidence from China. *Business Strategy and the Environment, 30*(1), 657-670.

Majeed, M., Inusah, A., & Abdul-Majeed, I. (2018). Generic strategies and firm's performance in the banking sector. *Journal of Marketing and Consumer Research, 50*, 21-31.

Malik, S. S., Ejaz, A., Irshad, A., Bilal, K., Aziz, S., Abbasi, B. A., & Zia, S. (2020). Nexus between corporate social responsibility and financial and non-financial sector performance: A non-linear and disaggregated approach. *Environmental Science and Pollution Research, 8*, 1- 18.

Maniora, J. (2018). Mismanagement of sustainability: What business strategy makes the difference? Empirical evidence from the USA. *Journal of Business Ethics, 152*(4), 931-947.

Mawardi, F. D., Saraswasti, E., & Andayani, W. (2019). Halo effect: Corporate social responsibility (CSR) and the role of stakeholders (employees and customers) on financial performance and firm value. *South East Asia Journal of Contemporary Business, Economics and Law,* 1*8*(5), 223-236.

Nigerian Code of Corporate Governance. (2018). Regulation on the adoption and compliance with Nigerian code of corporate governance. http://www.frcn.org.

Nirino, N., Battisti, E., Ferraris, A., Dell'Atti, S., & Briamonte, M. F. (2022). How and when corporate social performance reduces firm risk? The moderating role of corporate governance. *Corporate Social Responsibility and Environmental Management, 29*(6), 1995–2005. https://doi.org/10.1002/csr.2296

Oncioiu, I., Petrescu, A. G., Bilcan, F. R., Petrescu, M., Popescu, D. M., & Anghel, E. (2020). Corporate sustainability reporting and financial performance. *Journal of Sustainability, 12*, https://doi.org/10.3390/su12104297.

Park, S. B. (2022). Bringing strategy back in: Corporate sustainability and firm performance. *Journal of Cleaner Production, 388*, 1-10.

Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press.

Pulaj, E., Kume, V., & Cipi, A. (2015). The impact of generic competitive strategies on organizational performance. The evidence from Albanian context. *European Scientific Journal, 11*(28), 273-284.

Ramirez, F. S., & Ferrer, R. C. (2021). The mediating role of dividend policy on the impact of capital structure and corporate governance mechanisms on firm value among publicly listed companies in the Philippines. *DLSU Business & Economics Review, 31*(1), 95–111.

Selvam, M., Gayathri, J., Vasanth, V., Lingaraja, K., & Marxiaoli, S. (2016). Determinants of firm performance: A subjective model. *International Journal of Social Science Studies, 4*(7), 90-100. https://doi.org/10.11114/ijsss.v4i7.1662

Suleman, M. F., Rashidirad, M., & Suleman, S. F. (2019). The applicability of Porter's generic strategies in pure online firms: A case study approach. *Strategic Management Journal, 28*(3), 167-178. https://doi.org/10.1002/jsc.2258.

Suzan, L., & Revi, O. H. (2021). The influence of competitive strategy on corporation performance. *Journal of Akuntansi, 25*(2), 168-85. http://dx.doi.org/10.24912/ja.v25i2.804

Swarnapali, R., & Le, L. (2018). Corporate sustainability reporting and firm value: Evidence from a developing country. *International Journal of Organizational Innovation, 10*(4), 69-78.

Taouab, O., & Issor, Z. (2019). Firm performance: Definition and measurement models. *European Scientific Journal, 15*(1), 93-106.

Thalia, A., & Nuraini, S. (2023). The effect of environmental, social, and governance disclosure on firm value. E3S Web of Conferences, 426, 01078. https://doi.org/10.1051/e3sconf/202342601078.

Umasabor, E. I., & Aruomoaghe, J. A. (2021). The impact of corporate governance on bank performance in Nigeria for ten years period. *Technical and Vocational Education Journal (TAVEJ), 7*(1), 65-74.

Umasabor, E. I., & Eragbhe, E. (2023). Circular economy and sustainable development: A review of literature. *Journal of management sciences, 60*(2), 68.

Umasabor, E. I., & Ogiedu, K. (2023). Sustainable development goals and firm value: A review of literature. *African Development Finance Journal, 5*(5), 136-156.

Utile, B. J. (2017). Effect of sustainability reporting on firm's performance: A review of literature. *International Journal of Business and Management, 4*(7), 203-208.

Wahyuddin, B., Ernie, T. S., Erie, F., & Diana, S. (2016). The influence of business environment and business strategy on business performance (a survey on the shipbuilding industry business units in Indonesia). *South East Asia Journal of Contemporary Business, Economics and Law, 10*(2).

Wong, W. C., Nordi, S., Adzis, A. A., Batten, J. A., & Ahmad, A. H. (2020). Does ESG certification add to firm value? *Finance Research Letters, 39*(5). http://doi.org/10.1016/j.frl101593

World Commission on Environment and Development. (1987). *Our common future* [Brundtland Report]. Oxford University Press.

Wu, P., Gao, L., & Gu, T. (2015). Business strategy, market competition and earnings management: Evidence from China. *Chinese Management Studies,* 9(3), 401-424.

Yuan, Y., Lu, L.Y., Tian, G., & Yu, Y. (2020). Business strategy and corporate social responsibility. *Journal of Business Ethics, 162*(2), 359– 377.

APPENDIX 1

Appendix 1: Sustainability Disclosures Index

A. Environmental disclosure index

S/N	Disclosure Checklist
1	Materials disclosure(G4ENI)
2	Energy disclosure(G4EN2)
3	Water disclosure(G4EN3)
4	Biodiversity disclosure(G4EN4)
5	Emission disclosure(G4EN5)
6	Effluents and waste disclosure(G4EN6)
7	Product and services environmental impact disclosure(G4EN7)
8	Compliance to environmental laws and regulation disclosure (G4EN8)

Source: Simplified version of GRI index, 2021

B. Corporate Social Responsibility Disclosure

S/N	Disclosure Checklist
1	local community disclosure (CDIS)
2	Social donations and gifting(SDGI)
3	employee and training disclosure (EMYD)
4	health and safety disclosure(HSED)
5	customer and complaints disclosure(CCCD)

Source: Simplified version of GRI index, 2021

C. Corporate Governance Disclosure

S/N	Disclosure Checklist
1	CGD disclosure of roles and responsibilities of the board
2	roles of non-executive/ independent directors
3	roles of CEO in the board
4	role of chairman in the board
5	board performance process
6	governance standard compliance
7	internal control system
8	board education and training process
9	shareholders engagement process
10	the board of directors profile
11	CEO compensation
12	board ethics and code of conduct process
13	board members age
14	board members appointment dates1
15	whistle blowing process
16	board meetings records
17	board members third party transactions
18	audit committee
19	risk committee
20	remuneration committee
21	nomination committee

22	board change/re-election or resignation
23	board shareholding
24	major shareholders

Source: Simplified version of GRI index, 2021