

SUSTAINABILITY REPORTING AND FINANCIAL REPORTING QUALITY OF LISTED CONSUMER GOODS FIRMS IN NIGERIA

Adesanmi Timothy Adegbayibi¹ Boluwatife Olamiposi Adu²
Okiki Isaac Oyedokun³

^{1,2&3}Department of Accounting, Faculty of Administration and Management Sciences, Adekunle Ajasin University Akungba-Akoko, Ondo State, Nigeria

1.

Email: adesanmi.adegbayibi@aaua.edu.ng

2. Email: aduboluwatife@gmail.com

3. Email: okikioyedokun@gmail.com

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Correspondence: adesanmi.adegbayibi@aaua.edu.ng

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ABSTRACT

Despite the external auditors' reports for listed companies, inadequate quality reports still exist, leading to business collapse and great concern for the investors and other stakeholders. In lieu of this, this study examined the effect of environmental sustainability reporting, social sustainability reporting and economic sustainability reporting on the financial reporting quality of listed customer goods firms in Nigeria. Ex-post facto research design was employed for the study and data were obtained from secondary sources through the annual reports of sampled firms for the period of 2012 to 2022. Twenty-one (21) consumer goods firms listed on the Nigerian Exchange Group as of 31st December 2022 constitute the population of the study. The entire twenty-one (21) consumer goods firms listed on the Nigerian Exchange Group were sampled using census sampling technique. The independent variable, sustainability reporting, was measured with environmental sustainability reporting, social sustainability reporting and economic sustainability reporting while the dependent variable, financial reporting quality, was measured using Jones Discretionary Accrual Score. Data were analyzed using descriptive statistics and panel corrected standard errors regression. The findings revealed that environmental sustainability reporting has a positive and insignificant effect on the financial reporting quality of listed consumer goods firms in Nigeria. Social sustainability reporting has a negative and insignificant effect on the financial reporting quality of the sampled firms. Economic sustainability reporting has a negative but significant effect on the financial reporting quality of the sampled firms. The study concluded that economic and social dimension of sustainability which includes concerns about labour practices, human rights, and relationships with the communities in which a firm operates, are highly significant factors that negatively influence the financial reporting quality, especially for the consumer goods firms in Nigeria. The study recommends that relevant stakeholders should look into the regulatory provision of accounting guidelines regarding environmental reporting to improve on it due to its benefit and positive influence on financial reporting quality.

1. INTRODUCTION

The global awareness of sustainability issues intensifies the level of disclosures of sustainability information which also contribute to gaining competitive edge and enhancing organization survival especially in the developing economies like Nigeria (Kasbun et al., 2016). However, it has been proven that sustainability information disclosures enhance voluntary reporting framework through the Global Reporting Initiatives (GRI) which made financial reporting consistent, comparable and universe (Kasbun et al., 2016). Therefore, through sustainability reporting, quality of financial report can be enhanced. Sustainability reporting is an organization report reflecting its environmental, social, and economic performance or activities. The report communicates the sustainability performance or activities of the company to its stakeholders (Hendeson, 2020). Through the report, an information about how an organization contribute to or impact all stakeholders group is communicated. Organizations usually use sustainability reporting as a tool to leverage on opportunities as this report is usually communicated to reflect the company personalities contributing to organization success (Deloitte, 2021).

Sustainability reporting offers a comprehensive social document or report which a company uses to reveal its commitment to stakeholders (Rahman & Chowdhury, 2019; Kilic et al., 2019). It instigates the level of company social responsibility as its outlines the corporate social responsibility activities of the company and its contribution to the society (Kasbun et al., 2016). According to Mutalib et al. (2020), it connotes voluntary disclosures which consequently play a crucial role in regulations. The report gives a better representation of company value and model of governance (Mutalib et al., 2020). Sustainability reporting is within the framework of Global Reporting Initiatives (GRI). This initiative set a comprehensive guideline requiring the disclosures of company performance in respect to environmental, social, and economic activities or performance (Zimon, 2022). These disclosures are seen as indices portraying the level of sustainability information disclosure. Environmental disclosure relates to disclosures of economic activities or initiatives embarked upon by the organization. This disclosure proclaims a strong corporate governance practice such as board oversight, internal control etc. which provides a mechanism that ensures accurate and reliable financial reporting (Khodair, 2023). Social disclosures relate to disclosures of firm's social initiatives which boost the level of transparency and ethical behaviors. Through this, transparent reporting is assured, unethical behavior leading to

fraudulent reporting is discouraged and high commitment will be placed on quality financial report. The desire or effort of an organization to build public image and create eco-friendly environment through environmental initiatives attracts more investors to the firm. When this occurs, investors will seek assurance about the performance of the firm (Al-Shaer, 2020). In this regard, management will be eager to channel more effort into improving the quality of financial information displayed in the report to gain the interest of the investors.

Quality financial reporting remains one of the issues facing business organization in Nigeria. Financial Reporting has come into being to ensure uniformity in the global reporting system (Nwoye & Okoye, 2018), promote corporate governance, provide information for economic decisions etc. However, there are still issues facing financial reporting and this causes an inability to achieve a high-quality financial report, and this remains one of the interests of regulators and practitioners (Iliemena *et al.*, 2023). Ajao *et al.* (2023) opined that since accounting rules pave way for management discretion on financial report, management oftentimes apply a standard in an opportunity for a personal gain, the aftermath of this will negatively affect decisions of users as the information provided does not reflect the true picture of the economic entity. Abed (2022) stated that the pressure faced in the capital market by management to meet a target undermines the quality of financial report. When the target is not achieved, management will be forced to manipulate accounting figures which eventually mislead the public. The aftermath of the market pressure intensifies earnings management and creates a mislead about the performance of the company (Rahman & Chowdhury, 2019). Most business failures may be viewed to have come from this perspective. Adibah (2021) further stated that the current development in knowledge economy has a greater implication on financial reporting as it does not reflect this development. This has led to questioning the usefulness of financial reports.

In a bid to curtail the problem, extant studies (Antônio *et al.*, 2019; Akintoye *et al.*, 2022; Zimon, 2022; Iliemena *et al.*, 2023) have provided empirical evidence on how sustainability reporting such as environmental sustainability reporting, social sustainability report and economic sustainability reporting can help to mitigate the issues. For instance (Nnamani & Onyekwelu, 2017; Mutali *et al.*, 2020; Buallay, 2021; Kumar, 2021; Ghardallou, 2022) examine the impact of sustainability accounting on the quality of financial reporting and found that sustainability reporting has a significant impact on financial reporting. However, a problem still exists as the prior studies had not adequately explored the area of focus. Prior

studies (Asogwa, 2017; Aggarwal, 2017; Alhassan *et al.*, 2021; Chinedu, 2022; Agbata *et al.*, 2022; Iliemena *et al.*, 2023) in Nigeria had examined sustainability reporting on financial performance in listed oil and gas firms, deposit money banks and manufacturing firms while only few studies (Abimbola & Abosedo, 2022; Akintoye *et al.*, 2022; Ajao *et al.*, 2023) have examined on financial reporting quality and this constitutes a gap to be filled in this study. Against this backdrop, this study examined the effect of sustainability reporting on financial reporting quality of listed consumer goods in Nigeria.

1.1 Objectives of the Study

The broad objective is to examine the effect of sustainability reporting on financial reporting quality of listed consumer goods in Nigeria. The specific objectives are to:

- i. investigate the effect of environmental sustainability reporting on financial reporting quality of listed consumer goods in Nigeria
- ii. determine the effect of social sustainability reporting on financial reporting quality of listed consumer goods in Nigeria
- iii. assess the influence of economic sustainability reporting on financial reporting quality of listed consumer goods in Nigeria

1.2 Hypotheses

The following research hypotheses were formulated in their null form for the study:

- H₀₁: There is no significant relationship between environmental sustainability reporting and financial reporting quality of listed consumer goods in Nigeria
- H₀₂: There is no significant relationship between social sustainability reporting and financial reporting quality of listed consumer goods in Nigeria
- H₀₃: There is no significant relationship between economic sustainability reporting and financial reporting quality of listed consumer goods in Nigeria

2. LITERATURE REVIEW

2.1 Conceptual review

2.1.1 Financial Reporting Quality

The Financial Accounting Standard Board (FASB) and the International Accounting Standard Board (IASB) place much emphasis on financial reporting quality. According to Hassan (2023) Financial reporting quality aims at promoting transparency, thereby presenting high-quality financial report (Okoye & Nwoye, 2018). Financial reporting is the process of communicating the financial result of an organization to shareholders and the public for use

in line with regulatory, ethical, and conceptual framework (Okudo, Amahalu, Obi & Okafor, 2022). Financial reporting encompasses financial statements, accounting disclosures, corporate governance disclosures. It is an imperative process that an organization undergoes to provide key and useful information to users showing the performance and the position of the organization over time. However, the quality of financial reporting is a salient issue in the field of accounting because it affects the decisions of users. A financial report possesses a high quality if it provides information to users that is useful in assessing the performance and position of the organization. That is, a high-quality financial report is one in which information contained in it is material, relevant, faithfully, understandable, complete, and verifiable. Herath et al., (2017) opined that Accrual method, conservatism, value relevance and qualitative characteristics of financial statement have been generally applied by researchers. The accruals method is one of the significant models used in measuring the quality of financial reporting. The gathering technique for assessing the nature of financial report depends on the accumulation premise in accounting where incomes are recognized when made and not when money is gotten, and costs is recognized when brought about and not when money is paid. Here, there is a distinction between revenue received and revenue earned; expenditure paid, and expenditure incurred therefore, the cash flows in an organization should match both its accrued revenue and expense.

2.1.2 Sustainability Reporting

Sustainability reporting refers to firms disclosing non-financial information about environmental, social, and governance (ESG) aspects. It strives to present a full view of a company's sustainability effects and performance. The sustainability report goes beyond standard financial reporting by giving non-financial information on environmental, social, and governance (ESG) aspects. This contains information on environmental and social implications, governance challenges, human rights, supply chain management, and diversity, among other things (Adekanmi, 2022). It is intended to give a more comprehensive assessment of a company's performance and consequences by considering non-financial aspects. Sustainability reporting is the activity of measuring, revealing, and holding internal and external stakeholders responsible for corporate performance toward sustainable development objectives. Abed *et al.* (2022) views it as participating in the evaluation, transparency, and responsibility to internal and external stakeholders for the overall performance of the firm.

2.1.3 Environmental Sustainability

Environmental sustainability aims to improve human welfare through the protection of natural capital (for instance, land, air, water, minerals etc.). Initiatives and programs are defined as environmentally sustainable when they ensure that the needs of the population are met without the risk of compromising the needs of future generations. Environmental sustainability disclosure can take numerous forms, such as numerical data on a company's carbon footprint, water use, or trash generation, or qualitative information about the company's sustainability and social responsibility policies and efforts (Vender & Cauwenberge, 2022). Environmental sustainability disclosure is the practice of publicly revealing information regarding a company's environmental effect and policies (Hafiz et al., 2022). This information is often provided through a variety of channels, including annual reports, sustainability reports, and other public comments, and it offers stakeholders with insight into a company's entire approach to sustainability and responsibility (Yen & Wang, 2021). Environmental disclosure seeks to promote openness and accountability while also assisting stakeholders in understanding a company's performance in areas such as carbon emissions, water use, employee relations, community engagement, and ethical business practices. Environmental disclosure informs stakeholders about a company's approach to sustainability and social responsibility, and it can help organizations gain credibility and confidence with investors, customers, and other stakeholders (Wulan, 2022).

2.1.4 Economic Sustainability

Economic sustainability aims to maintain the capital intact. If social sustainability focuses on improving social equality, economic sustainability aims to improve the standard of living. In the context of business, it refers to the efficient use of assets to maintain company profitability over time. As stated by Zimon (2023), critics of this model acknowledge that a great gap in modern accounting practices is not to include the cost of damage to the earth in market prices (Hawking, 2010). A more recent approach to economics acknowledges the limited incorporation of the ecological and social components in this model. New economics is inclusive of natural capital (ecological systems) and social capital (relationships amongst people) and challenges the mantra of capital that continual growth is good and bigger is better, if it risks causing harm to the ecological and human system (Benn et al., 2023).

2.1.5 Social Reporting

2.1.5.1 Social Sustainability

The relationship between social responsibility disclosure and financial reporting quality is significant, emphasizing the necessity of providing investors with clear and full information on a company's social effects and activities. Businesses that can successfully manage their social and environmental implications and communicate their sustainability efforts to investors are more likely to be seen as valuable and appealing, and hence more successful in producing long-term value. Organizations that provide more information about their social effects and activities are seen to have a better value and greater potential for future development. This is because investors are more concerned with a company's long-term viability and the possible dangers and possibilities linked with environmental and social considerations. Furthermore, organizations that can successfully manage their social implications are more likely to generate future revenues and cash flows. This is because sustainable business practices may assist organizations in lowering costs, increasing efficiency, and improving their reputation among customers, workers, and other stakeholders.

Organizations show their attention to supporting social well-being and sustainable practices by posting information about labor practices, employee welfare, community participation, human rights, diversity and inclusion initiatives, and philanthropic activities (Christensen et al., 2021). Investors, customers, personnel, and the public may all assess an organization's contributions to society and its strategies for addressing social issues owing to social transparency. Organizations may boost stakeholder engagement and support for socially responsible activities by creating trust, developing relationships, and encouraging accountability among them by providing full and transparent social information (Shad et al., 2019)

2.2 Theoretical Underpinning

2.2.1 Agency Theory

Agency theory emphasizes the separation of ownership and control and connects principals and agents. Jensen and Mecklings created the hypothesis in 1976. Agency theory is a paradigm used to describe and overcome problems in the interaction between company owners and their agents. Interaction exists between the shareholders known as principles and

the company executives (board of directors) to conduct business for a defined objective. The fundamental of agency theory premise is that the actor is likely to be self-centered and motivated to maximize his own benefit. The shareholders (principal) have their own expectations, as do the executives (agents). Because the interests of shareholders vary greatly from those of directors, agency theory is concerned with addressing difficulties that arise because of a conflict of interest between the principal (shareholders) and the agent (executives) (Badara, 2016). Agency theory is significant to this study because it emphasized the reason why there could be a provide sustainability information. The theory helps to understand that when there is a minimization of conflict of interest, management behaviors will be re-shaped positively towards fulfilling the mandate of the shareholders therefore, management will be motivated toward disclosure non-mandatory information in the annual report.

This study was anchored on agency theory because the theory reveals that the severity of agency problems that existed between management and shareholders is one of the major causes rendering non-mandatory information. The theory also identified those problems which include moral hazard, effort level, earnings retention, risk aversion and performance target.

2.3 Empirical Review

2.3.1 Environmental Sustainability Reporting and Financial Reporting Quality

Adekanmi (2022) investigated the corporate characteristics and sustainability reports of listed non-financial companies in Nigeria. The study population included listed non-financial companies (113 companies). The sample size consisted of publicly traded non-financial companies (76 companies) from the general population. The Taro Yamaha method was used to determine sample size. Secondary data was obtained from the audited financial statements of the sample companies. Panel data from multiple least squares regression was used for analysis. As a result, there is a statistically significant positive relationship between profitability, firm size, and liquidity, and a statistically significant negative relationship with asset tangibility, while firm age has a negative effect on STR but it was shown that it was not significant. The results also show that growth rate, financial leverage, free cash flow, and business risk have a positive but insignificant relationship with STR of the selected companies.

Pimente et al (2022) investigated the impact of sustainability on earnings quality. A survey research design was used. This study found that the role of accounting professionals in academia is important in improving the quality of financial reporting through appropriate training.

El-Rahman (2019) investigated the characteristics that influence the quality of sustainability reporting. The relationship between these features and QSR has been tested/evaluated in 500 reports. The 500 represents the five-year sustainability report of Global Fortune firms from 2011 to 2015. This study employed ordinal dependent variables (QSR) and applies OLS regression for the study. Findings revealed that regulatory compliance, external assurance of the report, board independence, and type of information have a significant influence on sustainability reporting quality.

2.3.2 Economic Sustainability Reporting and Financial Reporting Quality

Sebrina et al (2023) investigated the impact of sustainability reporting quality on corporate social responsibility of companies listed on the Indonesia Stock Exchange from 2016 to 2019. To ensure the quality of individual reporting from a sustainable development perspective, disclosures of three main components (economic, environmental, and social) were used in this study. The results show that all variables have a significant impact on corporate social responsibility. Hodair (2023) investigated the impact of sustainable accounting on the quality of financial reporting in Indonesia with sample of 300 listed Egyptian companies. Survey research design was used with the aid of structured questionnaire and distributed among managers, accountants, and auditors. Finding revealed that significant impact of accounting elements of sustainable development on the quality of financial information.

Alhassan et al (2021) reviewed reports on the sustainability and financial performance of industrial products in Nigeria. This study used time series and cross-sectional analysis of selected industrial products companies listed on the Nigerian Stock Exchange. This study used a post hoc research design. Data were collected from secondary sources such as news reports and financial statements of Nigerian companies. Data were statistically analyzed using E-View 9.0 statistical software using Pearson's correlation coefficient and multiple regression analysis. The results of this study show that, at a 5% significance level, sustainability reporting (as measured by economic, environmental, and social performance indicators) has a

significant positive impact on return on assets, return on equity, and earnings per share. has been shown to have an impact.

2.3.3 Social Sustainability Reporting and Financial Reporting Quality

Tamunotonye (2023) looked at how corporate sustainability reporting influence financial performance of listed manufacturing firms in Nigeria. *Ex post facto* research design was employed for the study. The study employed sample size of 45 out of population of 95 listed manufacturing firms. Purposive non-probability sampling was employed for the study. Data was analyzed using correlation and regression analysis techniques. Results revealed that sustainability reporting has a positive effect on market value of listed manufacturing firms in Nigeria.

Owolabi et al (2023) study examined how sustainability reporting affected the value of accounting data for listed deposit money banks in Nigeria from period of 2004 to 2018. *Ex post facto* research design was used in the study. Twenty-one listed deposit money banks in Nigeria form the population of the study with sample size of 13 listed deposit money banks. Data was obtained from the annual reports of the selected banks. The data were analyzed using multiple regression analysis. The study discovered that the relevance of accounting is significantly and positively impacted by sustainability reporting metrics.

Zimon et al. (2022) studied how sustainability reporting and corporate reputation moderated CEO opportunistic behaviour. The study gathered information from the annual reports of 173 companies listed on the Tehran stock exchange. The findings revealed that NFSR improves corporate reputation. Additionally, ESR, SSR, ETSR, and GSR all have a beneficial impact on corporate reputation. Furthermore, CEO authority influences the link between NFSR/ESR/SSR/ETSR and corporate reputation.

Abosede and Ishola (2022) examined sustainability reporting as a panacea for corporate profit management in listed manufacturing firms Nigeria from period of 2015 to 2019. The study employed *ex post facto* research design and nine manufacturing firms was selected using purposive sampling technique. Content analysis approach was adopted to analyze individual sustainability reports and annual reports of other companies to obtain sustainability disclosure indicators. Study data were analyzed using multiple regression analysis. The study found that sustainability reporting has a significant but negative impact on actual earnings management

activities. This means that companies that engage in sustainability reporting are less likely to engage in profit management based on theories of legitimacy and ethics. This study identified a significant and negative relationship between sustainability reporting and earnings management. The study also showed that there is a clear and significant relationship between sustainability and asset performance.

In the study of Akintoye et al (2022), sustainability and financial reporting quality of listed manufacturing companies in Nigeria for the period of 2011-2020. Environmental and social disclosure indicators were proxies for sustainability and accumulated earnings management according to the Jones model (1991) was used as a measure of FRQ. This study uses panel regression analysis, applies variance inflation factors to test multicollinearity among predictor variables, and uses fixed effects estimators suggested by Hausman test when analyzing observed data. The results showed that environmental disclosure does not impair the quality of financial statements. This implies that the government and its agencies are enforcing strict environmental regulations.

Chinedu (2022) investigated the impact of profitability on sustainability reporting of listed oil and gas companies in Nigeria. *Ex post facto* survey design and content analysis method were employed. Sample size of 7 out of 10 listed oil and gas firms' study's population from 2010 to 2020 were used. Data were analyzed using OLS regression analysis and the result shows that profitability has insignificant effect on social sustainability reporting.

3. MATERIAL AND METHOD

This study employed *ex post facto* research design. The choice of the design was because the data needed is readily available in the annual report of the selected consumer goods firms on Nigerian Exchange Group Fact books. The data used were collected from secondary source through the annual report and Nigeria Exchange Group Fact Books for a period of 2012 to 2022. The population of this study comprised of 21 consumer goods firm listed on the Nigerian Exchange Group as at 31st December, 2022. This study employed listed consumer goods firm because of its peculiarity and vitality in the manufacturing sector of the economy.

Twenty-one (21) consumer goods firm listed on the Nigerian Exchange Group as at 31st December 2022 formed the population of the study. An entire twenty-one (21) consumer goods firm listed on the Nigerian Exchange Group was selected as sample size using census

sampling techniques. The independent variable for this study is sustainability reporting measured such as environmental sustainability reporting measured as the average of all the environmental disclosure items (%); social sustainability reporting measured as the average of all the social disclosure items (%) and economic sustainability reporting measured as the average of all the economic disclosure items (%) while the dependent variable is financial reporting quality measured by Jones Discretionary Accrual Score measured as generated residual from regressing inverse of total asset lag sales change to total asset lag and fixed asset to total asset lag on total accrual to total asset lag.

An econometric model was developed to establish the effect of sustainability reporting and financial reporting quality of listed customer goods in Nigeria. The model stated adapted from the study of Onyekwelu, (2017), was adopted, and some modifications were made to develop the following equations: Therefore, the general model specification is represented as follows:

The initial model is:

$$FRQ_{it} = f(SR)$$

However, the study functional model is therefore stated as.

$$FRQ_{it} = f(SR) \dots\dots\dots eqn 1.$$

$$FRQ_{it} = f(ESR, SSR, ECR) \dots\dots\dots eqn 2.$$

$$CFR_{it} = \beta + \beta_1 ESR_{it} + \beta_2 SSR_{it} + \beta_3 ECR_{it} + \varepsilon_{it} \dots\dots\dots eqn 3.$$

Where: FRQ = Financial Reporting Quality, ESR = Environmental Sustainability Reporting

SSR = Social Sustainability Reporting, ECR = Economic Sustainability Reporting

$\beta_1 - \beta_3$ is the beta Co-efficient (Co-efficient of the independent variable); ε_{it} is error terms of firm i and time t is 2012-2022. The *A-priori* expectation is that $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$. This implies that sustainability reporting will have a positive and significant effect on financial reporting quality of listed customer goods in Nigeria.

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

4.1.1 Descriptive Statistics

For a thorough analysis, it is expected that the general characteristics of the variables for the model estimate will be provided. As a result, estimation of the variables' descriptive statistics is necessary. A distribution's mean is its most crucial central feature, and its variance is its

most crucial dispersion feature. Practically, the square root of the variance (standard deviation) is used to calculate the degree of a distribution's dispersion.

From Table 1 financial reporting quality, measured by discretionary accrual (DACC) have a mean value of -0.1109852 with a standard deviation of 0.1420984 signifying that financial reporting quality across the sampled firms highly varies from one another as the standard deviation value is far from mean. The coefficient of variation of 12.80 percent and the DACC ranges between a minimum of -0.4345566 to a maximum of 0.2744182 . The total sum of DACC for the listed consumer goods is -25.63757 and the skewedness is positive and normal kurtosis value for discretionary accrual (DACC) showing 0.1974467 and 2.98073 respectively and indicating that the variable is the data is not normally distributed. For environmental sustainability reporting (ESR) have a mean value of 2.487365 with a standard deviation of 0.6761951 signifying that environmental sustainability reporting across the sampled firms highly varies from one another as the value is a bit far from the mean having the coefficient of variation of 27.18 percent and the ESR ranges between a minimum of 1.3333 to a maximum of 4 . The total sum of ESR for the listed consumer goods is 574.5814 and the skewedness is positive and normal kurtosis value for environmental sustainability reporting (ESR) showing 0.4361179 and 2.323889 respectively indicating that the variable is the data is not normally distributed.

Furthermore, on Table 1, social sustainability reporting (SSR) has a mean value of 3.27219 with a standard deviation of 0.5527779 signifying that social sustainability reporting across the sampled firms highly varies from one another as the value is a bit far from the mean having the coefficient of variation of 16.89 percent and the SSR ranges between a minimum of 1.5689 to a maximum of 4 . The total sum of SSR for the listed consumer goods is 755.876 and the skewedness is negative and abnormal kurtosis value for social sustainability reporting (SSR) showing -0.7894723 and 3.25385 respectively indicating that the variable is the data is not normally distributed. Lastly from Table 1, economic sustainability reporting (ECR) has a mean value of 2.980674 with a standard deviation of 0.3375762 signifying that economic sustainability reporting across the sampled firms highly varies from one another as the value is a bit far from the mean having the coefficient of variation of 11.32 percent and the ECR ranges between a minimum of 1.3333 to a maximum of 4 . The total sum of ECR for the listed consumer goods is 688.5357 and the skewedness is negative and abnormal kurtosis value for

economic sustainability reporting (ECR) showing -.86631 and 6.426408 respectively indicating that the variable is the data is not normally distributed.

Table 1 Descriptive Statistics

Variables	DACC	ERS	SSR	ECR
OBS	231	231	231	231
Mean	-.1109852	2.487365	3.27219	2.980674
S.Dev.	.1420984	.6761951	.5527779	.3375762
Coeff. V.	-1.280336	.2718519	.1689321	.113255
Min	-.4345566	1.3333	1.5689	1.3333
Max	.2744182	4	4	4
Sum	-25.63757	574.5814	755.876688.5357	
Skewness	.1974467	.4361179	-.7894723	-.86631
Kurtosis	2.98073	2.323889	3.25385	6.426408

Source: Author's Computation (2023)

The Pearson moment correlation was used to examine the connection between the study variables, and the findings were utilized to check for non-multicollinearity. The result in Table 2 shows the relationship between corporate social responsibility and financial performance. The relationship between discretionary accrual (DACC) and environmental sustainability (ESR) shows that an increase in environmental sustainability will increase the financial reporting quality by 10.89 percent indicating coefficient value of 0.1089 and the relationship between the two variables insignificant at 5 percent showing probability value of 0.0987. Likewise, from Table 2, the relationship between social sustainability reporting and discretionary accrual is negative as the relationship between the two variables move in the inverse direction and it implies that an increase in social sustainability reporting will cause a decrease in discretionary accrual by 15.04 percent indicating coefficient value of -0.1504 and the relationship is significant at 5 percent showing probability value of 0.0222.

From Table 2, it is shown that the relationship between economic sustainability reporting and discretionary accrual is negative and it imply that an onetime increase in economic sustainability reporting will cause a decrease in financial reporting quality by 15.73 percent indicating coefficient value of -0.1573 as the relationship between the two variables is inverse, implying that it moves in opposite direction and the relationship is significant at 5 percent

showing probability vale of 0.0167. The result in Table 2 also described the relationship between environmental sustainability reporting (ESR) and social sustainability reporting (SSR) is negative implying that the two variables move in the opposite direction and shows that an increase in social sustainability reporting will decrease environmental sustainability reporting by 2.77 percent indicating coefficient value of -0.0277 but the relationship is insignificant at 5 percent showing probability vale of 0.6757. Likewise, from Table 2, the relationship between economic sustainability reporting and environmental sustainability reporting shows that an increase in economic sustainability reporting will cause a decrease in environmental sustainability reporting by 2.80 percent indicating coefficient value of -0.0280 as the relationship between the two variables move in the inverse direction and the relationship is significant at 5 percent showing probability vale of 0.6725.

From Table 2, it is shown that the relationship between social sustainability reporting and economic sustainability reporting shows that an increase in responsibility toward the economic sustainability reporting will cause an increase in social sustainability reporting by 18.18 percent indicating coefficient value of 0.1818 as the relationship between the two variables move in the same direction and the relationship is insignificant at 5 percent showing probability vale of 0.0056. It is observed that the relationship between the independent variables is not too strong to cause multicollinearity as none of them is above 0.70 that is an indication for strong relationship between the variables.

Table 2: Correlation Analysis of Study Variables

	DACC	ESR	SSR	ECR
DACC	1.0000			
ESR	0.1089	1.0000	0.0987	
SSR	-0.1504*	-0.0277	1.0000	
	0.0222	0.6757		
ECR	-0.1573*	-0.0280	0.1818*	1.0000
	0.0167	0.6725	0.0056	

Source: Author's Computation (2023)

The normality of data distribution is an assumption of running a linear model which assures that the p-values for the t-test and F-test will be valid. The assumption merely requires that the residuals be identically and independently distributed. However, from the descriptive statistics the data across some of the variables shows that virtually all the data obtained for

this study are not normally distributed which is of no significance as the normality of the residual is of paramount significance. And as such, the normality of residuals will be conducted using Shapiro Wilks test of normality and the result is presented in Table 3. Since the value is lesser than 0.05 as indicated on the table at 5% level of significant therefore, the null hypothesis that the data is normally distributed across the models is rejected. For this reason, it is concluded that the residuals of the models are not normally distributed.

Table 3a: Shapiro-Wilk W Test for Data Normality

Variables	Obs	W	V	z	Prob>z
Sustainability Reporting residuals	231	0.94304	9.638	5.251	0.00000

Table 3b: Skewness/Kurtosis tests for Normality

Sustainability Reporting

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	----- joint -----	
				adj chi2(2)	Prob>chi2
residuals	231	0.0000	0.0011	32.33	0.0000

4.1.2 Multicollinearity Test

Multicollinearity tests are part of post estimation test to confirm the validity of the assumption of the regression model. In a situation where two or more explanatory variable are highly correlated, meaning that one can linearly predict from the others with a certain degree of accuracy, then there is problem of multicollinearity. The Variance Inflation Factor (VIF) value is used to investigate the relationship between the variables themselves and the result is not found to be significant conclude that there is multicollinearity because the variance inflation factor and tolerance values are comparatively beyond the established rule of thumb.

Based on the evidence presented in Table 4, it can be concluded that there is no multicollinearity problem. This is because the VIF values for all the variables are less than 10 and the tolerance values for all the variables are greater than 0.10 (rule of thumb). Therefore, the study can rely on regression co-efficient to predict the level of impact of independent variables on dependent variables and the outcome of the findings can be considered valid.

Table 4: Tolerance and VIF Value

Variable	VIF	1/VIF
ECR	1.03	0.966428
SSR	1.03	0.966444
ESR	1.00	0.998691
Mean VIF	1.02	

Author’s Computation (2023)

4.1.3 Test for Heteroskedasticity and Autocorrelation

The heteroskedasticity test was conducted to check the validity of the homoscedasticity assumption that variance in the residuals is constant as the absence of homoscedasticity violate the assumption and may lead to wrong inference. Heteroscedasticity test was conducted using Breusch-Pagan / Cook-Weisberg test and data for the study was also tested for autocorrelation using Wooldridge test for autocorrelation in panel data. Based on the result in Table 5, test for heteroskedasticity revealed the presence of heteroskedasticity given the probability value of 0.0008 which is lower than the expected threshold of 0.05 implying that error term is constant across the residuals. The result for auto correlation shows probability value of 0.0001 indicating significance at 5 percent and indicating the presence of autocorrelation. The cross-sectional dependence test is also presented in Table 5. The result indicates that null hypothesis that there is cross-sectional dependence is strongly accepted as the probability value indicated 0.0045 and the average absolute correlation of the residuals as obtained by using the abs parameter shows 0.350 which is considered a very high number. Hence, there is sufficient evidence to conclude that sustainability reporting and financial performance under fixed effect condition does exhibits cross-sectional dependence. From the result generally, it can be concluded that there is problem of heteroscedasticity, autocorrelation, and cross-sectional dependence. The observed statistical problem will be corrected using panels corrected standard errors (PSCE).

Table 5: Test for Heteroskedasticity and Autocorrelation

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

chi2(1) = 11.24 Prob > chi2 = 0.0008

Wooldridge test for autocorrelation

$$F(1, 20) = 22.560 \qquad \text{Prob} > F = 0.0001$$

Pesaran's test of Cross-Sectional Independence

$$\text{no cross-sectional dependence (P}>0.05) \quad 2.842, \qquad \text{Pr} = 0.0045$$

$$\text{Average absolute value of the off-diagonal elements} = 0.350$$

Author's Computation (2023)

4.1.4 Panel Unit Root Test for Non-Stationary Series

Panel variables have the tendency of been non-stationary at level which may likely affect the parameter stability and consistency of the model. However, to identify the stationary conditions of the variables, the study uses Levin-Lin-Chu unit-root test. The null hypothesis assumption of the unit root test is that all panels contain unit roots while the alternate hypothesis implies that some panels are stationary. The results of unit root tests were displayed in Table 6. It shows that all the variables are integrated of order zero that is $I(0)$. Therefore, it is not necessary to conduct the co-integration test to determine the long run relationship among the variables. The panel least square can estimate an efficient model and that is less spurious.

Table 6: Panel Unit Root Test

Variable	Levin-Lin-Chu unit-root test	
	Statistics	P-value
DACC	-2.8579	0.0021
ESR	-5.7067	0.0000
SSR	-3.1049	0.0010
ECR	-3.1809	0.0007

Author's Computation (2023)

4.1.5 Hausman Specification Test

The result of the Hausman specification test conducted for the study objective is shown in Table 7. The result to know the model interpretation for the three objectives showed p-value that is insignificant at 5 percent implying that the variation across entities is assumed to be random and uncorrelated with the independent variables included in the models. This indicates that the best model for interpretation is random-effect model.

Table 7: Regression Specification Test

Hausman Test: Ho: difference in coefficients not systematic

chi2(3) = 0.88 Prob > chi2 = 0.8309

Author's Computation (2023)

The regressed result showing how measures of sustainability reporting measures in terms of environmental sustainability reporting, economic sustainability reporting, and social sustainability reporting relations affect financial reporting quality after meeting the basis for a Best Linear Un-Bias Estimate (BLUE) is shown in Table 8. The Hausman specification test conducted produced p-value of 0.8309, which is insignificant at 5%. This implies that the variation across entities is assumed to be unsystematic with the independent variables included in the model hence the random-effect model is the most suitable for interpretation. the Breusch and Pagan Lagrangian multiplier test for random effects was carried out to test the best model between random effect and the pooled OLS regression and the result favoured the pooled OLS regression having a P-Value of 0.000 which is significant at 5 percent.

However, the observed statistical problem of heteroskedasticity, autocorrelation and cross-sectional dependence made the researcher to employ the correlated panels corrected standard errors regression to correct the statistical error. From the regression result, the estimates for the linear model as presented in Table 8 indicate Wald chi2(3) showing 29.81 and probability of the model to be 0.0505 which shows that the model is statistically significant at 5%. The R-Squared indicates 0.0505 and this implies that the independent variables in the model jointly explain 5.05 percent of the variation in the dependent variable with other variables captured by the error term. The overall result shows that the measures of sustainability report have negative effect and of significance value on the financial reporting quality of multinational corporations in Nigeria.

The individual results for the variables as shown in Table 8 showed that environmental sustainability reporting (ESR) has a coefficient of .2139 with the Z-statistics of 23.52 and p-value of 0.117. This implies that environmental sustainability has a positive but insignificant effect on financial reporting quality (FRQ) of consumer goods firms in Nigeria. The implication is that the engagement in environmental sustainability positively influences the

reporting quality of the consumer goods firms. The implication is that the environmental responsibility can influence the financial reporting quality of the listed consumer goods firms in Nigeria and the effect is insignificant. Likewise, from Table 8, social sustainability reporting (SSR) has a coefficient of $-.031773$ and z statistics of -3.31 and P-value indicating 0.002 . It then means that social sustainability has a negative and significant effect on financial reporting quality (FRQ) of listed consumer goods firms in Nigeria. The implication is that social sustainability is probably high, and this practice has watered down the quality of the financial report because the report has no framework in the country but a voluntary practice that can be subject to the manipulation of the management.

Lastly from Table 8, economic sustainability reporting (ECR) has a coefficient of $-.0555755$ and z statistics of -3.38 and P-value indicating 0.001 . It then means that economic sustainability reporting has a negative and significant effect on financial reporting quality (DACC) of consumer goods firms in Nigeria. The implication is that the reporting of the economic and marketing presence of a consumer goods firm is an avenue for the management to engage in unfair disclosure to their advantage.

The study aligns with the study of Umar et al., (2019) that examines how sustainability reporting affect the financial reporting quality of listed consumer goods firms in Nigeria. The finding showed that economic performance has a significant negative effect on financial performance. It also supports the findings of Akintoye et al., (2022) which examined sustainability and financial reporting of listed manufacturing firms in Nigeria and the findings revealed that environmental disclosures do not impair the quality of their financial reports. However, the findings of the study negate the results Umar et al (2018) which the result states that environmental reporting affect corporate reporting practices of manufacturing firms in Nigeria.

Table 8 Panels Corrected Standard Errors (PCSEs) Regression Results

		Panel-corrected		
DACC	Coef.	Std. Err.	Z	P> z
ESR	.0213933	.0136656	1.57	0.117
SSR	-.031773	.0101407	-3.13	0.002
ECR	-.0555755	.0164525	-3.38	0.001
_Cons	.1054215	.0552575	1.91	0.056
Number of obs	=	231		
R-squared	=	0.0505		
Wald chi2(3)	=	29.81	Prob>chi2	= 0.0000

Author's Computation (2023)

CONCLUSION AND RECOMMENDATION

The study examined the effect of sustainability reporting on financial reporting quality of listed customer goods firms in Nigeria and specifically focused on environmental sustainability reporting and financial reporting quality, the relationship between social sustainability reporting and financial reporting quality, and the relationship between economic sustainability reporting and financial reporting quality of listed customer goods firms in Nigeria.

A further analysis of the components of the study revealed that environmental sustainability reporting has a positive and insignificant effect on financial reporting quality of listed consumer goods firms in Nigeria. This implies that the environmental responsibility can influence the financial reporting quality of the listed consumer goods firms in Nigeria and the effect is insignificant. Also, Social sustainability reporting has a negative and insignificant effect on financial reporting quality of listed consumer goods firms in Nigeria. The implies that social sustainability is probably high, and this practice has watered down the quality of the financial report because the report has no framework in the country but a voluntary practice that can be subject to the manipulation of the management. Economic sustainability reporting has a negative and significant effect on financial reporting quality of listed consumer goods firms in Nigeria. This implies that the reporting of the economic and marketing presence of a consumer goods firm is an avenue for the management to engage in unfair disclosure to their advantage.

The study concluded that economic and social dimension of sustainability which includes concerns about labour practices, human rights, and relationships with the communities in which a firm operates, are highly significant factors that negatively influence the financial reporting quality, especially for the consumer goods firms in Nigeria. Based on the findings of this study, it is recommended that:

- i. Relevant stakeholders should see to the regulatory provision of accounting guidelines regarding environmental reporting to improve on it due to its benefit and positive influence on financial reporting quality.
- ii. Enough representation of various social components in financial reports is necessary and the audit of the social sustainability reports should be encouraged to improve its quality which in turn improves the quality of the whole financial report.
- iii. Management should focus less on the inclusion of economic sustainability measures which are capable of watering down the quality of the financial reporting.

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