

Value Relevance of Corporate Social Sustainability Reporting of Listed Financial Service Firms in Nigeria

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Abstract

Nigeria financial service firms have been battling with challenges of societal regulatory deficiency issues that have hampered their competitive edge and global relevance. This has been linked with fundamental issues such as unethical business practices, respect for human beings and society, global acceptable standard for health and safety among others. This study is conducted to examine value relevance of corporate social sustainability reporting of listed financial service firms in Nigeria. The study employed *ex-post facto* research design and relied on secondary data obtained from annual reports of the firms for a period of 2010 to 2020. The population of the study consist 51 listed financial services firms and 35 firms were purposively selected as sample size. Data obtained were analysed using descriptive and panel corrected standard error (PCSE) regression due to identified heteroscedasticity problem. The findings revealed that human right, society and product responsibility as measures of corporate social sustainability reporting are statistically value relevant, while labour practices and decent work are not statistically value relevant. The study concluded that any improvement on the firm's social sustainability reporting policy will enhance its value relevance in the Nigerian exchange group. It is recommended that listed firms should focus more on the projection of their social sustainability information to promote its value relevance and increase competitive advantage.

Keywords: Value relevance, financial service, listed firms social reporting, sustainability reporting.

1. Introduction

Currently, business entities are not only evaluated on their economic accomplishment, but also on non-economic measures (Ameduet *al.*, 2019). This has demanded the increasing significance and relevance devoted to social and environmental reporting by stakeholders. Corporate social sustainability reporting is an extension of the financial reporting system, which reflects broader role of firms in the host community and the society at large. Corporate social sustainability responsibility is an agenda that was put in place to monitor and judge firm's performance to confirm to, economic, social and environmental requirements.

Unlike financial reporting, social sustainability reporting concentrates on the firms' contribution to the society and the environment through their behaviour and activities to cater for critical

environmental threats such as climate change, pollution, human rights issues. Social sustainability responsibility was established in reaction to stakeholders' pressure for increased transparency and cognisance about the effect of their actions on the society and the environment (Okoye&Onuora, 2019; Obiora *et al.* 2022). Business firms are not being socially responsible if they merely concur with the legal minimum requirements, because this is what a reasonable moral citizen would likewise do. Corporate entities are socially irresponsible because their operations resulted into environmental degradation, pollution and poverty within the communities in which they operate. Hence, it is essential to realize that the agitation of the public for improved corporate social sustainability reporting will not vanish if business entities refuse to respond to what these challenges had posed within the society.

Furthermore, in recent years, value relevance has been a prevalent area of study among researchers in the field of accounting. Value relevance focused on relevance and reliability of information disclosed in the annual financial statement that reflect changes in equity market price (Cooray, et al., 2020). The voluntary disclosure of financial and non-financial information by financial service firms have an impact on the competitive advantage and decline in their value relevance in the capital market (Abdulrahman *et al.*, 2021). The decline in the value relevance is linked with lack of adequate reporting of corporate social sustainability information. This is also a signalling effect of decreasing respect for human beings and the society. Consequently, decline in value relevance can cause misrepresentations in the process of making informed investment decisions (Setyahuni&Handayani, 2020).

The weakening in value relevance of financial services firms are also triggered by dynamic expectations regarding corporate social sustainability reporting, which are either perceived as economic benefits or as costs that can reduce firms' value relevance (Halimah et al., 2020; Sharma et al., 2019). Value relevance is fundamental to qualitative characteristics of financial statements. Accounting information are understood to be value relevance, if they possess a substantial influence on market share price. Accounting information that does not have value relevance is irrelevant for decision making processes by investors and other users.

Okerekeoti (2022) stated that social sustainability reporting has no significant association with profitability of oil and gas companies in Nigeria. Likewise, Hariyani *et al.* (2022) observed that social sustainability reporting practices reduces share value and also that investors will respond to social information revealed in their financial reports of the firms. Also, Ezekwesili and Ezejiofor (2022); Rahman *et al.* (2020); Amedu *et al.* (2019) revealed a positive relationship between social accounting reporting and value of listed firms. Okoye and Onuora (2019) concluded that corporate social sustainability has both significant and no statistically significant influence on market share price. While, Erhirhie and Ekwueme (2019) found no significant effect of corporate social sustainability on value relevance of oil and gas firms in Nigeria. King'wara (2020); Setyahuni and Handayani (2020) findings shown positive but not statically significant relationship between social sustainability and value relevance. Furthermore, Khaghaany *et al.* (2019) revealed that share price is sensitive to social sustainability reporting.

The perspective of existing studies have relatively not addressed in Nigerian context whether social sustainability reporting is value relevant or destroyed firms' value. Consequently, a study that expands the knowledge of the value relevance of corporate social sustainability reporting that can fill these identified gaps is necessary. This study provided empirical evidence that will assists the management in financial service sector in Nigeria to realise whether corporate social sustainability reporting of the sector is value relevant or not, so as to guide them in making value creating corporate policy regarding corporate social sustainability reporting.

In addition, most previous studies examined the effect of social sustainability reporting on firm performance, but the value relevance of the social sustainability reports has shown relevance in contemporary business environment. Furthermore, most studies focused on the host community without considering other stakeholders' interests, but this study attempts to look into other stakeholders' interests such as labour practices and decent works, human right, society and product responsibility reporting in line with the assumptions of stakeholder's theory.

To bridge the gap in literature, it is paramount to ponder on the value relevance of corporate social sustainability reporting. Therefore, the objective of this study is to examine the effect of corporate social reporting on value relevance of listed financial services firms in Nigeria. The study focused on value relevance and four indicators of social sustainability aspects which includes; labour practices and decent work, human rights, society, and product responsibility for the period of 2010 to 2020.

This study comprises of five sections; introduction which entails the general overview of corporate social sustainability reporting and value relevance. The subsequent sections are; the literature review, data and methods used, data analysis and discussion of findings and conclusively, conclusion and recommendations.

2. Literature Review

2.1 Value Relevance

Almagtome and Abbas (2020) define value relevance as a direct dimension of information aids for making decision as it reveals accounting information role of providing investors with essential information for assessment purposes. According to Ameduet *al.* (2019), value relevance measures statistical link between the financial statements information reported and the reflection on stock price. Value relevance study observes the link between financial or non-financial information and market share prices (Rahman *et al.* 2020). Thus, value relevance connotes the ability that relevant and reliable financial and non financial information presented in financial statements reflect market or share value. Value relevance as a concept is established on relevance and reliability. The channel of research for value relevance is on the proposition that if information is relevant and reliable, investors will change their attitude which reflects in the share price of the firms. Therefore, a value-relevance information is considered if changes in share price are connected with the release of the information.

Nevertheless, research on value relevance has concentrated comprehensively on accounting and financial information, there is now serious attention to non-financial information particularly with the recognition of the societal consequences that firms can encounter resulting from social and environmental activities alongside with the recognition of the sustainable development goal. Globally, there is now a sensitive attention to social sustainability reporting because of the increasing socially responsible and moral investors. This study examines the effect of corporate sustainability reporting on the equity's market share price, therefore, price model is more suitable to substantiate the objective of the study. Echobuet *al.* (2022) used Ohlson model to express relationships amongst the equity market value and two key variables in financial reporting. There are various measurements used in previous studies as value relevance proxy by market value. These measurements include; Tobin's Q which is described as the proportion of total debt and market-capitalization to total assets, share price. The Ohlson price model is also used as value relevant of sustainability reporting measure. The study makes use of market value as proxy for value relevance. This is so since quoted firms have a share valuation already, market value of quoted firms is the current market share price of an entities.

2.2 Corporate Social Sustainability Reporting

According to Amedu, *et al.* (2019), social sustainability reporting is a general term that describes an organisation's reporting system that reflects information on its social-activities that is useful to prospective stakeholders. Iheduru and Okoro (2019), viewed social sustainability reporting as the measurement, analysis and communication of interactions and links between social issues constituting the social dimension of sustainability. GRI (2013) describes sustainability reporting as the act of determining, disclosing and being responsible to both internal and external stakeholders for firm's performance concerning sustainable development goals.

On a broader scale, this study viewed social sustainability reporting as holistic reporting approach that considers by aspects social dimensions of the combined actions of organisations in achieving their own objectives without jeopardising the capability of the forthcoming generations to find lasting prosperity to meet their own needs. The firms' financial performance solely is inadequate to explain market value, but when it is combined with sustainability reporting which has been compiled into performance ratings, will enhance value relevance information of financial statement.

Corporate social sustainability reporting is propelled by the transformation of social conscience; firms cannot accomplish their objectives at any cost without taking into cognisance the impacts of their strategies and actions on the entire society (Olagunju & Ajiboye, 2022). Social sustainability reporting on management approach is about an organizational impact on social system within which it functions to achieve its objective. The sustainability reporting index G4 guidelines discloses 47 indicators that was considered in the study to score or measures social sustainability reporting. These indicators of social sustainability reporting are further sub-categorised by labour practices and decent work, human rights, society, and product responsibility.

The labour practices and decent work (LPDW) reporting include; employment which has four (4) indicators, occupational-health and safety which also has four indicators, training and education has three indicators, diversity and equal opportunity has one indicator, equal remuneration for women and men has one indicators, supplier valuation for labour practices has two indicators, labour practices and Grievance Mechanisms (GRI, 2013).

The human rights reporting addresses the degree at which procedures have been implemented, incidents of human rights violations, and changes in stakeholders' ability to satisfy and exercise their human rights. Among the human rights issues included are non-discrimination, gender equality, freedom of association, collective bargaining, child labour, forced or compulsory labour, and indigenous rights (GRI, 2019). There is growing global consensus that organizations have the responsibility to respect human rights. Organizations can affect a wide range of human rights. In assessing which human rights are relevant for reporting, the organization should consider all human rights. Human rights extend beyond the rights of employees in the workplace (GRI, 2011). Human rights have become well-established in international standards and laws, and this has obligated organizations to implement specialized training that equips employees to address human rights in the course of their regular work. The total number of employees trained and the amount of training they receive both contribute to an assessment of an organization's depth of knowledge about human rights.

The society reporting as an indicator of social sustainability reporting is a key element in managing impacts on people in local communities is assessment and planning in order to understand the actual and potential impacts, and strong engagement with local communities to understand their expectations and needs. There are many elements that can be incorporated into

engagement, impact assessments, and development programs. This Indicator seeks to identify which elements have been consistently applied, organization-wide. International Finance Corporation (IFC) (2012). Engagement, impact assessments, and development programs, combined with the consistency of their application, provide insight into the overall quality of an organization's efforts, as well as its degree of follow-up on policy or policies. Organizational operations related to entering, operating, and exiting can have a number of significant negative impacts on local communities (GRI, 2013).

Product responsibility reporting helps to recognise the presence and scope of methodical efforts to discourse health and safety through the life cycle of a product or service. The expectation of customers is that products and services should meet the standard and perform their intended functions satisfactorily, and not pose a risk to health and safety. This responsibility is not only subject to laws and regulations, but is also addressed in voluntary codes such as the OECD Guidelines for Multinational Enterprises. Efforts made to protect the health and safety of those who use or deliver the product or service have direct impacts on an organization's reputation, the organization's legal and financial risk due to recall, market differentiation in relation to quality, and employee motivation. In addition to direct financial consequences, ongoing non-compliance poses increased financial risk due to damage to both reputation and employee motivation (GRI, 2013).

2.3 Social Sustainability Reporting and Value Relevance

Okerekeoti (2022) stated that social sustainability reporting practices of Oil and Gas firms in Nigeria has not significant association with market value. Diyah *et al.* (2022) observed that social sustainability reporting practices by listed firms reduce their intrinsic value and also that investors will respond well to social information revealed to the public by the firms in their financial reports. Furthermore, Ezekwesili and Ezejiolor (2022) revealed that positive relationship exists between social accounting practices disclosure and value of listed Nigerian Multinational Corporations. Halimah *et al.* (2020) result shown that sustainability reporting has a significant influence on share price of firms and also concluded that sustainability reporting is value relevant.

Erhirhie *et al.* (2019) also found that social sustainability reporting exerts negative effect on value relevance of the firms. Chikwendu, *et al.* (2019) affirmed that social sustainability reporting has significant influence on company's market value. Zraqat (2019) opined that investors react positively and appreciate reporting on social sustainability practices among commercial banks in Jordan which reflects positive change in their share price. Emeka-Nwokeji and Osioma (2019) findings shown that social sustainability reporting has negative and not significant influence on share price of firms. Given these settings, it is not clear if social sustainability reporting has any significance influence on value relevance of firms.

2.4 Theoretical Review

2.4.1 Legitimacy Theory

Legitimacy theory was propounded by Dowling and Pfeffer in 1975. Legitimacy theory assists to comprehend the organisation's behaviour, values and culture in executing, developing and reporting its social obligation strategies. The major assumption of legitimacy theory is satisfying the organisation social contract, which permits the recognition of its objectives, likewise the concept of social contract holds that the activities of business organisations should comply with social expectations. The legitimacy theory states that in order to sustain its business performance,

firms have to behave in a manner that is expected by the society (O'Donovan, 2002). This necessitates the firms to use sustainability reports as an evidence to show compliance to norms.

According to legitimacy theory, there exist social contract between corporations and the society in which they operate, which states that an organization owe the society a duty to disclose their activities within the society (Ioannou & Serafeim, 2015). There will be increase in competitive advantage of firms who take up the responsibility of publicly disclosing their social and environmental impacts using sustainability reports. Consequently, the activities of firms that refused to take up their social and environmental responsibilities will be interrupted because the society will revoke the social contract and eventually, the firms will not continue to exist.

Legitimacy theory is relevant to corporate social sustainability reporting activities as it concentrates on how corporate entities respond to numerous stakeholders' expectations and pressures in order to promote their value relevance survive. Hence, organisations seek for an equilibrium between their actions and how they are perceived by outsiders and what is thought by society to be appropriate. This study was hinged on legitimacy theory.

2.5 Empirical Review

Solomon *et al.* (2014) investigate the effects of corporate social responsibility performance (CSR) on share prices. A sample size of 30 firms were selected for study on stratified basis. The study employed secondary data via the firms' annual-financial-statements of the listed manufacturing firms considered. The outcomes of the study presented no significant relationship between corporate-social responsibility performance and stock prices of Nigerian listed manufacturing firms and it further revealed a negative non-significant correlation between stock prices and CSR activities. Mohammed *et al.* (2016) investigated the influence of corporate social responsibility disclosure on the financial performance of listed Nigerian manufacturing firms. The study found an overall significant positive-association between corporate-social responsibility disclosure and earnings per share.

Akinleye and Adedayo (2017) examined the effect of corporate social responsibility on financial performance of multinational firms in Nigeria. Five multinational firms were randomly selected for the study and the results of the study revealed that there is insignificant negative relationship between corporate social responsibility and profit after tax. The result on the other hand, found that total asset exerted significant positive impact on profit after tax. This result contradicted Onyeka & Nwankwo (2016) who showed that corporate social responsibility has positive and significant-impact on net profit of the firms studied. Whetman (2017) assessed the association between corporate sustainability-reporting and firm performance. A positive relationship was found between corporate sustainability reporting and all measures of profitability for companies with low institutional ownership. The results showed further that sustainability-reporting and capital structure all have a positive and significant impact on firm return on equity, return on assets and firm's profit margin.

Narullia and Subroto (2018) examined the value relevance of accounting information and corporate social responsibility. The study used Ohlson's model and moderated regression analysis. The result showed that CSR information was not relevant information for measuring firm value. Emeka-Nwokeji and Osisoma (2019) conducted a study on how aggregate sustainability disclosures and its disaggregate dimensions affect firms' performance in Nigeria. The study established mixed results about social sustainability-disclosures and market value of firm. This finding contradicted Amedu *et al.* (2019) who found that environmental sustainability has no significant-relationship with firm value.

Erhirhie and Ekwueme (2019) assessed the effect of corporate social sustainability disclosures on financial performance of oil and gas sector of Nigerian Exchange Group. The study source data through secondary sources via annual report of the individual firms using content analysis. The study adopted descriptive statistics and regression analysis technique. The findings showed that corporate social sustainability reporting has no significant effect on return-on-asset and return-on-capital-employed of oil and gas firms listed on the floor of Nigerian Exchange Group while on other hand, corporate social sustainability reporting has a significant effect on return-on-equity of oil and gas firms listed on the floor of Nigerian Exchange Group.

Okoye and Onuora (2019) examined the value-relevance of corporate social accounting disclosures on the market share price considering eight listed Deposit Money Banks in Nigeria. The findings revealed that there is positive and significant relationship between corporate social reporting and market share price of listed banks; while, health and safety reporting is not statistically significant in influencing the market share price of listed banks in Nigeria.

King'wara, (2020) conducted a study in Kenya considering stakeholder theory in investigating the potential influence of shared social responsibility disclosure on firms' financial performance. The results shown that there was positive but not statistically significant link between corporate social responsibility disclosures and return on asset while there was a negative but not statistically significant relationship between social- responsibility disclosures and return on ordinary shares and finally, findings also showed a negative but not statistically significant association between social-responsibility disclosures and Tobin's Q of the firms listed on NGX.

Setyahuni and Handayani (2020) investigated value relevance of information on environmental, social, and governance considering listed public firms in Indonesia. The study found that social-disclosure and environmental-disclosures have positive and not insignificant effect on share price as such they are value relevant. Rahman *et al.* (2020) conducted a study using the banking sector in Bangladesh to explore the value relevance of Corporate Social Responsibility Reporting. The results of the study shown that CSR disclosure have significant positive relationship on market value. Iswati (2020) investigates the impact of CSR and sustainability reporting on business value using the financial performance of 132 manufacturing listed firms in Indonesia from 2017-2018. The results indicated that corporate social-responsibility does not significantly affect value of manufacturing listed companies in Indonesia.

Govindan *et al.* (2021) carried out study on logistics sector across nations by examining the drivers and value relevance of corporate social responsibility performance considering ownership-structure and board characteristics. The results suggested that social responsibility performance has no significant positive effect on value relevance on logistics firms.

Ezekwesili and Ezejiofor (2022) conducted study on 'sustainability accounting-practices to ascertain its influence on sustainability-reporting of Multinational Corporations in Nigeria'. The result of their findings showed a high degree of social accounting practice among Nigerian listed multinational corporations. The study also revealed positive connection between social accounting-practice and value of multinational corporations in Nigeria. Okerekeoti (2022) investigated profitability effect on sustainability reporting of seven listed oil and gas companies in Nigerian. The outcome indicated that profitability had not significant influence on social sustainability reporting of oil and gas companies in Nigeria.

2.6 Gap in Literature

The attention of several studies reviewed were directed at investigating the effect of corporate sustainability reporting on firm performance without main attention on its effect on value relevance. The existing works have mainly restricted their studies to evaluating the level of sustainability reporting, bottom-line disclosure but not extending further to show value relevance of sustainability reporting, particularly among listed financial services firms in Nigeria. It was also found from empirical review that several studies using various context, scopes, theories and methodologies reported that there is positive significant relationship between sustainability reporting and firm value while others found negative and/or non-existing relationship.

These conflicting findings call for more research to facilitate convergence in the understanding of value relevance of corporate sustainability reporting among listed firms in Nigeria. Despite myriad of studies on sustainability reporting, there is still a gap in literature in the area of determining the value relevance of corporate sustainability reporting particularly in financial services sector in Nigeria which is one of the most vibrant sectors that contribute greatly to the gross domestic product of Nigeria economy. As a result of these, therefore, it is coherent to state the hypothesis thus:

H₀1: Social sustainability reporting does not affect value relevance of financial services firms in Nigeria.

3. Data and methods

This study employed *ex post facto* research design to examine how corporate social sustainability influence share price of listed financial services firms in Nigeria. The study used secondary data retrieved from annual reports which were analysed using descriptive and inferential statistics. The population of this study consisted 51 listed firms in financial services sector on Nigerian Exchange Group as at 31st December, 2020. The sample size comprised 35 financial services firms listed on Nigerian Exchange Group that have consistently submitted their annual reports to the Nigerian Exchange Group from 2010 to 2020. In this study, purposive sampling technique was used because firms were selected using a number of criteria.

The study adapted the model in the study of Ameduet *al.* (2019) on value relevance of sustainability reporting in Nigerian manufacturing firms.

The model of their study is stated thus:

$$MV_{i,t} = \beta_{it} + \beta_1(\text{Eco-Sus}_{it}) + \beta_2(\text{Soc-Sus}_{it}) + \beta_3(\text{Env-Sus}_{it}) + \beta_4(\text{Lev}_{it}) + \varepsilon_{it}$$

Where:

MV = Market value measured using share price; Eco-Sus = Economic sustainability reporting measured using SRI index; Soc-Sus = Social sustainability reporting measured using SRI index; Env-Sus = Environmental sustainability reporting measured using SRI index; Lev = Leverage measured as debt equity ratio.

This study however adapted the moderating variable of Ameduet *al.* (2019) to examine the effect of corporate social sustainability reporting on value relevance of listed financial services firms when all other potential moderating variables are held constant. This study further modified the model of Ameduet *al.* (2019), by conducting a more in-depth analysis of corporate social sustainability reporting aspect. The model of this study is stated in line with the objective of the study. The functional model stated in broad is;

$$MV = f(SS) \text{ -----3.1}$$

$$MV = f(LPD, HR, So, PR) \text{ -----3.2}$$

Hence, the model is as stated in econometric form in equation (3.3).

$$MV_{i,t} = \beta_0 + \beta_1 LPDW_{it} + \beta_2 HR_{it} + \beta_3 So_{it} + \beta_4 PR_{it} + \varepsilon_{it} \text{ -----3.3}$$

Were:

$MV_{i,t}$ = Market value of firm i in time t

LPDW= Labour practices and decent work

HR = Human Rights

So = Society

PR = Product responsibility

ε_{it} = error term that represents other independent variables that affect the model but not captured

$i_1, \dots, 35$ = Company script

$t_{2010-2020}$ = time

β_0 = Constant parameter

β_{1-4} = Coefficients of variable

ε = Error term

a priori expectation: $\beta_{1-4} > 0$

Table 1: Summary of Variables and their measurements.

S/N	Variable	Description	Measurement
SOCIAL SUSTAINABILITY REPORTING(SSR)			
1	Labour practices and decent work (LPDW)	Engaging and inclusive work environment that span across ensuring employability, skills development through training and education and fair remuneration.	Total LPDW disclosure score divided by maximum LPDW possible for a firm. Okoye&Ndum, 2020; Ameduet <i>al.</i> 2019.
2	human rights (HR)	The Human Rights covers the extent to which processes have been implemented, incidents of human rights violations, and changes in stakeholders' ability to enjoy and exercise their human rights.	Total human rights (HR) disclosure score divided by maximum PP possible for a firm. Ameduet <i>al.</i> 2019; Okoye&Ndum, 2020
3	Society (So)	Firm's impact on the entire society and local communities. These include anti-corruption, public policy, anti-competitive behavior and compliance.	Total Society (So) disclosure score divided by maximum (So) possible for a firm. Emeka-Nwokeji& Osisioma, 2019.
4	Product responsibility (PR)	The environmental impact of products and services in the course of their lifecycle. PR concern the products and services that directly affect stakeholders, and customers in particular.	Total Product responsibility (PR) score divided by maximum PR possible for a firm. Okoye&Ndum, 2020.
Dependent Variable (Value Relevance)			
5	Market Value	Market value a proxy of value relevance is the prevailing shares price at the end of the period 31st March.	Market price per share as published by NGX and firms' annual report as at 31st Mar. Ohlson, 1995; Nguyen <i>et al</i> 2020

Source: Authors' compilation (2023)

3.6 Data Analysis Technique

This study examined the effect of corporate social sustainability on value relevance of listed financial services firms in Nigeria and to achieve this objective, the study employed descriptive and Panel Corrected Standard error (PCSE) to analyse collected data.

4 Data Analysis and Discussion of Findings

4.1 Descriptive Statistics

The descriptive statistics is presented in Table 2 and as observed, the mean for market value (MV) measured by share price stood at 3.522786. The standard-deviation of 6.821640 is very large which specifies the magnitude of dispersion from the mean and shows that MV of selected firms varies considerably from one firm to another. The maximum and minimum values stood at 48.50000 and 0.000 respectively. The Jacque-Berra test of normality indicates the absence of normality in the arrangement for the distribution as the p-value of the Jacque-Berra is less than 5% significant level. This was supported by the result skewness estimate stood at 3.460663 and with kurtosis at 17.38911.

The social sustainability reporting measured by Labour practices and decent work, (LPDW), Human Rights (HR), Society (SO) and Product responsibility (PR) disclosed that the mean-value of LPDW, HR, SO, and PR of the selected firms stood at 0.932292, 0.125000, 0.640625, and 0.018229 on average respectively. This indicated that 93% of the selected firms on average disclose information on Labour practices and decent work, 12% of the selected firms on average disclose information on Human Rights, 64% of the selected firms on average disclose information on Society, while only 2% of the selected firms on average disclose information Product responsibility.

The standard deviation of HR and PR stood at 0.331150, and 0.133954 respectively which is very large indicating a huge dispersion of the distribution from the mean and shows that HR and PR vary considerably from one firm to another. The standard deviation of LPDW and SO stood 0.251573 and 0.480443, depicting that the distribution is close from the mean-value. The maximum and minimum values stood at 1 and 0 respectively. The Jacque-Berra test of normality of social-sustainability measured by Labour practices and decent work, (LPDW), Human Rights (HR), Society (SO) and Product responsibility (PR) indicated that there is no normality in the arrangement for the distribution as the p-value of the Jacque-Berra is less than 5% significant level. This was supported by the result skewness and with kurtosis revealing absence of outliers in the series and that the distribution is not normally distributed.

Table 2: Descriptive Statistics

	MV	LPDW	HR	SO	PR
Mean	3.522786	0.932292	0.125000	0.640625	0.018229
Median	0.570000	1.000000	0.000000	1.000000	0.000000
Maximum	48.50000	1.000000	1.000000	1.000000	1.000000
Minimum	0.000000	0.000000	0.000000	0.000000	0.000000
Std. Dev.	6.821640	0.251573	0.331150	0.480443	0.133954
Skewness	3.460663	-3.441200	2.267787	-0.586161	7.202479
Kurtosis	17.38911	12.84186	6.142857	1.343584	52.87571
Jarque-Bera	4079.221	2307.673	487.1837	65.88880	43121.43
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	1352.750	358.0000	48.00000	246.0000	7.000000
Sum Sq. Dev.	17822.82	24.23958	42.00000	88.40625	6.872396
Observations	384	384	384	384	384

Source: Authors' computation (2023).

Where: MV= Market value, LPDW= Labour practices and decent work, HR = Human Rights, SO = Society, PR = Product responsibility

4.2. Test of Variables

4.2.1 Correlation Matrix for the Model

Table 3 shows the correlation statistics. Correlation coefficient measures the direction and degree of association between two or more variables. The results reveal that MV is positively and significantly correlated with HR, SO ($r = 0.176, 0.287, p=0.00$) at 5% and this implies that increase in MV will result in a significant increase in HR, SO, and vice-versa. In addition, market value measured with share price has a positive but insignificant relationship with LPDW, with ($r = 0.093, p = 0.069$). The correlation between social sustainability reporting variables, Labour practices and decent work, (LPDW), Human Rights (HR), Society (SO) and Product responsibility (PR) is positive correlated except for SO and PR having negative relationship with ($r=-0.020, p=0.701$).

Table 3: Pearson Correlation Matrix

	MV	LPDW	HR	SO	PR
MV	1.000				
LPDW	.093	1.000			
HR	.176**	.102*	1.000		
SO	.287**	.101*	.234**	1.000	
PR	.061*	.037	.125*	-0.020	1.000

** Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

Source: Authors' computation (2023)

The correlations matrix provides preliminary insight into the degree and direction of the relationship between the variables. However, correlations do not necessarily imply functional dependence between variables and hence limited usefulness for causality. Regression analysis is more suitable for this purpose and the results are presented. The variance inflation factor (VIF) test is first presented to identify the collinearity status of the variables. A multi-linearity between the independent variables indicates a perfect association. Table 4 When the independent variables are perfectly associated, the parameter parameters would be undefined.

In the case of multicollinearity, the predicted coefficients would be significant standard errors. The variance inflation factor test is built to test multicollinearity in this analysis. The variance inflation factor (VIF) explains how often the variance of a regressor calculation was distorted due to collinearity with the other regressors. Essentially, VIFs over 10 are known to be a source of alarm, no variables have more than 10 VIF values and therefore no variables have been found to have a serious sign of multicollinearity.

Table 4: Variance Inflation Factor Test of Variables

Variable	Tolerance	VIF
LPDW	0.940	1.064
HR	0.565	1.769
SO	0.766	1.306
PR	0.905	1.105

Source: Authors' computation (2023)

4.2.2 Panel Unit Root Test

Having described the nature of our data series, they were analysed for unit root at individual intercept. The purpose for selecting individual intercept is to confirm that the data will be treated with recognition of differences in the cross sections; that is, each firm in the panel is treated as different from other firm instead of pooling them together as was obtainable in the descriptive statistics section above. The result of the unit root test as is contained in Table 5 shows that all the selected data series are stationary at level, first difference and second difference, as all the null hypotheses of unit root process were rejected given that each series' probability value consistently yield a value less-than 5%.

It is evident that all the variables are free from unit root tangle; the Augmented Dickey Fuller (ADF) unit root result with intercept only for instance reveals that all the variables are stationary at first difference except for MV, LPDW and SO which are stationary at level difference and PR that is stationary at 2nd difference. Therefore, we accept that there is no unit root in the data series selected for the study base on the result in table 5 and that the variables are stationary at levels.

Table 5: Panel Unit Root Test [ADF Test with Intercept Only]

Variable	T-Statistics	P-Value	Order of Integration	Decision
MV	148.007	0.0000	I(0)	Stationary
LPDW	25.2346	0.0049	I(0)	Stationary
HR	52.9639	0.0000	I(1)	Stationary
SO	66.8305	0.0148	I(0)	Stationary
PR	6.12588	0.0468	I(2)	Stationary

Source: Author's computation (2023)

4.3 Social Sustainability Reporting and Value Relevance

Table 4.6 shows the regression results of how social sustainability reporting proxies affect value-relevance of listed financial services firms in Nigeria. To enhance the reliability of the findings, all appropriate line regression assumption test on variables were performed to ensure that the results represent best linear unbiased estimation and the results were presented alongside the regression for interpretation on Table 6. The heteroscedasticity test which was performed to verify the validity of homoscedasticity assumption that variance in the residuals are constant was accomplished using Breusch and Pagan Lagrangian-test and the result shows p-value of 0.0000 which indicate the presence of heteroscedasticity problem. The study also performed serial correlation-test using Woolridge test for autocorrelation in panel data, the results have p-value of 0.0000 which is significant at 5 percent level. This implies that there is problem of auto correlation.

The Hausman fixed random test was also conducted as suggested in Gujarati, *et al.* (2012) to compares the estimates of the fixed and random estimators and the result shows p-value of 0.0000 which was also significant at 5 percent level. Furthermore, Breusch and Pagan Lagrangian-multiplier test for random effects was carried out to choose between random-effect and pooled-OLS and the result favoured the random effect showing probability value of 0.0000. However, in order to correct the problem of autocorrelation and heteroscedasticity in making the results of the regression suitable for interpretation on the basis of best linear unbiased estimation, a robust test was performed in consistent with other extant study like Emeka-Nwokeji and Osisoma, (2019);

Olagunju and Ajiboye, (2022) using panel corrected standard error regression. The regression coefficient and probability value are basis of judgment used in interpretation of the results.

The R^2 for the regression stood at 0.085 which connotes that social sustainability reporting accounts for about 8.5% of systematic variations in value-relevance of listed financial services firms in Nigeria. Similarly, the F-stat is 26.65 (p-value = 0.0000) which is statistically-significant at 5 percent level, confirms the appropriateness of the model to draw statistical inference. Breusch and Pagan Lagrangian multiplier test for random effect showing probability value of 0.0000 which is statistically significant at 5 percent level. This implies that, the idea that the dependent and explanatory variables are considerably linear is not to be rejected, thus the parameters are well fit for the model. The combined statistical significance of the model is therefore represented.

Analysis of the Panel Corrected Standard Error (PCSE) regression coefficients reveals that the four social sustainability parameters, that is, labour practices and decent work (0.064; $p=0.593$); human rights (2.093; $p=0.012$); society (1.121; $p=0.031$) and product responsibility (1.353; $p=0.011$) present positive-effects on share price of listed financial services firms in Nigeria. However, the results show statistical significance for all the variables of social sustainability reporting except for LPDW which shows insignificant-influence on share price of listed financial services firms in Nigeria.

As reported in Table 6, PCSE regression model results show that the parameters explained 8.5 percent of variation in the firms' share price and the model is significant at 1 percent level. Any improvement on any of on HR, SO and PR will produce significance influence on share price of listed financial services firms in Nigeria while improvement on LPDW have no significant effect on share price. Hence LPDW is not value relevance. When control variable was introduced in the model, all results show positive effect on share price. This implies that the results submit that introduction of firm size as control-variable in the model alters the significant level of HR and PR. The explanatory power reduces slightly from 8.5 percent to 7.9 percent.

Table 6: Social Sustainability Reporting and Value Relevance

<i>Variable</i>	Fixed Effects Model	Random Effects Model	PCSE Model
<i>C</i>	3.732 (1.110)**	3.099 (1.373)*	1.656 (1.163)
LPDW	-0.278 (1.094)	-0.382 (1.089)	0.064 (1.074)
HR	0.712 (0.727)	0.793 (0.732)	2.093 (0.832)*
SO	-0.222 (0.489)	0.093 (0.492)	1.121 (0.518)*
PR	0.439 (0.522)	0.884 (0.523)	1.353 (0.531)*
R^2	0.1638	0.3458	0.0853
Wald χ^2		4.74{0.3152}	23.16{0.0001}
No of Observation	378	378	378

*, ** signify significant at 0.05 and 0.01 level respectively; standard error in parenthesis (), p-value in { }.

Source: Authors' compilation (2022)

4.4 Discussion of Findings

Table 6 show the regression results examining the effect of social sustainability reporting to the value-relevance of listed financial services firms in Nigeria. The regression results analysis reveals that the social sustainability reporting proxy with Labour practices and decent work, (LPDW), Human Rights (HR), Society (SO) and Product responsibility (PR) has a negative and positive effect which is statistically insignificant at 5 percent significant level. Even though majority of the proxy exhibited negative relationship. On the overall, the study findings reveal that social-sustainability reporting affect has a negative significant effect on value relevance of listed financial services firms in Nigeria. Thereby, the hypothesis stated that Social sustainability reporting does not affect value relevance of listed financial services firms in Nigeria is not accepted for this study.

The results are in line with Nguyen (2020) conducted an empirical study to examine the impact of sustainability reporting on firm value. This study focused on the current most popular guidance, the (GRI). The findings indicate a significant negative relation between firm value and a firm's GRI adherent level of sustainability reporting. The findings of this study in is disagreement with the study of Chikwendu, *et al.*, (2019) who examined the effect of sustainability reporting on performance of listed firms in Nigeria. The results of the study when considered in aggregate, shown that sustainability reporting has a significant effect on company's return-on-asset while when considered individually, economic sustainability performance disclosure has a positive but insignificant effect on return on asset of the firms studied while environmental sustainability performance disclosure has a negative insignificant effect on return on asset and finally, social sustainability performance disclosure has a positive significant effects on return on asset.

Okoye and Ndum, (2020) examined the effect of sustainability-reporting on firm value proxy by economic-value-added of manufacturing firms listed on the floor of Nigerian Exchange Group. Findings from the empirical analysis showed that economic sustainability reporting, social sustainability reporting, environmental sustainability reporting and sustainability governance reporting exerted a significant positive effect on economic value added, of listed manufacturing firms in Nigeria.

5. Conclusion and Recommendations

This study examined the effect of corporate social sustainability on value relevance of listed financial services firms in Nigeria. Based on the findings from the analysed data, the study made the following conclusions. Corporate social sustainability reporting drives value relevance of listed financial services firms in Nigeria. The study indicated that financial rewards of involving in corporate social sustainability reporting practices outweigh the associated costs in the long run. Fostering greater social sustainability reporting did guarantee value relevance of listed financial services firms in Nigeria. This is evident from the result which revealed that social sustainability reporting has overall positive and significant effect on value relevance of the listed firms. Based on the study findings, it was recommended that financial services firms should embraced social sustainability reporting practices designed to achieve respect for human beings and society since such has tendency of increasing effect on market value.

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