

SOCIAL AND ENVIRONMENTAL IMPACT ON FINANCIAL PERFORMANCE OF SELECTED LISTED MANUFACTURING FIRMS IN NIGERIA

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Abstract

The question of the balance between corporate sustainability initiatives and profitability has been widely discussed. The problems facing today's managers were how to manage performance across sustainable dimensions so that the synergistic advantages of its execution approach may be derived. Hence, the study examines social and environmental impact on financial-performance twenty-four (24) listed manufacturing firms in Nigeria from 2010 to 2020. Secondary data and multiple-regression technique were adopted. The variables for the study are community relations, research and development and return-on-assets. Finding revealed that R&D cost has positive significant outcome on firm accomplishment as these items show-up in the fixed effects regression with statistically significant p-values. Likewise, Finding revealed that community cost has negative non-significant effect on firm accomplishment. The study concluded that investment in research and development should be deployed more to increase the financial performance of manufacturing firms while community relations cost should be embark upon but more funds should not be committed to it. It is therefore recommended that shareholders and regulatory authorities should ensure compliance with regulations in providing environmental-information as this will help firms to be conscious of the environment they belong.

Keyword: Social, environmental, research and development, financial performance

1 Introduction

Firms around the world are currently obliged to expand financial reporting standards which is important to their existence especially in an era where there are issues with environmental degradation effect on humans and other environmental factors (Clerverline, 2021; Asaju & Aome, 2015; Atanu & Olorundare, 2017; Adimin, 2010; Bassey, 2019). Industrialization became big after the 18th century (Tapang, Bassey & Bessong, 2012). This industrial revolution brought economic improvement and prosperity (Mastrandrea & Schneider, 2008) as cited in (Makori & Jangongo, 2013). This improvement has made firms' face pressure from stakeholders and they started publishing their sustainability report (KPMG International, 2011). The report gained popularity and industries began to publish their sustainability report.

In Nigeria, firms are required to make voluntary full disclosure on social and environmental reports as regard the community in which they operate. Elkington (1998) initiated the triple-bottom-line concept of profit (economic), people (social) and planet (environment) indices that are relevant to stakeholders. This practice however, has grown significantly over the years (KPMG International, 2013). Manufacturing firms especially cement firms' in Nigeria are at the fore-front of this as their business success or failure depend on how they relate with their host communities (Murray, 2010). This report is an improvement of the traditional way of financial reporting. This integral part of financial-reporting measures the ability of a firm to meet its obligations to the society (Krkac, 2007). These study is restricted to the social and environmental factors of

sustainability reporting. The extent of these indices are measured using community relations cost, R&D cost, while return-on-assets measured financial accomplishment. Community relations cost deals with philanthropy and social investment, the allocating of funds for community development which may result in conflicts with organizations (Idemudia and Ite, 2006). They are developmental projects within and outside the host communities such as building or renovation of schools, buildings, hospitals and donations. Gitman, and Zutter (2012) in their finding described research and development as the outcome of creative activities (such as those undertaken in an organization) over a certain period of time. Financial performance measures a firm's overall financial level over a particular time duration and compares the general performance of different firms functioning in the same industry (Henri & Journeault 2010). The association linking social and environmental reporting and financial-performance is established on slack theory of (Waddock & Graves, 1997) which asserted that before a firm can cater and meet the expectations of the community, they will have excess resources available at their disposal. However, Khavel, Nikhasemi, Haque and Yousefi (2012) posited that social and environmental report is germane to achieve organization overall aim of profit maximization, diversification, and product differentiation through assessment of a firm's impact on its environment and different stakeholders like employees and community.

The in-balance linking investment in community and research and development cost and profitability has been discussed lately by scholars. The challenges before today's managers has been how to manage performance across these dimensions to derive synergistic benefits from its implementation strategy. Conflict between firms and their host communities come about because of trust and the firms' ability to meet their obligations towards the society (Ogbemi, 2020; Amabipi, 2016; Barbar, 1983). Some firms take community relations for granted and don't provide basic facilities such as building schools, provide health facilities, give donations and provide scholarship to students and youths in the communities. This eventually leads to conflict between these firms and their host communities. Also firms' inability to commit resources on research and development and see how their operations affect their communities in which they operate and look for better ways of improve their operations and products is of concern. Hence, the study examined social and environmental impact on financial-performance of selected listed manufacturing firms in Nigeria.

Review of Related Literature

2.1 Conceptual Review

2.1.1 Social, research and development and Financial-Performance

Dibia and Nwaigwe (2017) define social and environmental reporting as the level of human consumption and activity which can continue into the foreseeable future, so that the systems which provide goods and services to humans persist indefinitely. Sustainability report was named in 1994 by Elkington, the founder of a British Consultancy, Sustain-Ability (Elkington, 1998, 2004).

Community relations cost

Delannon, Raufflet and Baba (2016) describe community relations as a medium through which firms' relate with the community. Community development is anchored on firm's initiative at cushioning the effect of their externalities on the host communities. Community relations cost depicts a firm in good light and convinces stakeholders that an organization performs its operations in an ethical manner.

Research and development cost

Research and development include applied analysis and basic analysis (Seraina, 2008). It is the total domestic cost on research and development. Gitman, Chad and Zutter

(2012) described research and development as the outcome of creative activities undertaken in a firm to find new ways of doing things. They are cost incurred to further advance knowledge. It is a plan search for new knowledge that will enhance production and increase efficiency.

Financial-Performance

Financial accomplishment measures a firm's overall financial level over a particular time and compares performance of different firms operations in the same industry (Henri and Journeault 2010). It measures the accomplishment of firms in term of profit and the ability of a firm to utilize its resources.

Return on assets

It indicates the ability of the firm to produce accounting based revenues in excess of actual expenses form a given portfolio of assets measured as amortized historical costs (Carter & Easton 2016) and provides insights into the ability of management to perform well with the given resources.

2.2 Theoretical Review

2.2.1 Stakeholder Theory

According to Freeman (1984), the theory maintains that firms have stewardship role towards a variety of stakeholders, different from shareholders, i.e. creditors, customers, suppliers, employees, government, community, environment, future generations, and so on. The theory argued that firms should create value for its stakeholders.

2.2.2 Agency Theory

Alchian and Demsetz (1972) propounded agency theory. The theory sees the shareholders as principal and management as agents. More so, shareholders anticipate the agent to act and make decisions in the principal's interest.

2.2.3 Signaling theory

It was developed in 1973 by Spence; published on the seminar paper of Akerlof in 1970. Signaling is a general phenomenon applicable in any market with information asymmetry. The firms are seen from the outside world through what the shareholders receive from this firms.

2.2.4 Legitimacy Theory

Dowling and Pfeffer propounded legitimacy in 1975. The theory assume that a company is in existence unless it cannot meet the expectations of the society in which it operates. Lindblom (1994) hinted that it is a state where a firm's operations is in consistence with the value system of the society. However, whenever there is potential or actual disparity linking the value systems, entity's legitimacy is threatened.

2.2.5 Slack-Resources theory

Availability of financial resources is a determinant of social and environmental responsibilities of firms that invest in corporate-social-responsibility (Waddock & Graves, 1997). It refers to the stock of excess resources available to a firm during a given period. The scholars hinted that before a firm can cater and meet the expectations of the community, they will have excess resources available at their disposal

The theory is therefore relevant to this study because firms are faced with the economic realities of hyper-inflation and challenges that threatened their existence.

2.3 Empirical Reviews

The existing literature on the connection linking community relation R&D and financial accomplishment is comprised of mixed findings.

Olayinka and Temitope (2011) surveyed corporate-social-responsibility and financial-performance in Nigeria. Secondary source of data and ordinary-least-square regression models were use to analyse the data. The result showed positive significant connection linking good practices of companies with financial-performance. Taib and Ameer (2012)

analysed the association linking corporate sustainability practices and financial-performance in UK and US between 2005 and 2009. Annual reports recorded and multiple-regression models were used. The finding revealed negative insignificant outcome on financial accomplishment. Community, business ethics & environment indices do negative effect but diversity index has a positive & significant impact on the financial performance of companies. This implies that innovation in computing power and language would ease the choice of reporting medium in the future and it is advisable to report community, diversity, environment, recruitment, and promotion in real-time as they occur. Ayaydin & Karaaslan (2014) investigated the out-turn of research and development investment on firm's financial-performance in Turkey from 2008 to 2013. Secondary data and multiple-regression models were use to analyse the data. Proxies for the study were return-on-assets, capital structure, liquidity, efficiency and firm size. The finding revealed significant positive of research and development on financial accomplishment. The study gives empirical support to those recommendations from policy makers and business leaders for maintaining the R&D expenditures especially in high-technology sectors even when facing a recession.

Singh (2014) investigated the consequences of corporate-social-responsibility disclosure on the financial-performance of firms in UK from 2008 to 2012. Secondary data and ordinary-least-square models were used. The result shown negative non-significant connection linking good social practices and financial accomplishment both in short-term scenario and long-term. Research by Kiraci, Celikay and Celikay (2016) assessed the end-result of firm's R&D cost on profitability in Turkey between 1998 and 2012. Secondary source and multiple-regression technique were used. The findings showed a positive significant outcome on the short-run profitability of a firm and long run. Investment in research and development may not be profitable in the short-run but will yield better result at the end. Lome, Heggseth and Moen (2016) studied the consequences of intensity in R&D on financial accomplishment during financial crisis of 247 Norwegian industrial companies between 2004 and 2009. Multiple-regression technique was used. The result showed that companies with more investment in R&D were better in financial-performance during the financial crisis. Also, R&D investment was more during the financial crisis than in other periods. Mohammed, Saheed and Oladele (2016) investigated corporate-social-responsibility and financial accomplishment of ten(10) listed manufacturing firms' in Nigeria from 2001 to 2012. Secondary source and multiple-regression were used. The finding showed positive significant outcome on earnings-per-share. The study concluded that social and environmental reporting disclosures by firms should made mandatory so that stakeholders can benefit from the report.

Abdel and Raed (2017) investigated the upshot of R&D cost on financial accomplishment of five(5) listed Pharmaceutical firms in Jordan from 2006 to 2010. Simple-linear-regression-square technique was used. The finding revealed positive significant outcome on financial accomplishment. It was established that research and development cost leads to future benefits for both firms and its stakeholders. Umobong and Agburuga (2018) assessed the connection linking financial accomplishment and corporate-social-responsibility of quoted-firms in Nigeria from 2005 to 2015. Secondary data and multiple-regression model were used. The finding revealed negative significant outcome linking community relations and return-on-assets and return-on-capital-employed .firms with better financial accomplishment make better information make higher return-on-investment. Hashim, Ries and Huai (2019) assessed the outcome linking corporate-social-responsibility and financial-performance in southeast African countries from 2013 to 2017. Secondary data and multiple-regression model were used. The finding unconcealed negative non-significant connection linking community relation

and financial accomplishment. Jian, Feng and Chen (2019) evaluated the association linking research-and-development, advertising and firm's financial accomplishment in South Korea from 2012 to 2016. Multiple-regression technique and secondary data were used. The finding revealed positive significant association linking financial accomplishment with large firms' while negative significant impact exist in small firms. Kaiming and Shihong (2019) investigated the effect of research and development investment and financial performance in China between 2015 and 2017. Secondary data and multiple-regression models were applied. The finding revealed positive significant outcome on financial accomplishment. R&D investment is conducive to improving corporate financial accomplishment, and R&D investment has a lag in return to the enterprise. Nwambeke, Udama & Oko (2019) inspected the connection linking environmental-accounting-disclosure on financial accomplishment of cement companies in Nigeria from 2006 to 2017. Multiple-regression analysis and annual reports. The finding revealed that charitable contribution costs have positive significant consequences on financial accomplishment while community-development cost has positive significant outcome on the financial accomplishment. Community cost should not be handle with levity as this has serious consequences on financial accomplishment.

Dalida (2020) established the connection linking R&D intensity and financial accomplishment of firms in Egypt for the period from 2000 to 2019. Multiple-regression and secondary data were used. Finding indicated significant positive connection linking R&D and return-on-assets. This investment will increase profitability. Aditi and Madhumita (2021) interrogated the association linking corporate-social-responsibility and financial accomplishment in Indian. Secondary source and multiple-regression were used. Employees, customers, investors, community and environmental are proxies for the study. The finding revealed positive significant association on return-on-assets. Mondal (2021) investigated the consequences of lagged research-and-development expenditure on financial accomplishment in India 2008 to 2017. Secondary source and multiple-regression technique were used. Leverage is found to have negative influence while liquidity positive significant outcome on the firms'. Garba and Madhumathi (2022) investigated how corporate-social-responsibility added value to the Indian banking sector. Secondary data and panel-regression model were used. The finding revealed positive significant outcome on their market value, liquidity and risk. The scholars are of the view that high-performing market value is a function of how the firms' impact the society, so profit is a function of their level of activities.

From the literatures reviewed, it was observed that research and development has few literatures in Nigeria which is an indication that few research has been conducted on it. Moreso, the negative impact of community relation cost on financial performance of firms in developed countries is an indication that firms in developing countries spend much on power, water and other infrastructure that makes it difficult for them to meet the present demand of the society. Firms in Nigeria do not have real-time report on the community as event unfold.

3.1 Data and Method

The study adopted *ex-post facto* research design. The study looks at social and environmental end-result on the financial-performance of listed manufacturing firms in Nigeria for period from 2010 to 2020. The reason for choosing 2010 as the base year is because IFRS was adopted in Nigeria in 2010 and the world just came out of recession. The variables are community relations, R&D and return-on-assets. Twenty-four (24) companies were used. The reason for choosing manufacturing firms listed on the Nigerian exchange limited is because they constitute the major companies where the

environment is affected by production activities. They are responsible for major water pollution, air pollution and soil pollution.

Description of Operational Variables

From the specified regression equation, the researcher proxied financial performance as Return-on-Assets (ROA). **ROA** is the quotient of dividing profit after tax by total assets.

Community Relations Cost It is the proportion of amount spent on donations and community development projects to total income.

Research and Development Cost (R&D). This has to do with the amount disclosed in the financial statement which the company spent on R&D. It is measured using total cost of R&D to total revenue.

Model Specifications

The model has been modified in tandem with Nnamani, Onyekwelu and Ugwu (2017) in their study titled the effect of sustainability reporting on financial performance of firms in Nigeria brewery sector was used though subject to some modifications. The structure is as follows:

$$PEF = f(SUS)$$

$$PERF = \alpha_0 + \beta_1 SUS + U_t \dots \dots \dots \text{eqn. 1}$$

Where: PERF = Performance of Nigerian Manufacturing firms,

SUS = Sustainability Accounting

α = constant, β = co-efficient of the independent variables

U = error term,

The specific models are as follows:

$$ROA = \alpha_0 + \beta_1 CRD_t + \beta_2 RD_t + U_t \dots \dots \dots \text{eqn. 2}$$

Where: ROA = Returns-on-Asset, CRD= Community Relations cost

R&D = Research and Development cost, t = time covered in this study (10 years).

4.Results and discussion of findings

4.1 Table 1: Descriptive Statistics

	ROA	CRC	R_D
Mean	0.064903	0.014431	0.137041
Median	0.043126	0.001526	0.004291
Maximum	3.237088	1.968699	21.80103
Minimum	-2.359907	0.000000	0.000000
Std. Dev.	0.303419	0.121754	1.357415
Skewness	2.390875	15.76020	15.50915
Kurtosis	63.39361	253.3415	247.6523
Jarque-Bera	40372.78	700308.2	668985.9
Probability	0.000000	0.000000	0.000000
Observations	264	264	264

Source: Researcher's Computation, 2022.

Table 1 above reports the descriptive statistic such as mean, median, standard deviation, maximum, minimum, Jarque-Bera, kurtosis and skewness. Average return on asset is 0.064 and median value of 0.043. The standard deviation of 0.303, indicates the existence of low degree of disparity among the firms ROA. It shows that their ROA is close. More so, the maximum of ROA is 3.23, while -2.359 is the minimum. ROA pooled across the firms report positive skewness of 2.3908. It was discovered that ROA failed to exhibit normality at 5% level of significance, because the Jarque-Bera statistics of 40372.78 has p-value less than 0.05. The mean and median statistics of the research and development variable show that the data point is not close to each other. The Jarque-Bera shows that the variable is statistically not normally distributed. Community relation cost reports mean of 0.014431 and median of 0.001526. It reports Jarque-Bera

statistics that the variable has p-value greater than 0.05. It is positively skewed and leptokurtic. It is worthy of note that, descriptive statistics was carried out to ensure that the estimated coefficient of the model does not suffer from the problem of inconsistency and lack of efficiency.

4.2 Panel Unit Root test result

Variable	LLC(Levin, Lin & Chu t^*)		LPS(Im, Pesaran and Shin W-stat)		Order of Integration	Remarks
	Statistics	p-value	Statistics	p-value		
CRC	-6.12411	0.0000	-2.48152	0.0065	I(0)	Stationary at level
R_D	-17.8788	0.0000	-8.93847	0.00000	I(0)	Stationary at level
ROA	-9.16390	0.0000	-4.27973	0.0000	I(0)	Stationary at level

Source: Researcher's Computation , 2022

Carrying out unit root test before estimating the model was a necessary step in order to choose the most appropriate estimating technique. Studies have shown that panel data have tendency of been mean variant and therefore, there was need to test the Stationarity condition of these variables. Also, the prevailing problem of spurious regression had necessitated the test for unit root of panel series variables. However, examining the stationary property of panel data series prior to analysis the relationship among the variables has been described as fundamental due to the challenges posed by non-stationary series in regression analysis. This is important as the proposed methodology (panel regression) for the analysis can only be used to estimate models involving variables that are integrated of order zero I(0). In Table 2, Levin, Lin and Chu test and LPS (Im, Pesaran and Shin W-stat) were adopted in confirming the stationarity condition of these variables. The result of the test showed that all the variables were stationary at level. Therefore, the model estimation can be carried out using panel least square with an option of fixed or random effect.

Table 4.3.: Correlation Analysis: Ordinary

Correlation Analysis: Ordinary

Correlation			
Probability	ROA	R_D	CRC
ROA	1.0000		

R_D	-0.0996	1.0000	
	0.1068	-----	
CRC	-0.0859	0.1764	1.0000
	0.1648	0.0000	-----

Source: Researcher's Computation, 2022

The correlation results in Table 3 showed that R_D cost of the firms do exhibit weak statistical CRC of the firms($r=-0.1764, p<0.05$).. CRC exhibit weak correlation with other explanatory variables such as R_D($r=0.17644, p<0.05$).. It can be deduced from the correlation analysis that low level of correlation was observed among the explanatory variables. This implies the less likelihood of encountering multicollinearity problem which may understate or overstate the standard errors and thereby lead to wrong inference about the behaviour of the variable.

Table 4: Serial Correlation
Breusch-Godfrey/Wooldridge test for serial correlation in panel models

Breusch-Godfrey/Wooldridge test for serial correlation in panel models		
	Test statistics	Prob.
F-statistics	-1.098862	0.2718

Source: Researcher Computation, 2022.

The presence of autocorrelation in model residual can lead to inconsistency and inefficient model estimate. In view of this, the study conducts serial correlation test with aid Breusch-Godfrey/Wooldridge test for serial correlation in panel models. The null hypothesis is that there is no serial correlation in idiosyncratic errors, while the alternative is that there is serial correlation in idiosyncratic errors. The result of the test as displayed in Table 4.5 shows that the study rejects the alternative hypothesis and accept the null hypothesis, which implies that there is no serial correlation in idiosyncratic errors, because the p-value of the test statistics (-1.098862) is greater than 0.05(0.2718).

Table 5. Hausman Test
Correlated Random Effects - Hausman Test (Test cross-section random effects).

Correlated Random Effects - Hausman Test (Test cross-section random effects).			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	9.6151	4	0.0474

Source: Researcher's Computation , 2022.

The study compared the fixed effect and random effect model using the Hausman test. The result of the Hausman test =9.6151, $p < 0.05$) indicates that fixed effect will be the most appropriate model. The Hausman test was used to differentiate between fixed effects model and random effects model. Therefore, in estimating the parsimonious model of the variables, fixed effect will be the appropriate assumption.

Table 6: Parameter Estimate of sustainability reporting on the financial performance of listed manufacturing firms in Nigeria

Variable	Fixed Effect Model			Random Effect Model		
	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.
R_D	0.1631	7.3384	0.0000	0.1585	7.8024	0.0000
CRD	-0.9074	-2.2713	0.0240	-0.9268	-2.3419	0.0199
C	0.0561	2.6701	0.0081	0.0621	2.7082	0.0072
R squared		0.6745			0.6273	
Adjusted Rsquared		0.6222			0.5722	
F-statistic		74.2600			64.8176	
Prob(statistic)		0.0000			0.0000	
Hausman test			9.6151(p=0.0474)			

Source: Researcher's Computation 20212

Community relation cost of the firms in table 6 (fixed effect regression) exhibited negative relationship with the financial-performance of the firm. The coefficient of the variable (-0.9074) and t-value of -2.2713 shows that in average across the period and within the firm, financial-performance decline when the community relation cost increases. This study is in tandem with previous studies of Taib and Ameer (2012), Umobong and Agburuga (2018), Singh (2014), Hashim, Ries and Huai (2019).

Research and development cost in table 6 (fixed effect regression) had significant relationship with the firm's performance. The coefficient of 0.1631($t=7.3384$, $p<0.05$) showed that research and development contributed positively to the rise in firm performance. This study is in tandem with previous studies of Ayaydin & Karaaslan (2014), Lome, Heggseth and Moen (2016), Abdel and Raed (2017), Dalida (2020), Mondal (2021).

Conclusion and recommendations

R&D can be likened to innovation and it puts the company ahead of its competitors. It is usually separated from operational activities carried out in a company. Companies who venture into this do not have expectation of an immediate profit but is expected to contribute to the long-term profitability of the company. Patents, copyrights, and trademarks are improved due to the discoveries made and new products introduced. Findings reveal that environmental cost especially R&D cost has a significant effect on firm financial performance as these items show-up in the fixed effects regression with statistically significant p-values. Likewise, findings reveal that social disclosure especially Community relations cost has an insignificant effect on firm financial-performance. The need to enact laws by financial authorities especially the financial reporting council of Nigeria on how financial reports should be prepared will guide users make inform decisions. The study concluded that investment in research and development should be deployed more to increase the financial performance of manufacturing firms while community relations cost should be embark upon but more funds should not be committed to it. Companies in developed countries around the world have embraced this report long before now and it has helped their financial growth. It is therefore recommended that shareholders and the government should ensure compliance with environmental regulations, especially in the area of environmental costs as this helps the firms to be conscious of the environment where it belongs.

REFERENCES

- Abdel, R.R & Raed, K. (2017). Impact of research and development expenditure on financial performance: Jordanian evidence. *European Journal of Business and Management* 9(32), 73-83.
- Abosede, A.J., Eze, B.U., & Sowunmi, M.F. (2018). Human resource management and banks' performance in Nigeria. *Journal of Varna University of Economics*, 62(2).
- Adhikari, N. R. (2020). Training and development costs, staff costs and operational profitability in Nepalese Commercial Banks. *Management Dynamics*, 23(2), 109–118.
- Aditi, S & Madhumita, C. (2021). Does CSR disclosure influence financial performance of firms? Evidence from an emerging economy. *Sustainability accounting management and policy journal*, 12(4), 2018-0042
- Agba, A. M. O, Mboto, W. A. & Agba, M. S. (2013) Wages or other conditions: A critical assessment of factors in workers performance in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 3(7), 489-505.
- Alshbili, I.A & Elaner, A.A (2019). The influence of institutional context on corporate social responsibility disclosure: a case of a developing country. *Journal of Sustainability Finance & Investment* 10(1), 1-19.
- Ajibade, A.T; Amuda, M,B; & Olurin, O.T (2019). Dividend policy and financial performance- a study of quoted manufacturing firms in Nigeria and Kenya.South. *Asian journal of social studies and economics*, 1-6.
- Alchian, A., & Demsetz, H. (1972). Production, information costs, and economic organization. *The American Economic Review*, 62(5), 777–795.
- Amabipi, A.K (2016). Understanding host community distrust and violence against oil companies in Nigeria. Walden University.
- Amankwah, D.O & Agyemang, O.O (2020).The relationship between policy dividends and firms' performance on Ghana stock exchange. 6(4), 378-397.
- Atanu, F.H. & Olorundare, J. (2007). Rural Development and Sustainable Development in Nigeria. *Ankpa Journal of Arts and Social Sciences*, 2(4),14-26.
- Asaju, K & Arome. S (2015). Environmental degradation and sustainability in Nigeria: The Need for environmental education. *Journal of Social Sciences*. 3(3), 56-61.
- Awadzie, D.M., Soku, M.G, & Botchwey, E.A.(2022). Sustainability reporting and the financial performance of banks in Africa. *Journal of business, economics & finance*, 11(1), 43-57.

- Barber, B (1983). Rulgers University press 190 (219)
- Bassey, I (2019). Environmental degradation and sustainable development in Nigeria: A study of the south-south region in Nigeria. *International journal of humanities, social sciences and education*, 6(8)33-42.
- Cahaya, F.R., Porter, S., Tower, G. and Brown, A. (2015). The Indonesian Government's coercive pressure on labour disclosures: Conflicting interests or government ambivalence, *Sustainability Accounting, Management and Policy Journal*. 6(4), 475-497.
- Camelia, O.S; et al (2020). Impact of Sustainability Reporting and Inadequate Management of ESG Factors on Corporate Performance and Sustainable Growth. *Sustainability journal* 12(20), 8536.
- Carter, R.C., & Easton, L.P. (2016) Sustainable supply chain management: evolution and future directions. *International Journal of Physical Distribution and Logistics Management*, 41(1), 46-62.
- Clarissa, S.V & Rasmini, N.R (2018). The Effect of Sustainability Report on Financial Performance with Good Corporate Governance Quality as a Moderating Variable. *International Journal of Sciences: Basic and Applied Research*, 139-149.
- Cleverline, B (2021). Combating environmental degradation in Nigeria through the recognition of the rights of nature. [Doi.org/10.2139/ssrn.3843333](https://doi.org/10.2139/ssrn.3843333).
- Dalida, M.A.E (2020). The impact of research and development intensity on financial performance of pharmaceutical companies listed on Egyptian stock exchange. *Alexandria journal of accounting research*, 4(3), 1-55.
- Delannon, N; Raufflet, E. and Baba, S. (2016). Corporate community engagement strategies and organisational arrangements: A Multi case study in Canada. *Journal of Cleaner Production*. 129(15), 714-723.
- Dharmadasa, P., Gamage, P., & Herath, S.K. (2014). Corporate governance, board characteristics and firm performance: evidence from Sri Lanka. *South Asian Journal of Management*, 21(1), 7-31.
- Dibia, N.O & Nwaigwe, N.G. (2017). Corporate sustainability reporting and firm profitability: A survey of selected quoted companies in Nigeria. *Journal of Finance, Banking and Investment*. 4(2), 136-147.
- Dowling, J. & Pfeffer, J. (1975). Organisational legitimacy: social values and organisational Behaviour. *Pacific Sociological Review*, 18(1), 122-136.
- Elkington, J. (1998)(2004). Cannibals with forks: The triple bottom line of 21st century business. Stony creek: *News Society Publications*.
- Enekwe, C. I., Nweze, A. U. & Agu, C. I. (2015). The effect of dividend payout on performance evaluation: evidence of quoted cement companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research* 3(11): 40-59.
- Falk, J. (2012). Comparing wages in the federal government and the private sector. Working paper. 3.1-26.
- Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2012). Does Board Gender Composition affect Corporate Social Responsibility Reporting? *International Journal of Business and Social Science*, 3.
- Financial Accounting Standard Board (FASB) 1974 for research and development costs.
- Freeman, R. E. (1984). *Strategic Management: A stakeholder approach*. M.A. Pitman
- Freihat, A.R.F & Kanakriyah, R (2017). Impact of research and development expenditure on financial performance: Jordan experience. *European journal of business and management*, 9(12), 73-83.
- Fodio, M.I. Abu-Abdissamad, A.M., & Oba, V.C. (2013). Corporate social responsibility and firm value in quoted Nigerian financial services. *International Journal of Finance and Accounting*. (7) 8, 331- 340.
- Gaba, N., & Madhumathi, R. (2022). Does corporate social responsibility add value to the Indian banking sector? *Indian Journal of Finance and Banking*, 9(1), 140-158.
- Garg, P. (2015). Impact of sustainability reporting on firm performance of companies in India. *International Journal of Marketing and Business Communication*, 4(3), 38-45.
- Gitman, C; & Zutter, J. (2012). *Principles of Managerial Finance*. Edinburgh, England: Pearson.
- Global Reporting Initiative. (2000-2013). Global Reporting Initiative G3, G3.1, G4. Global Reporting Initiative Organization.
- Hashim, F., Ries, E. A., & Huai, N. T. (2019). Corporate Social Responsibility and Financial Performance: The Case of ASEAN Telecommunications Companies. FGIC 2nd Conference on Governance and Integrity 892-913.
- Hongming, X; Ahmed, B & Hussan, A (2020). Sustainability reporting and firm performance: The demonstration of Pakistani firms. Sage journals, doi.org/10.1177/2158244020953180
- Henri, J.F & Journeault, M. (2010). Eco-control the influence of management control systems on environmental and economic performance. *Accounting Organisation and Society*, 35(1), 63-80.
- Institute of Chartered Accountants of Nigeria (2014). Corporate reporting, Paper 2. United Kingdom: Emile Wolf.
- Igbekoyi, O. E., Ogungbade, O. I., & Olaleye, A. G. (2021). Financial Performance and Environmental Sustainability Reporting Practices of Listed Manufacturing Firms in Nigeria. *Global Journal of Accounting*, 7(1), 15-24.
- Idemudia, U., & Ite, U. E. (2006). Corporate-community relations in Nigeria's oil industry: challenges and imperatives. *Journal of Corporate Social Responsibility and Environmental Management*, 13(4), 194-206.

- Idewe, I.O & Murad, B.A (2019). Dividend policy and financial performance: a study of selected deposit money banks in Nigeria. *African journal of business management*, 13(7), 239-266.
- Jian, X; Feng, L & You-hua, C. (2019). R&D, Advertising and firm's financial performance in South Korea: Does firm size matter? *MDPI*. 11(14), 1-16.
- Jian, X; Feng, L and You-hua, C. (2019). R&D, Advertising and firm's financial performance in South Korea: Does firm size matter? *MDPI*. 11(14), 1-16.
- Krkač, K. (2007) *Introduction to business ethics and corporate social responsibility*, Mate, Zagreb.
- KPMG (2011). Global sustainability service and sustainability ltd: Count me in: The Readers take on sustainability Reporting, Amstelveen.
- KPMG (2013). KPMG International: The KPMG survey of corporate responsibility reporting.
- Mahmood, Z., Kouser, R. & Masud, M.K. (2019). An emerging economy perspective on corporate sustainability reporting – main actors' views on the current state of affairs in Pakistan. *Asian journal of sustainability and social responsibility* 4(8), 2-31.
- Margolis, Joshua D. and Elfenbein, H, A & Walsh, J. P (2009). Does it Pay to Be Good...And Does it Matter? A Meta-Analysis of the Relationship between Corporate Social and Financial Performance.SSRN doi.org/10.2139/ssrn.1866371.
- Makori, D.M. & Jagongo, A. (2013) Environmental accounting and firm profitability: An empirical analysis of selected firms listed in Bombay Stock Exchange, India. *International Journal of Humanities and Social Sciences*, 3(8), 167-179.
- Murray, A. (2010). Do markets value companies' social and environmental activity? An inquiry into associations among social disclosure, social performance and financial performance <http://theses.gla.ac.uk/1770/>
- Nnamani, J.N; Onyekwelu, U.L., & Ugwu, O.K. (2017).Effect of sustainability accounting on the financial performance of firms in the Nigerian brewery sector. *European Journal of Business and Innovation Research*, 5(1), 1-15.
- Nwamkeke, G.C; et al (2019).Impact of environmental accounting disclosure on financial performance of cement companies in Nigeria firms. *Journal of Arts and Humanities*.4 (1), 63-76.
- Nzekwe, O. G., Okoye, P. V. C., & Amahalu, N. N. (2021). Effect of sustainability reporting on financial performance of quoted industrial goods companies in Nigeria. *International Journal of Management Studies and Social Science Research*, 3(5), 265-280.
- Ogbemi, O.B (2020). Attitude of Host communities towards deploying corporate social responsibility to manage conflicts in the Niger Delta Nigeria. *Global journals of arts, humanities and social sciences*, 8(10), 122-141.
- Okegbe, T.O and Egbunike, F.C (2016).Corporate social responsibility and financial performance of selected quoted companies in Nigeria. *Journal of social development*, 5(4), 168-189.
- Onoja, A. A., Okoye, E. I., & Nwoye, U. J. (2021). Global reporting initiative and sustainability reporting practices: A study of Nigeria and South Africa oil and gas firms. *Research Journal of Management Practice/ ISSN, 2782, 7674*.
- Ordu, P. A & Amah, C. O (2021). Sustainability accounting and financial performance of oil and gas companies in Nigeria. *International Journal of Innovative Finance and Economics Research* 9(1),182-197.
- Owolabi S.A & Okulenu, S.A (2020). Sustainability Reporting as a Catalyst to Performance of Insurance Company in Nigeria. *International Journal of Research Publications*, 31-44.
- Porini, R (2020). Dividend payout ratio and financial performance: A case of firms listed on Dar es Salaam stock exchange. *Digital research repository*, 10(1), 1-11.
- Qamrizzaman, M.D; Jahan, I & Karim, S (2021).The Impact of Voluntary Disclosure on Firm's Value: Evidence from Manufacturing Firms in Bangladesh. *Journal of Asian Finance, Economics and Business* 8 (6), 0671-0685.
- Seraina.C. (2013).RandD expenses and firm valuation: A literature review, *International Journal of Accounting and Information Management*. 16(1), 5-24.
- Singh, S. (2014), Impact of Corporate Social Responsibility and Financial Performance of Firms in UK. Available from: http://www.essay. utwente.nl/65014/1/singh_ma_mb.pdf.
- Spence, M. (2002). Signaling in Retrospect and the Informational Structure of Markets. *The American Economic Review*, 92(3), 434-459.
- Sinha, A., & Mondal, K. (2020). The impact of lagged R&D expenses on firm performance: Empirical evidence from the BSE healthcare index. *Colombo Business Journal*, 11(2),114-141.
- Taib, E.M & Ameer, R. (2012). Relationship between corporate sustainability practices and practices and financial performance: evidence from gri reporting companies. doi.org/10.2139/ssrn.2152124.
- Tapang, T.A; Bassey B.E; & Bessong, P.K (2012).Environmental activities and its implications on the profitability of oil companies in Nigeria. *International Journal of Physical and Social Sciences*. 2(3), 285-302.
- Thayaraj, M.S & Karunarathne, W.V.A.D (2021). The Impact of Sustainability Reporting on Firms' Financial Performance. *Journal of business and technology*, 5(2), 51-73.

- Umobong, A.A & Agburuga, U.T (2018). Financial performance and corporate social responsibility of quoted firms in Nigeria. *International Journal of Innovative Social Sciences and Humanities Research*. 6(1), 14-30.
- Uyagu, D. B., Joshua, O., Terzungwe, N. & Muhammad, L. M. (2017). Effect of firm characteristics on environmental reporting practices of listed manufacturing firms in Nigeria. *Nigerian Journal of Management Sciences*, 6(1).
- Wachira, M & Bendt, T (2019). Exploring the content of sustainability reporting (SR) disclosures among public companies in South Africa, Mauritius and Kenya. Conference paper, June
- Wasara, T.M & Ganda, F. (2019). The Relationship between Corporate Sustainability Disclosure and Firm Financial Performance in Johannesburg Stock Exchange (JSE) Listed Mining Companies. 11(16), 1-23.