European Journal of Accounting, Auditing and Finance Research
Vol.12, No. 6, pp.,59-76, 2024
Print ISSN: 2053-4086(Print),
Online ISSN: 2053-4094(Online)
Website: https://www.eajournals.org/
Publication of the European Centre for Research Training and Development-UK

Sustainability Reporting and Investors' Behaviour in the Oil and Gas Firms Listed in the Nigerian Capital Market

Sunday Asukwo Okpo, PhD, FCA
Department of Accounting, Faculty of Management Sciences, Akwa Ibom State University, Obio Akpa Campus.

Eno Gregory Ukpong, PhD
Department of Accounting, Faculty of Management Sciences, Akwa Ibom State University, Obio Akpa Campus.

Afiong Ukana Otung
Department of Accounting, Faculty of Management Sciences, Akwa Ibom State University, Obio Akpa Campus

doi: https://doi.org/10.37745/ejaafr.2013/vol12n65976 Published July 05, 2024

Citation: Okpo S.A., Ukpong E.G. and Otung A.U. (2024) Sustainability Reporting and Investors' Behaviour in the Oil and Gas Firms Listed in the Nigerian Capital Market, *European Journal of Accounting, Auditing and Finance Research*, Vol.12, No. 6, pp.,59-76

ABSTRACT: *Discussions on sustainability reporting and climate change have continued to dominate research space unabated due to the importance attached those matters. Investors use sustainability performance to evaluate the extent of the responsibility of firms and also as a basis for making their investment decision. Behaviours of investors in the capital markets are influenced by many factors. Consequently, this study investigated how sustainability performance disclosure influences investor's behaviour in the capital market. The independent variable of the study was sustainability performance disclosure which was broken down into environmental sustainability performance disclosure, social sustainability performance disclosure and governance sustainability performance disclosure; while the dependent variable was the investor's behaviour which was measured by market capitalisation. The population of the study consisted of all listed oil and gas firms in Nigeria Exchange Group while a sample of six firms were purposefully selected. The study utilised secondary data extracted from the annual reports of the selected companies, through contents analysis based on the checklist developed by the researcher based on the work of other researchers, for the period of 2015 to 2022. The data were analysed with correlation and multiple regression using SPSS version 20 packages. The results of the analyses indicate that a low significant positive relationship between environmental, social and governance sustainability performance disclosure and market capitalisation, though the relationship was insignificantly low for social performance disclosure. The study concluded that sustainability performance disclosure influences the behaviour of investors in the Nigeria capital market. The policy implication of the study is that firms that disclose sustainability reporting in their annual reports are likely to attract more investors. The study recommends amongst others that firms should deliberately increase their disclosure of sustainability performance reporting in order to attract investors to their shares and therefore increase their market value.*
KEYWORDS – Sustainability performance disclosure; investor's behaviour; market capitalisation; oil and gas firms, Nigerian capital market.

INTRODUCTION

Discussions on the impact of the interactions of businesses with the environment have continued to gain global attention (Denu, et al., 2023). This is due to the fact that the survival of businesses is dependent on the attention given to the environment by those businesses. The activities of businesses affect the environment either positively or negatively. The issue of sustainability stems from the drive to ensure that the future of the environment is secured for the unborn generation (Akpan & Simeon, 2021; Okon, et al., 2023). The impetus for the move towards the sustenance of the environment stems from the destructive activities of firms in the ecosystem particularly in the oil and gas sector. These activities have caused colossal damages to the ecosystem and any firm that does not exhibit any form of interest in the remediation process of the environment is usually adjudged to be unfriendly to the environment. Okon et al (2023) averred that sustainability reporting is a contemporary issue in accounting which emerged as a result of advancement in technology which exerts unprecedented pressure on the environment and society. Discussions on sustainability reporting have gained momentum in the last decade and this is caused by the moves of the global community and promoters of environmental sustenance to ensure continued survival of the ecosystem (Denu, et al., 2023; Udomah & Emenyi, 2023). The affection of stakeholders have increased over time towards firms that show reasonable evidence of their contributions towards remediation or replenishment of the natural environment or ecosystem.

Advancement in technology, increased competition among firms, the complexities in the production system, the yearning desires of firms to meet the expectations of the stakeholders, have been advanced as the activities that have increased pressure on the environment. The major effect of the degradation and depletion of the environment is that economic growth will be distorted resulting in widespread poverty, hunger, disease and poor wellbeing of human beings. In agreement with the above assertion, Akinadewo, et al (2023) argued that the threat to long term economic growth is as a consequence of environmental destabilisation and pollution as well as the non-renewability of natural resources which have become barriers to production globally.

The increasing agitation for disclosure of information on sustainability reporting arose as a result of increased enlightenment and awareness created by non-governmental organisations in particular and a host of other environmental activists. Gray (2006) suggests that the increase in awareness and concern about social and environmental issues and their impact on the corporate and economic influence, engender the growth in the demand for social and environmental sustainability.

Firms usually communicate their contributions towards the environment in forms of sustainability report included in their annual reports. Sustainability report is the mechanism through which the activities of firms are communicated to the stakeholders. It is the practice of disclosing the environmental, social and governance impacts of an organisation's activities to the stakeholders usually in the annual reports of firms. Prober, et al (2015) suggest that

sustainability is a global attempt by companies to integrate environmental impact on the decision making framework which conveys results to stakeholders. Milne and Gray (2012) describe sustainability reporting otherwise known as triple bottom line or corporate social responsibility (CSR) as a three part reporting framework that highlight the economic, environmental and social performance of an organisation in addition to financial performance. Udomah and Emenyi (2023) suggest that sustainability reporting is synonymous with triple bottom line reporting, corporate social responsibility reporting and development reporting.

The importance of sustainability reporting cannot over emphasized. By disclosing the ESG performance, companies are demonstrating their commitment to sustainability, their accountability for their actions and their responsiveness to stakeholder expectations. Consequently, investors can use the disclosure to assess the risk and opportunities associated with different businesses and as well be able to compare performance with industry standards and best practices. Moreover, firms by measuring and reporting their ESG impacts, are able to identify areas of their operations that require improvement, set their targets and goals, as well as monitor their progress and achievements. This will lead to adoption of new technologies, processes that can reduce their environmental footprints, improve their social impact, enhance their social impact and enhance their governance quality.

Sumiyati and Suhaidar (2020) suggest that rational investors usually carefully consider the information of future prospects of companies and the behaviour of information users will be greatly influenced by the content and scope of information received. Thus companies need to present information that can be relied upon during the process of decision making. Investors in the capital market are rational agents seeking for where to invest their funds in order to earn expected returns and at the same time mitigate against future risks. The financial statements communicate information that investors can leverage on in their investments decisions making. Accordingly, the sustainability report which is usually disclosed in the narrative section of the annual reports provides investors with the information required to evaluate the future prospects of their investments in the firms and at the same time assess the risks inherent in such firms. To facilitate their decision making process, investors usually carry out analysis, judgements and assessments of all relevant information available at its disposal.

Behavioural science has identified many factors that motivate investors to exhibit certain behavioural tendencies towards a particular investment. The factors narrow to the credibility of the source of information upon which such decisions are taken. Juxtaposing this with sustainability report it is certain that the value relevance of sustainability report lies in its credibility. The capital market is information driven. Consequently, the availability of new information particularly sustainability report is expected to drive share prices higher or otherwise, and by extension the market capitalisation. Efficiency of capital market implies that share prices incorporate all relevant information instantaneously (Schoenmaker & Schramade, 2023).

This study apart from adding to the numerous publications on sustainability reporting has contributed to knowledge in many ways. Firstly, its major focus is on how investors react to

availability of information on sustainability of environment. This is in line with the fact that prices of shares in the capital market are sensitive to availability of new information and this drives the capitalisation of the market. Secondly investors are able to assess the risks and potentials inherent in investment in any firm through their knowledge of the environmental performance of firms. Thirdly, most scholars focus on the effect of sustainability reporting on financial performance (the cause effect), Udomah & Emenyi, (2023); Okon, et al., (2023) while this study focuses on how disclosure of information on environmental performance assists investors in their decision making (the utilisation effect). This study provides the platforms for the assessment of investment potentials of firms according to their sustainability performance.

REVIEW OF RELATED LITERATURE

Conceptual review of sustainability reporting

Sustainability reporting can also be referred to as social disclosure or social performance (Gray, 2006). The concept of sustainable environment is an attempt to grapple the environment from the destructive activities of companies to preserve it for future generation. It encompasses all activities that are put together by the stakeholders to ensure the environment is replenished or restored to ensure continuity. The various stakeholders here include the non-governmental organisations, the agencies of governments, the communities, the consumers, the individuals and others.

The value-relevance of accounting information lies the ability of investors to use such information to make informed decisions. For accounting information to be value-relevant it must contain information that will motivate investors and endear them to the firm. Sustainability report which is usually disclosed voluntarily in annual reports of firms has been considered as an important component of the annual report. Efforts by businesses to enhance product quality, address climate change, reduce poverty and inequality, and create a more sustainable future are frequently detailed in annual reports (Alghamdi & Agag, 2023). Sustainability report is one of the items of voluntary disclosure in annual reports of companies.

Sustainability reporting is the process of voluntarily disclosing and communicating the performance of firms towards the environment, social and governance practices. Mutalib, et al (2020) describe sustainability report as a report published by a company or organisation about the economic, environmental and social impacts caused by its everyday activities. It forms core decision metrics by investors in their investment decision. This is so in view of the importance of remediation of environment to the survival of the firms in the medium to long term. For firms that strive to remain and continue in operation in the foreseeable future must not only engage in activities that will sustain the environment but must also invest reasonably in the environment. The concept of sustainability reporting has been taken to be synonymous to corporate social responsibility (CSR) and triple bottom line reporting (see Udomah & Emenyi, 2023; Mutalib, et al, 2020).

One of the most useful description of sustainability reporting is provided by Global Reporting Initiative (GRI) (2011) as the practice of measuring, disclosing and being accountable internal

and external stakeholders for organisational performance towards the goals of sustainable development. The environment in which businesses operate is an important contributor to the survival of the business. According to Okpo (2020) the business receives from the environment (input or raw material and other natural benefits such as weather, rain, sunshine) and in turn gives back to the environment finished products, waste and other components some of which may naturally be harmful to the environment. The activities of companies have not only impacted on the environment negatively, but has also affected the economic and social strata of the society. Therefore the need for companies to take actions that will restore the environment to ensure the continuity of such companies cannot be overstretched but it is also a very important measure of ensuring that the going concern of such firms is sustained. In the strength of the above, Akinadewo, et al, (2023) argued that the threat to long-term economic growth is as a result of environmental destabilization and pollution and the non-renewability of natural resources as a barrier to production globally.

The importance of sustainability reporting cannot be overemphasized. Apart from assisting investors in their decision making process, it is a mean through which organisations convey their non-financial performance and consequences on the economy extensively (Sumiyati & Suhaidar, 2024). Moreover, it enables companies to provide information regarding the non-financial aspects of its operations, ultimately allowing companies to actively engage in a solution towards improving firm accountability, transparency and corporate image (Whetman, 2017). Moreover, sustainability reporting enable firms to assess their risk exposure to natural occurrence and the mitigating panacea available to them. Gray (2006) suggests that the market generally sees social and environmental matters as one of the manifestations through which economic success and wellbeing might eventually interact.

Sustainability reporting is relevant not only to the reporting entity but also to the users of the sustainability reports. To the reporting entity, sustainability report enables the disclosing entity to identify risks and opportunities that may impact on long term performance and improve transparency and brand image. Thus by reporting on sustainability, firms can mitigate impacts from potential ESG risks, reduce waste and thereby increase cost savings ensuring compliance with regulatory requirements as well as making effective strategic decisions. To the users (investors) of sustainability reports, it enables them evaluate the entity they want to invest in and consequently, the report becomes the tool upon which their investment action is premised. Gray (2006) suggests that the matter of sustainability is as important as any other concern of the business and that it needs to be developed in a mandatory context. Sumiyati and Suhaidar (2024) averred that companies with strong ESG disclosures are often seen as a better long-term stakes, which tend to be more resilient, better managed and better at mitigating risk, which can lead to superior financial performance over time. Their study reveal that investors tend to buy shares of companies that also attach sustainability reports compared to companies without sustainability reports. By integrating the concept of sustainability to the company's decision-making process the industry are able to overcome the present and emerging sustainability challenges within operational environment (Husgafvel, et al, 2015). Wu and Li (2023) argued that advocates of sustainability report maintained that companies that disclose strong

environmental performance can benefit financially, gaining corporate legitimacy, positive reputation and stakeholder support.

The International Financial Reporting Standards (IFRS) S1 documents that information about sustainability-related risk and opportunities is useful to primary users because an entity's ability to generate cash flows over the short, medium and long term is inextricably linked to the interactions between the entity and stakeholders, society, the economy and the natural environment throughout the entity's value chain (Deloitte, 2024). The institutional investors need to understand that sustainability and climate issues are material to financial risk analysis. Investors are increasingly identifying the links between ESG performance, value creation and risk reduction. This understanding provides the roadmap for long term investment decisions.
Despite the robust benefits of sustainability reporting, Alghamdi and Agag (2023) however argued that there is a chance that sustainability reporting reduces rather than increases business value due to the high cost involved, the opportunity costs involved and investor concerns about greenwashing. They further argued that traditional investors may be hesitant to put their money into a company whose executive spends a lot of money on social environment programme without seeing a significant return on investment.

Components of sustainability reports

Sustainability performance is usually premised on three pillars: environmental sustainability performance, social sustainability performance and governance sustainability performance.

Environmental sustainability performance

Environmental performance can be described in several ways. Environmental performance can be described as the performance of firms towards the environment with a view to remediating it from degradation. It represents those measures that are carried out by firms in order to address the adverse effect of their activities on the environment. Albertini (2016) documents that academic research posits environmental performance as the measurable results of the environmental management system in relation to the control that the organisation has over its environmental impacts based on its environmental policy. It is used to ascertain the effectiveness of the environmental initiatives an organisation puts in place to mitigate and protect the environment. It can also be described as indicators whose aim is to report the efficiency in resource utilization, waste and emission of different businesses or business's processes. To support the various definitions, Alsayegh, et al, (2023) averred that practices that have a net positive impact on the environment are referred to as environmental sustainability governance practices.

Sumiyati and Suhaidar (2024) document that sustainability report contains important information about environmental sustainability performance. This information include information about their impact on the air, water, soil, biodiversity and human health. Environmental sustainability has been as a process of consuming natural resources at a rate below the natural regeneration or that can degrade the ecosystem or to consume a substitute, generating limited emissions and not being engaged in activities that can degrade the ecosystem (Kleindorfer, et al., 2005 as cited in Rizvi and Garg, 2022).

Social sustainability performance

Social performance can be described as how well the mission of an organisation is translated into reality through organisation's actions. It is concerned with how well an organisation is achieving its mission or social goals. Social performance relates to the social contribution of firms to the community in which they operate. Such information include workplace health, workers' right, human rights and differences, wages and working conditions (Sumiyati & Suhaidar, 2024). McKenzie (2004) as cited in Rizvi and Garg (2022) described social sustainability as a process of actively supporting the preservation and creation of skills as well as the capabilities of future generations, promoting health and supporting equal and democratic treatments that allow for good quality of life both inside and outside of the company context.
Stakeholder pressure is a significant motivator for corporations to embrace sustainability embrace sustainability measures and practices, particularly social sustainability. The stakeholders include community and employees. Social sustainability ensures that human rights are complied with, equity and ethics across firms (Denu, 2023). According to Langhelle (1999) as cited in Denu, et al, (2023) social sustainability is an ethical rule of conduct for human survival and expansion that must be achieved in a mutually inclusive and sensible manner. Some of the notable social sustainability practices include worker's rights to equal treatment, avoidance of discrimination against minority and equal training or educational opportunities. It also embraces the products and process aspect of people's safety and well-being.

Governance sustainability performance

Corporate governance covers the structure, principles, processes and other mechanisms used by the board of directors to manage and oversee companies. The importance of entrenching a good code of corporate governance in an organisation cannot be overemphasized. Corporate governance aims to enhance stewardship and transparency and plays a significant role in bridging the information expectation gap between organisation and stakeholders (Hmid, et al, 2020). The investors have come to understand that sustainability and climate issues are a critical factor in the financial risk analysis. They are increasingly identifying the links between ESG performance, value creation and risk reduction.

This understanding provides a direction for investment decision. Corporate governance provides a clearer vision of how the company is governed for growth. Thus the concept of sustainability reporting becomes more robust and encompassing when consideration is given to the governance structure beyond environmental and social factors. Afterall, the extent of the practice of sustainability is determined by the extent of the involvement of the board. Corporate governance provides a clearer vision of how the company is governed for growth. Thus the concept of sustainability reporting becomes more robust and encompassing when consideration is given beyond the environment and social factors to how the companies are governed. Afterall the involvement of the board determines the extent of the practice of environmental and social issues.

The study by Erin, et al, (2021) revealed that board governance variables are significantly associated with sustainability reporting quality. Awen and Yahaya (2023) suggest that

governance performance include the code of conduct, business principles, accountability, transparency, disclosure, executive pay, board diversity, board structure, bribery and corruption, stakeholder's engagement and shareholder's right.

Investors' behaviour in the capital market.

Investor's behaviour can be described as the responsiveness of investors towards investment opportunities. The response of investors is based on availability of relevant information. Accordingly, Schoenmaker and Schramade (2023) suggest that the efficient market usually incorporates all relevant information instantly. However, the analysts pay attention to newly arriving information, judge its value relevance and use that information to take investment decision.

The risk-averse investors usually take into consideration those information that will enable them take decision bothering on not only whether their investments in such firms is secured or not but also on the ability of such investments to earn sufficient returns to compensate for the cost of tying down the capital. The information that facilitates investment decisions may include financial and non-financial, quantitative and qualitative, voluntary and mandatory, internal and external and sometimes intuition. Anao et al (1993) document that the behaviour of investors is dependent on the category in which the investors fall. The risk exposure of investors depends on the extent to which investors are willing to take risk. Anao et al (1993) categorise investors into three: the defensive investor who is very conservative and extremely averse to risk, the enterprising investor who takes calculated risk and the speculator who is a gambler and lover of risk.

The behaviour exhibited by investors in the capital market is dependent not only on the category they belong but also on other factors which include the quality of information which is available in the decision making process. For instance Okpo and Aruwa (2021) found that investor's behaviour is positively affected by disclosure of information on risk. Consequently information on sustainability reporting has been adjudged to be value relevant (Schoenmaker and Schramade, 2023). The investor's behaviour towards available sustainability reports is crucial in the investment decision making process. The capital market investor's behaviour towards disclosure of sustainability reports can be categorise into two. The first category is that investors who are attracted to the firm due to disclosure of information on sustainability will tend to be motivated to invest in such firms. Their decision to invest in those firms is based on their rational assessment of the worthwhileness of investing in such firm. Thus Shanmugasundaram (2011) argue that investors behave rationally towards specific capital market information. The second category is the reverse, that is, when the information on sustainability is not persuasive enough, investors will be motivated to disinvest or worse still, not invest in such firm. In either case, the effect is that the market capitalisation either expands or contracts. Thus the disclosure of information on sustainability is seen as a catalyst that stimulates expansion or contraction of market capitalisation.

Theoretical perspective

The sustainability reporting can be explained by many theories such as agency, stakeholder, signalling, capital needs and a host of others. However, this study is anchored on stakeholder's theory developed by Edward Freeman in 1984. This theory emphasises the importance of stakeholders in the decision making package of entities. This theory states that all stakeholders are important and must be considered in every action of management. It further suggests that any one that is affected by the entity or its workings in any way should be considered as a stakeholder. This implication of this theory is that organisations should strive to do what is right to the all the stakeholders and in doing so the entity will experience a lasting success.

Mahajan et al, (2023) document that stakeholders theory is concerned with organisation's aim of generating multiple benefits for different stakeholders (groups and individuals) who can affect and be affected by the organisation (civil societies, communities, investors). Obiora, et al (2024) suggest that stakeholder theory emphasized that the success of the business is contingent on the effective management of relationship with all stakeholders.

The stakeholder theory is used to explain the relationship between sustainability reporting disclosure and investor's behaviour in that the investor that utilises the sustainability reports in their decision making is a stakeholder whose interest must be protected by the management of the firm. The disclosure of firms' information on environmental, social and governance performance is an important decision of management which affects various investors (stakeholders) directly and indirectly. Consequently, the disclosure of information on sustainability report in annual report of companies is an important function of management which is capable of arousing the interest of investors in such firms.

Empirical reviews

The scholarly articles of many authors on sustainability reporting have been reviewed in order to gain insight into the views and findings of others. Udomah and Emenyi (2023) investigated the effect of sustainability reporting on financial performance of cement companies in Nigeria. Using ex-post facto research design with data collected from annual reports of selected cement companies in Nigeria between the year 2016 and 2020, the findings show that there is an insignificant relationship between sustainability reporting and financial performance of cement companies in Nigeria.

Okon et al., (2023) studied the effect of sustainability reporting on the financial performance of listed oil and gas firms in Nigeria. The study adopted ex-post facto research design with data derived from annual reports of sampled oil and gas firms in Nigeria from 2012 to 2021. The data were analysed with robust panel least squares regression. The findings of the study show that social, health, environmental and safety disclosures have significant positive effect on the return on capital employed.

Etim and Akpan (2023) examined the effect of sustainability disclosure on financial performance of oil and gas companies listed on the floor of the Nigeria Exchange Group for the period 2012-2021. The dependent variable of the study being financial performance was

proxied by return on capital employed (ROCE) while the independent variable of the study being sustainability disclosure was proxied by social, economic, environmental and governance practices disclosure. The research design adopted for the study was ex post facto, secondary data were used, four hypotheses were tested using pool ordinary least square regression analysis and the statistical software employed was STATA 14. The findings of the analysis revealed that social sustainability disclosure, economic sustainability disclosure, environmental sustainability and governance disclosure have significant positive effect on return on capital employed of oil and gas companies in Nigeria. Thus, it was concluded that sustainability disclosure has significant effect on financial performance of oil and gas companies in Nigeria.

Mgammal and Al-Matari (2022) conducted a study on the mitigating effect of sustainability report on investment decision and share price relationship. Their findings with a sample of 240 observations from the first quarter of 2014 of all banks in Saudi Arabia reveal that sustainability report and share price show negative significant interaction while publication of the sustainability reporting on the relationship between investment decision and share prices was significantly positive. The results suggest that sustainability reporting information is considered for the benefit of investors and sustainability reporting data is used to supplement accounting information in decision making.

Mutalib, et al (2020) investigated the impact of sustainability reporting on performance of selected quoted companies in Nigeria. The specific objective of the study was to ascertain the impact of sustainability reporting on return on equity, return on assets, earning per share and net profit margin. The study adopted ex-post facto research design with data sourced from annual report of 76 non-financial firms quoted on the Nigerian stock exchange (Nigerian Exchange Group). The data were analysed using t-statistics and the findings revealed that sustainability reporting has impact positively on the financial performance of firms.

Alhassan, et al (2021) studied how sustainability reporting affects the performance of listed industrial goods firms in Nigeria. The data for the study were extracted from annual reports of selected industrial goods firms in listed on Nigeria stock exchange from 2011 to 2020. The data were analysed with correlation and regression models. The findings reveal that sustainability reporting has positive significant effect on return on assets, return on equity and earnings per share.

Furthermore, Kabir, et al., (2021) conducted a study on the effect of sustainability reporting on the financial performance of oil and gas firms in Nigeria. The study population comprised of 12 firms of which 7 were selected. The data for the study were sourced from annual reports of the selected firms. The results of analysis of data indicate that economic sustainability and environmental sustainability have significant effect on financial performance; while social sustainability has positive insignificant effect on financial performance.

Alghamdi and Agag (2023) explored the influence of sustainability reporting on customer behaviour and firm value. Data for the study were collected from petrochemical companies in

Saudi Arabia from 2012 to 2022. The data were analysed using fixed effect panel model. Their findings reveal that sustainability reporting has negative impact on firm value and customer behaviour.

Akpan and Simeon (2021) ascertained the effect of sustainability disclosures on cash flow return on investment of shareholders of oil and gas companies in Nigeria. Secondary source of data was used and the research design adopted was *ex post facto*. The study adopted time series and cross sectional analysis of selected oil and gas firms quoted on the Nigeria Stock Exchange as at 31st December 2020 for a period of seven years spanning 2014-2020. Content analysis methodologies were employed to get data for the sustainability parameters. To test the hypotheses which were formulated in the study, the researcher adopted the robust panel least square regression technique. The results from the study reveal that social sustainability disclosure have a positive significant effect on cash flow return on investment of listed oil and gas firms in Nigeria. Also, the results reveal an insignificant effect of health and safety disclosure as well as environmental disclosure on cash flow return on investment. It was concluded that sustainability disclosures do not significantly affect cash flow return on investments of shareholders.

METHODOLOGY

This study adopts ex-post facto research design due to the fact the data for the study were extracted from secondary sources which is the annual report of the sampled companies. The population of the study comprises of all the nine oil and gas firm operating in Nigeria. Utilising the purposeful sampling technique, six firms were selected based on the availability of their annual reports for the period of 2015 to 2022.

Hypotheses development

In order to achieve the objectives of the study some hypotheses were postulated.
The importance of environment to the sustenance of oil and gas companies cannot be overemphasised. The companies draw their existence from the environment and as such the disclosure of their efforts to remediate the environment can be expected to impact positively on the behaviour of investors. Therefore the first hypothesis attempts to suggest the empirical relationship between environmental performance and investor's behaviour which was proxied by market capitalisation.

H_{01} : The disclosure of information on environmental performance is not significantly related to the market capitalisation of oil and gas firms in Nigeria.

The governance of firms apart from signalling compliance to good corporate governance is an indicator that the firm is properly managed. Consequently, the disclosure of information on governance performance should present signal that the future of such companies can be sustained. Thus the second hypothesis postulated to test the existence of any relationship between governance performance and market capitalisation.

European Journal of Accounting, Auditing and Finance Research
Vol.12, No. 6, pp.,59-76, 2024
Print ISSN: 2053-4086(Print),
Online ISSN: 2053-4094(Online)
Website: https://www.eajournals.org/
Publication of the European Centre for Research Training and Development-UK

H_{02} : The market capitalisation of oil and gas firms in Nigeria is not significantly related to the disclosure of information on governance performance disclosure.

The social interactions of companies with the people and communities in which companies exists determine the peace, progress and long term survival of such companies. Therefore when such information is disclosed the investors are expected to show their appreciation by investing in such companies. Therefore the third hypothesis is developed.

H_{03} : Corporate governance performance disclosure is inversely related to the market capitalisation of oil and gas firms in Nigeria.

Model development

The independent variable of the study was sustainability report which was decomposed into three components: environment, social and governance, while the dependent variable was the investor's behaviour which was proxied by market capitalisation. Therefore the first model is established to show the relationship between the dependent and independent variables as follows:

$$MCAP = f(SURD) \quad - \; - \; - \; - \; - \; - \; - \; - \quad (i)$$

The second model established the relationship among the independent variables:

$$SURD = f(EPD, SPD \; \& \; GPD) \quad - \; - \; - \; - \; - \quad (ii)$$

The last model is the econometric model which harmonises the components of the independent and dependent variables into one model as follows:

$$MCAP_t = ß_0 + ß_1EPD_t + ß_2SPD_t + ß_3GPD_t + \mu_t \quad - \; - \; - \quad (iii)$$

Where

$MCAP_t$ = Market capitalisation in period t.
$SURD_t$ = Sustainability report disclosure in period t.
$ESPD_t$ = Environmental sustainability performance disclosure in period t
$SSPD_t$ = Social sustainability performance disclosure in period t.
$GSPD_t$ = Governance sustainability performance disclosure in period t.
μ_t = Stochastic error term included to measure other factors that affect the dependent variable which are not captured in the model in period t.
$ß_0$, $ß_1$, $ß_2$ and $ß_3$ are coefficients that will be derived from the results of analyses of data.

Data generation

The data for this study were extracted from the annual reports of the selected oil and gas firms for the period of 2015 to 2022. Contents analysis was adopted in extracting the disclosure information based on the checklist formulated by the research based review of extant literature and Global Reporting Index (GRI). Following from prior studies of Okpo and Aruwa (2021), Awen and Yahaya (2023), Udomah and Emenyi (2023), a score of 1 was awarded when disclosure was made and 0 was awarded when there was no disclosure.

The average score of the data were obtained using the model

$$D_{score} = \frac{\sum(\text{Disclosure scores})}{\text{Maximum number of disclosure scores}}$$

European Journal of Accounting, Auditing and Finance Research
Vol.12, No. 6, pp.,59-76, 2024
Print ISSN: 2053-4086(Print),
Online ISSN: 2053-4094(Online)
Website: https://www.eajournals.org/
Publication of the European Centre for Research Training and Development-UK

The aggregate of the disclosure scores was obtained for the disclosure of each variable. From extant literature, the researcher constructed the disclosure checklist for the three variables as contained in table 1 below.

Environmental disclosure	Social disclosure	Governance disclosure
• Biodiversity • Waste management • Emission management • Carbon management • Affluence • Environmental impact • Environmental regulation • Environmental compliance information • Water use • Material use	• Workforce health and safety • Customer health and safety • Gender diversity. • Equal opportunity. • Poverty alleviation. • Community impact. • Supply chain and management. • Training and education. • Customer privacy • Wages and working conditions	• Code of conduct for staff • Business principles. • Accountability. • Transparency • Disclosure of executive pay. • Board diversity. • Board structure. • Corruption and bribery. • Stakeholder's engagement. • Shareholder's right.

Figure 1 – Checklist of environmental, social and governance disclosure.
Source – Compiled by researcher, 2024.

RESULTS OF DATA ANALYSIS

The results of the analysis of data are presented in table 1.

Table 1 - Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.391603717	10.922400.058		.677	.502
	ESPD	1.5825666581	1.7030176.677	.122	1.979	.357
	SSPD	3.2328410646	1.6105228.341	.263	2.007	.050
	GSPD	1.9719734519	1.5720809.766	.165	2.254	.215

a. Dependent Variable: MCAP

From the results of the analysis, the beta coefficient of the environmental sustainability performance stood at 0.122 indicating that 12.2% of variation in market capitalisation is accounted for by changes in the environmental sustainability performance disclosure. Also the Pearsonan product moment correlation coefficient of the relationship between environmental sustainability performance (see table 2) stood at 0.352 indicating a low positive relationship between environmental sustainability performance disclosure and market capitalisation.

The beta coefficient of the relationship between social sustainability performance disclosure stood at 0.263 indicating that 26.3% changes in market capitalisation is accounted for by

changes in social sustainability disclosure. The correlation coefficient of the relationship between social sustainability performance disclosure and market capitalisation stood at 0.058 indicating that there is a very low positive relationship between social sustainability performance disclosure and market capitalisation.

The beta factor of the relationship between the governance sustainability performance disclosure stood at 0.165 indicating that 16.5% of changes in market capitalisation is accounted for by changes in the governance sustainability performance disclosure. Moreover, the correlation coefficient of the relationship between governance sustainability disclosure and market capitalisation stood at 0.213 indicating that there is low positive correlation between governance sustainability performance disclosure and market capitalisation.

Table 2 - Correlations

		MCAP	ESPD	SSPD	GSPD
MCAP	Pearson Correlation	1	-.127	.255	-.169
	Sig. (2-tailed)		.352	.058	.213
	N	56	56	56	56
ESPD	Pearson Correlation	.127	1	.033	.081
	Sig. (2-tailed)	.352		.809	.551
	N	56	56	56	56
SSPD	Pearson Correlation	.255	.033	1	.021
	Sig. (2-tailed)	.058	.809		.880
	N	56	56	56	56
GSPD	Pearson Correlation	.169	.081	.021	1
	Sig. (2-tailed)	.213	.551	.880	
	N	56	56	56	56

Source – results of analysis compiled by the researcher, 2024.

Test of hypotheses

The various hypotheses earlier postulated are tested.

Hypothesis one

This hypothesis states that the disclosure of information on environmental performance is not significantly related to the market capitalisation of oil and gas firms in Nigeria. The results of the analysis of data the t-value stood at 0.352 and this is greater than 0.000. This indicates that the null hypothesis (H_o) is rejected. This implies that there is significant relationship between environmental sustainability performance disclosure and market capitalisation of listed oil and gas firms in Nigeria.

Hypothesis two

This hypothesis states that the market capitalisation of oil and gas firms in Nigeria is not significantly related to the disclosure of information on governance performance disclosure. The t-value of 2.007 is greater than 1.960 at 5% level of significance and consequently the null hypothesis (H_0) is rejected thus implying that the market capitalisation is significantly related to the disclosure of information on governance sustainability performance.

Hypothesis three

This hypothesis states that corporate governance performance disclosure is inversely related to the market capitalisation of oil and gas firms in Nigeria. From the result of analysis the t-value of 2.254 is greater than 1.960 at 5% level of significance indicating that the null hypothesis (H_0) should be rejected. This means that the corporate governance performance disclosure is significantly related to the market capitalisation of the listed oil and gas firms in Nigeria.

DISCUSSION OF FINDINGS

The adjusted coefficient of determination of the relationship between sustainability performance disclosure and market capitalisation stood at 0.159 indicating that 15.9% of variation in market capitalisation of oil and gas firms is accounted for by changes in sustainability performance disclosure.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.332[a]	.210	.159	20027390.94386

a. Predictors: (Constant), GSPD, SSPD, ESPD

The findings of this study are consistent with prior studies of Okon, et al (2023)., Mgammal and Matari (2022), Matalib, et al., (2020), Alhassan, et al., (2021); Akpan and Simeon (2021), who all found positive relationship between sustainability reporting and financial performance, market value and return on capital employed respectively. Also Etim and Akpan found a positive relationship between the parameters of sustainability disclosure and return on capital employed. However, Udomah and Emenyi (2023) found insignificant relationship between sustainability reporting and market value. The findings of this study clearly demonstrates the importance of sustainability performance disclosure in creating incentives to investors particularly in the capital market. This is based on the fact that when firms disclose their sustainability performance investors tend to have more confidence in such firms and this will attract such investors to the firms. Moreover, according to Okpo, et al (2024) when firms enunciate policies that ensure the sustainability of environment it will send signals to the stakeholders that such firms have future growth prospect. The findings also justify the move by stakeholders on the importance of sustainability performance as additional boost to enhance confidence of investors.

CONCLUSION AND RECOMMENDATIONS

From the findings of the study it was concluded that disclosure of sustainability performance reporting in the annual reports of oil and gas firms influences the behaviour of investors in the capital market. Arising from the outcome of the study it is evident that the disclosure of sustainability performance reports is inevitable for firms in the oil and gas sector if the firms want to be perceived as responsible corporate entities. Moreover, prior studies found a positive relationship between sustainability disclosure and financial performance of the firms (Okon, et al., 2023; Udomah & Emenyi, 2023; Akpan & Simeon, 2021). Consequently, the study

recommends that oil and gas firms should deliberately engage in good corporate social responsibility and disclose such adequately in their annual reports so that stakeholders will be acquainted of their performance. Moreover, sustainability performance guarantees the security and future of firms, therefore oil and gas firms should be compelled through appropriate enactment of the law to set aside a certain percentage of their earnings for the purpose of replenishing the environment. Furthermore, continuous sensitization and enlightenment of oil and gas firms on the importance of disclosing their deliberate sustainability activities on the environment should be heightened.

REFERENCES

Akimadewa, I. S., Adebayo, O. I., Ogundele, O. S. & Jaba, A. A. (2023). Sustainability reporting practice and financial performance of listed goods firms in Nigeria, *European Journal of Science, Innovation and Technology*, 3 (3), 40 – 55.

Alghamdi, O. A. & Agag, G. (2023). Unlocking the power of reporting: exploring the link between voluntary sustainability reporting, customer behaviour and firm value, *Sustainability*, 15 (21).

Akpan, D. C. & Simeon, U. J. (2021). Corporate sustainability disclosures and cash flow return on investment of shareholders of oil and gas companies in Nigeria. *International Journal of Innovative Finance and Economics Research*, 9(3), 111-124.

Alhassan, I., Anwarul Islam, K. M. & Shariful Harque, Md. (2021). Sustainability reporting and financial performance of listed industrial goods sector, *International Journal of Accounting and Finance Review*, 9 (1), 46 – 61.

Alsayegh, M. F., Ditta, A. Maymood, Z. & Kowser, R. (2023). The role of sustainability reporting and governance in achieving sustainable development goals: and international investigation, *Journal Sustainability*, 15 (4), 1 – 18.

Anao, A. R., Osaze, B. E. & Ekundayo, J.O. (1993). Investment Analysis and Management, The Chartered Institute of Bankers of Nigeria, Lagos.

Awen, B. I. & Yahaya, O. A. (2023). Determinants of environmental disclosure quality using Probit estimation among deposit money banks in Nigeria, downloaded from: https://www.researchgate.net/publication/372152116.

Awen, B. I. & Yahaya, O. A. (2023). The role of women in sustainability reporting, Wayamba Journal of Management, 14 (1), 16 – 34.

Deloite (2024). IFRS S1 – General Requirements for Disclosure of sustainability-related financial information, downloaded from: Deloitte.com.

Denu, M. K., Bentley, Y. & Duan, Y. (2023). Social sustainability performance: developing and validating measures in the context of emerging African economies, Journal of Cleaner Production, 412 (1), 1 - 16

Erin, O., Adegboye, A. & Bamigboye, O. A. (2022). Corporate governance and sustainability reporting quality: evidence from Nigeria, 13 (3), 680 – 707.

Etim, J. A., & Akpan, D. C. (2023). Sustainability disclosure and financial performance of oil and gas companies in Nigeria. *Journal of Business and African Economy,* 9(3), 39-55.

Global Reporting Initiative (2011). Sustainability reporting: G3.1 version retrieved from:

http://globalreporting.org

Gray, R. (2006). Does sustainability reporting improve corporate behaviour? Wrong question? *Accounting and Business Research, International Accounting Forum*, 65 – 88.

Hamid, S., Draz, M. U. & Lai, F. (2020). The impact of corporate governance and sustainability reporting on integrated financial reporting: A conceptual framework, SAGE open, April – June, 1 – 15.

Husgafvel, R., Pajunen, N. Virtanen, K., Paavola, I., Paallysaho, N & Inkinen, V. (2015). Social sustainability performance indicators – experience from process industry, International Journal of Sustainable engineering, 8 (1), 14 – 25.

Ibrahim, Y. K, Mohammed, A. N. Agbi, S. E., Kaoje, N. A. & Abdulkarim, U. F. (2021). Sustainability reporting and financial performance of listed oil and gas firms in Nigeria, *Gusau Journal of Accounting and Finance*, 2 (3), 1 -16.

Mahajan, R., Lim, W. M., Sareen, M., Kumar, S. & Panwar, R. (2023). Stakeholder theory, *Journal of Business Research*, 166, 1 – 16.

Mgammal, M. H. & Al-Matari, E. M. (2022). Sustainability reporting disclosure moderating effect on investment decision, financial accounting variables and share prices relationship: A case of Saudi Arabia, *Contaduria y Administracion*, 6 (7), 210 - 237

Milne, M. J. & Gray, R. (2013). Whither ecology? The triple bottom line, the global reporting initiative and corporate sustainability reporting, *Journal of Business Ethics*, 118 (1), 13 – 29.

Mutalib, Y. O, Itiabije, E. U. Okon, A. E. & Chijioke, O. E. (2020). Impact of sustainability reporting on corporate performance: evidence from Nigeria Stock Exchange, *Journal of Management and Entrepreneurship*, 20 (7), 345 – 367.

Okon, L. J., Philip, I. B. & Okpokpo, A. S. (2023). Sustainability reporting ad financial performance, *AKSU Journal of Administration and Corporate Governance*, 3 (1), 32 – 44.

Okpo, S. A. (2020). Issues and perspectives in environmental accounting practice in a contemporary setting with Nigeria in focus, *INOSR Arts and Humanities*, 6 (1), 76 – 86.

Okpo, S. A. & Aruwa, S. A. S. (2021). Voluntary risk disclosure and investor's behaviour in the Nigerian capital market. *AKSU Journal of Administration and Corporate Governance*, 1 (3), 11 – 21.

Okpo, S. A., Umoren, A. O. & Simeon, U. J. (2024). Gaining investor's confidence through environmental information disclosure in annual reports of companies in Nigeria, *International Journal of Advances in Management and Economics*, 13 (02), 01 – 14.

Prober, I., Meric, I. & Meric, G. (2015). Does company green score affect stock price? *Review of Business and Finance Studies*, 6 (3), 11 – 19.

Rizvi, Y. S. & Garg, R. (2022). Environmental sustainability performance: a study of the role of green human resource management and other green internal intellectual capital components, *International Journal of Business and Systems Research*, 16 (1), 65 – 105.

Schoenmaker, D. & Schramade, W. (2023). Capital market adaptability, investor behaviour and impact, *Corporate Finance for long-term value*, 395-428.

Shanumugasundaram, V. (2011). Investor behaviour towards various capital market information, Indian Journal of Commerce and Management Studies, 2 (7), 40 -45.

Sumiyati & Suhaidar, (2020). How does important sustainability reporting for investment decision making, *SRIWIJAYA International Journal of Dynamic Economics and*

Business, 3 (4), 2 – 18.

Udomah, M. O. & Emenyi, E. O. (2023). Sustainability reporting and financial reporting of selected cement firms in Nigeria, *GPH International Journal of Business Management*, 06 (08), 40 – 65.

Whetman, L. L. (2017). The impact of sustainability on firm's profitability, *Undergraduate Economic Review*, 14 (1), 1 – 21.

Wu, H. & Li, J. (2023). The relationship between environmental disclosure and financial performance: mediating effect of economic penetration, *Economic Research – Ekonosmka (Instrazuaja)*, 36 (1), 116 – 142.