CORPORATE BOARD DIVERSITY AND ENVIRONMENTAL SUSTAINABILITY REPORTING IN OIL AND GAS FIRMS IN NIGERIA

By

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ABSTRACT
This study investigates how corporate board diversity affects environmental sustainability reporting in Nigeria oil and gas firms using data from 2011 to 2022. This study's primary focused on the negative effects of oil spills in Nigeria's Niger Delta. Expost-facto research design was used as a guide while multiple regression analysis was used in analyzing the data. Results indicate negative but statistically significant relationship between environmental sustainability reporting and board size (BSZ), a negative but statistically insignificant relationship between gender diversity and environmental sustainability reporting and board nationality (BNAT), and a negative but statistically insignificant relationship between gender diversity (BGD) and environmental sustainability reporting. Additionally, there was a positive correlation between environmental sustainability reporting and board independence (BIND), even if the correlation was not statistically significant. The study concludes that, despite the majority of independent variables showing a negative correlation with environmental sustainability reporting, corporate board diversity is believed to have a higher impact on corporate information disclosure. Boards of Nigeria oil and gas firms may exert more influence over environmental sustainability reporting if their numbers were fewer. The study recommend that smaller boards should be encouraged in order to promote effective information disclosure. It was also recommended that the Nigeria government and corporate organization should be aware of their immediate responsibility in protecting and maintaining the natural environment.

Keywords: Oil and Gas, Corporate, Reporting, Governance, Environment

INTRODUCTION
Background to the Study
Nigeria is the topmost producer of crude oil in the continent of Africa and is ranked tenth in the globe in terms of oil production. Nigeria serves as a prominent illustration of a significant economy that is dependent on crude oil. Nigeria is one of the major oil-producing and oil-exporting countries in Africa (Kamer, 2023). Exploration and

extraction of petroleum has taken over half of the nation's Niger Delta, resulting in a complex network of access roads, pipelines, wells, gas flaring, dredge spoils, and flow stations strewn everywhere. These oil facilities are usually located close to homes, businesses, schools, and other community amenities. Kadafa (2012) investigates the ecological consequences of oil exploration and extraction in Nigeria's Niger Delta. The oil industry's industrial operations have caused environmental problems that have permanently harmed Nigeria's oil-producing regions and ecosystem.Rusted pipes, poor infrastructure upkeep, leaks or spills at well heads, human error, oil theft, and intentional vandalism are the main causes of oil spills in the region (Adeola, 2000).Due to the operations of the oil and gas firms operating in Nigeria's Niger Delta, there has been an oil spill, which has negatively impacted the environment and caused hardship for the local population.

According to Ayanlade and Proske (2016) oil spills have caused significant environmental degradation, environmental damage, and environmental marginalization. As a result, the locals have had to deal with challenging situations that have affected their social and economic lives. The management of these firms and the appropriate authorities have continued to give the little importance in maintaining the natural. The administration and directors of these companies have consistently been carrying out operations, resulting in the people suffering excruciating anguish from the oil spill. Stakeholders inclusion is key when it comes to reporting on environmental sustainability in firms annual reports (Etuk, Uford & Udonde, 2023). One significant trend in the business world today is the pressure on companies to report on a wide range of themes, including social, environmental, and governance issues. According to Ekundayo (2016) firms are compelled to reveal the environmental impact of their operations in order to show that they care about the environment. According to Okafor (2018), environmental accounting disclosures raise an organization's worth and, thus, its profitability. According to Ohidioa., Omokhudu, and Oserogho (2016) organisations and people should make their financial commitments towards environmental improvement. This is particularly true for firms whose operations expose them to risks associated with the environment, such as pollution. Modern firms are trying to meet the demands and needs of various stakeholders that would enhance environmental commitment, openness, accountability, and risk reduction by providing reports on numerous elements effecting their sustainability.

Statement of the Problem

Even though most corporate boards are aware of their poor environmental performance especially in the Niger delta region of Nigeria, where most oil and gas industries are headquartered, environmental issues have historically been treated with a certain lightness and limited relevance by oil and gas firms. Major stakeholders, communities, and other groups have frequently demonstrated in response to concerns about environmental sustainability and performance. A competent board will constantly seek to fulfill its responsibilities by developing the necessary plans. Corporate environmental responsibility can be enhanced by adding diversity to the board. It is expected that a diverse board of directors will address diversity, equity, and inclusion (DEI) initiatives given their growing importance on the corporate agenda.

A board with fewer members who adhere to the same ideology and philosophy may produce stereotyped assessments lacking in uniqueness, imagination, and creativity. Moreover, rules made by a small group of people usually don't last long (Jizi et al., 2014). A diverse board can assist firms by adding resources, fresh ideas, and expansion to the sustainability of corporate organisation. Numerous empirical studies reviewed, indicate that there is lack of adequate recent research on environmental sustainability reporting in Nigeria oil and gas firms in Niger delta, as well as a common observation of authors' disagreements on the significance of corporate board diversity on environmental sustainability reporting. The possibility that corporate board diversity as a vital phenomenon could have on environmental sustainability reporting in Nigeria's oil and gas firms operating in the Niger delta have not adequately been examined by most researchers such as Acti, Lyndon, & Bingila (2013), Masud et al., (2018), Uwaoma and Ordu (2016), and Chukuemeka, Ibanichuka, and Ofurum (2021). The objective of this research is to bridge the gap in knowledge and develop the field of study while taking considerations these issues .

The Goal of this Research

The purpose of this study is to investigate the connection between corporate board diversityand environmental sustainability reporting in Nigeria oil and gas firms. The particular goals are to:

1. To evaluate how gender diversity of board affect environmental sustainability reporting in oil and gas firms in Nigeria.
2. Examines how board size diversity affects environmental sustainability reporting in oil and gas firms in Nigeria.
3. Analyze the impact of board nationality diversity on environmental sustainability reporting in oil and gas firms in Nigeria.
4. Assess the impact of board independence on environmental sustainability reporting in oil and gas firms in Nigeria.

Research Questions

To find out the impact of corporate board diversity on environmental sustainability reporting in Nigeria oil and gas firms, the following queries were put up:

1. Does gender diversity on board affect environmental sustainability reporting in Nigeria oil and gas firms?
2. Does board size diversity impact on environmental sustainability reporting in Nigeria oil and gas corporations?
3. Is there a connection between the nationality diversity on board and environmental sustainability reporting in Nigeria oil and gas firms?
4. Does the disclosure on environmental sustainability by Nigeria oil and gas firms depend on the independence of the board.

Study Hypotheses

The following hypotheses was tested at 5% significant level.

H1: In Nigeria oil and gas firms, the gender diversity of board has no discerning impact on environmental sustainability reporting.

H2: In Nigeria oil and gas corporations, there is no appreciable correlation between board size diversity and environmental sustainability reporting;

H3: The nationality diversity of board has no bearing on the environmental sustainability reporting of Nigeria oil and gas firms;

H4: Environmental sustainability reporting in Nigeria oil and gas firms is unaffected by board independence.

Significance of the Study

Prospective researchers, boards of directors of oil and gas firms, businesses, governments, communities, non-governmental organizations, pressure groups, etc. will all greatly benefit from this study.

The Study's Scope

This study looks at the connection between environmental sustainability reporting and corporate board diversity in Nigerian oil and gas firm. The Nigerian Exchange Group floor lists the following oil and gas companies: Ardova Plc, Eternaoil, 11 Plc, Conoil, Japaul Gold & Ventures Plc, Oando Plc, MRS Oil Nigeria. Seplat Energy, Total Nigeria, Chevron, and Capital Oil

Review of Literature

Introduction

This section reviews existing literatures, provides detail concept on "corporate board diversity" and "environmental sustainability reporting," enumerates the independent and dependent variables relevant to the research, and highlights multiple studies written by various authors along with the theory that guides the study.

Conceptual Review of Board Diversity and Environmental Sustainability Report

According to Ajayi (1998), environment refers to all of an organism's surrounding circumstances both natural and artificial in a specific place. According to Onuoha (2012), an environment is a group of conditions and forces that surround and have an immediate impact on a species or organization. Environmental sustainability is the act of continuous operation, interacting, protecting and sustaining the environment without compromising the needs of future generations to meet their own needs (World Commission on Environment & Development, 2013).Environmental sustainability reporting as defined by Glam and Peraita (2017) are data used to assess a company's environmental practices in relation to the financial effects of its operations. Environmental sustainability reporting is described as a collection of data regarding a company's previous, present, and future environmental activities by (Ejoh, Oakland, & Sakey,2014). Environmental sustainability reporting, according to Ong., Tho., Hoh., Thai, and The (2016), is a declaration that displays a business's environmental efforts, including its environmental goal, environmental policies, and environmental consequences, all of which are documented and released to the public once a year.

Dibia and Onwuchekwu (2015) said that environmental transparency helps businesses get the public's perspective on their activities and provide insightful advice about them. Given the catastrophic effects that oil and gas spills from oil companies' operations have had impact on the environment, environmental sustainability reporting acts as a channel of communication between the company and its stakeholders, informing them of the firm's values, the current state of affairs, its plans, and its actions with regard to its organizational commitments to environmental sustainability. Corporate organizations nowadays are now placing higher values on environmental sustainability, risk mitigation, accountability, and transparency in order to ensure continuous existence. The International Institute for Sustainable Development (IISD) made an assertion that Bruntland was the first toproposed the idea of environmental sustainability in 1987 on his study, though the ideal have since changed since 80s.

The preservation and protection of the natural environment is one of the fundamental tenets of business organizations' positive relationships with their host environments. June 5 was declared World Environment Day (WED) by the UN General Assembly in 1972. The inaugural event was held in 1974 with the theme "Only One Earth." Over the years, WED has grown as a forum for bringing attention to environmental issues such air pollution, gas emissions, gas flaring, water pollution, illegal wildlife trade, sustainable consumption, rising sea levels, and food security, to name a few (Geneva environment Network). Corporate organization needs to account for their environmental impact, and reason been they often engaged in one economic activities or the others. Businesses have a social responsibility to enhance the environment and societal situations (Gaudencio et.al., 2020., Jaderna et. al., 2019). It is required of organizations to support community activities by supplying basic infrastructure, particularly in the communities where they operate. These initiatives help businesses obtain a competitive edge, enhance their reputation and image, and boost their financial success. (Oti & Mbu-ogar, 2018).

Organizations coexist with the environment for symbiotic relationships, obtaining raw materials and selling goods to society. Environmental knowledge is crucial for a firm's performance potential, as it influences future performance. External factors like clients, rivals, community, financial institutions, and governmental bodies can impact a business. Understanding the environment is essential for corporate management.For the past 20 years, environmental issues related to the oil-producing region have been managed by Nigerian government agencies. However, the National Oil Spill Detection and Response Agency Report (NOSDRA), released in 2006 by Alexandra Gas and Oil Connections, states that the oil firms' industrial operations continue to jeopardize the lives of over thirty million Nigerians in the region. The Nigerian federal government has set up a number of organizations and laws to handle environmental problems associated with oil contamination in the area. For example, the Niger Delta Development Commission (NDDC) and the Nigeria Federal Ministry of Environment were among the federal organizations established in 2000.

Ite and Idemudia (2006) concluded that these groups haven't had a major influence on how environmental concerns are handled after evaluating the roles and practices of these groups and their impact on current legislation. The primary reasons for the fragmented nature of environmental regulations is the insufficient cooperation of relevant parties that existed.

Assessment of Environmental Sustainability Reporting and Corporate Board Diversity

Gender Diversity

Gender diversity referred to the ratio of male to female directors in an organizations. Despite many Nigerians claim to support gender equality, the national cultural perspective on this matter typically results in unfavorable sexual stereotypes (Lincoln & Adedoyin, 2012). More women's attempts to advance to high positions of leadership have been thwarted by the persistence of men in positions of power in society. The male dominance that still exists in Nigeria typically keeps women from advancing to executive roles (Lincoln & Adedoyin, 2012). Women's representation on boards is positively correlated with sustainability in the social, environmental, and governance domains according to research by Al-Shaer and Zaman (2016). In Nigeria, the idea that a male is the head of the household has permeated almost every aspect of society, including corporate settings. According to Barako and Brown (2008) state that it is noteworthy and favorable correlation between the number of voluntary corporate social, environmental, and governance reports among Kenya-listed companies and the proportion of women on the boards of directors of Kenyan banks. Though scholars have focused their attention on how gender diversity affects firm performance, very few studies have looked at how gender diversity affects how much environmental sustainability is reported or disclosed, particularly in developing nations like Nigeria (Sikand, 2013, Al-Shaer & Zaman, 2016, Nadeem (2017).

Board Size

Thetotal number of board members in an organization during a given time frame is known as the board size. Diverse board characteristics are regarded as the most studied for a variety of reasons (Tibiletti et al., 2021). Information disclosures and organizational success are assumed to be impacted by the size of an organization's board. Mark Van Vugt et.al., (2004) claim that subgroup interactions that promote information sharing and organizational efficacy can be facilitated by a board's size. The number of directors on board can indirectly affects board's effectiveness, which in turn affects the organization's overall success according to Biswas et al., (2018). An organization's governance may have an impact on various aspects of the business and, generally, how well the company performs in a fiercely competitive market (Manning et al., 2019).

Large board size proponents evaluate board size in terms of potential "faultliness strength" and a "pool of expertise" (Tibiletti et al., 2021) (Ali & Ayoko, 2020). According to research, multicultural and multinational corporations should take advantage of their large board sizes in order to effectively represent the interests of the diverse range of stakeholders. Nonetheless, smaller businesses gain more from having smaller boards since, in the energy industry; they are more dedicated to corporate sustainability than larger businesses.

Board Nationality

The presence of both foreign and domestic members in an organization is an example of board nationality diversity. The majority of foreign directors are particularly dedicated to upholding the organization's core principles of openness, responsible corporate citizenship, and a favorable reputation with customers and authorities (Oxelheim & Randy, 2003). According to Zaid et al. (2020), having a diverse national mix on the board is essential for the development of corporate sustainability reporting. The rise of multinational firms has led to an increase in the number of foreign directors in Nigeria, a country with lower industrialization. Masulis, Wang, and Xie (2012) claim that the presence of a foreign board member possessing the requisite exposure, skills, knowledge, and power will enhance a company's chances of discovering new business prospects, breaking into unexplored markets, and gaining a comprehensive grasp of the external environment.

Board Independence

Non-executive directors are those who do not oversee the day-to-day operations of their companies. In corporate governance, "board independence" refers to board members who are not actively involved in the day-to-day operations of the firm according to Amahalu., Abiahu, Nweze, and Obi (2017). Independent non-executive directors do not oversee the company's daily operations., in contrast to senior management. The board's responsibilities include streamlining and improving organization's operations while raising awareness of morals and societal issues. The impact of independent board members on transparency has been demonstrated (Adams & Ferreira,2009., Muttakin, Khan, & Subramaniam, 2015). Independent boards guarantee businesses adhere to moral standards and good corporate governance.

Theoretical Framework

This study is based on stakeholders‘ theory

Stakeholders Theory

The present study is grounded in Freeman's idea of stakeholders, which was formulated in 1984. It is going to be used to clarify how corporate board diversity affects environmental sustainability reporting in oil and gas firms in Nigeria. Aifuwa, Embele, and Saidu (2018) state that the theory of stakeholders represents the ideals of the principal, or business owner, the agent, or management, and other pertinent stakeholders, including the public, suppliers, investors, and the local community. The stakeholder theory looked at how stakeholder expectations affected information flow inside an organization. (Frazzini, Cohen, & Meloy, 2012).In order to maintain the support of its stakeholders, a successful business organization must find ways to accommodate their interests in all facets of its operations. A firm's ultimate purpose, according to Fontaine, Haarman, and Schmid (2005),is to maximize the organization's fundamental worth and the interests of all of its constituent groups, not just shareholders. One component of sustainability reporting that considers the requirements of multiple stakeholders is environmental sustainability reporting, which indirectly addresses social, economic, and environmental challenges. The theory addresses how stakeholders' expectations impact information sharing while accounting for the presence of more powerful stakeholders (Font & Bonilla, 2016; Ngu & Amran, 2018).

Methodology

Introduction

This section includes the research design, study population, sampling strategy, sample size, data source, and model specifications.

Research Design

Research design is the plan that guides the conduct of a research. Since events, transactions, and reports in this study have been made or has ocured, an ex-post factoresearch design was selected.

Population of the Study

The population of this study consists of eleven (11) listed oil and gas firms as of December 31, 2022, this firms are listed in the Nigerian Exchange Group (NGX).

Sampling Techniques and Sample Size

The study's sample size was determined by carefully choosing eleven (11) of the eleven (11) quoted oil and gas firms. Among the firms engaged are: Eterna oil, 11 Plc, Conoil, Japaul Gold & Ventures Plc, Oando Plc, Ardova Plc (Forte Oil),MRS Oil Nigeria. Seplat Energy, Total Nigeria, Chevron, and Capital oil

Source of Data

Secondary data was sourced from the annual reports of the relevant firms for this research.

Model Specification

The multiple panel regression model was adopted for this study, thus;

$ENVSR_{it} = f(BGD, BSZ, BNAT, BIND,)$

$ENVSR_{it} = 3_0 + 3_1 BGD + 3_2 BSZ, + 3_3 BNAT + 3_4 BIND + €_{it}$

Where:

ENVSR = Environmental Sustainability Reporting of Firms

BGD= Board Gender

BSZ = Board Size

BNAT = Board Nationality
BIND = Board Independence
β_0 = Intercept Estimates
$\beta_1 - \beta_4$ = Independent variables coefficient
€ = error term

Presentation of Data, Interpretation, Analysis, and Findings
Introduction

The purpose of this study is to empirically investigate the effect of corporate board diversity on environmental sustainability reporting in oil and gas firms in Nigeria . The independent variables are size of the board , independence of the board , gender of the board , and nationality of board members, while the dependent variable is environmental sustainability report (ESR) , represented by environmental disclosure index (EDI).

Regression Output of both FE and RE

Where FE is fixed effect and RE is Random Effect
DV is dependent variable
IDV is independent variables

Table 4.1 Regression Output (FE, RE) (DV is EDI)

IDV	**FE**	**RE**
Cons	**0.0512** (*0.0939*)	**0.0576**(*0.0486*)
Bsize	**-0.0060** (*0.0031*) *	**-0.0054** (*0.0025*) *
Bgd	**0.0001** (0.8172)	**-0.0001** (0.9820)
Bnat	**-0.0004** (0.2776)	**-0.0003** (0.3369)
Bind	**0.0003** (0.4304)	**0.0013** (0.5534)
F (prob)	0.0000	0.0322
DW	1.4534	1.4013
Hausman		95.42% > 5%
No of Cross	8	8
No of Obs	78	78

Study computation 2024.

P-value in brackets ( ) : significant level 5%.

The result of table 4.1 revealed that under the Hausman test has a value of 95.42% which is greater than 5%, thus the random effect result was more desirable than the fixed effect result. This means that the heterogeneity in the constant is time variant .The F-test probability value of 3.22% indicated that at least one of the independent variables has significantly influences the dependent variable.

The result of the coefficient of size of the board represent by bsize revealed that board size has negative effect on environmental disclosure index. A percent rise in board size will drop environmental disclosure index by 0.54%. Although, this effect is significant because the probability value of 0.25% is less than 5%..

Also, a percentage rise in board gender represented by bgd will drop environmental disclosure index of the firms by 0.01%. This effect is in-significant because the probability value of 98.20% is more than 5%.

A percentage rise in board member nationality ratio represented by Bnat will negatively affect environmental disclosure index of the firms covered in this study by 0.03% and it is not significant because the p-value of 33.69% is more than 5%. And finally, a percentage rise in board independence ratio will improve the environmental disclosure index of the firms covered in this study by 0.13% and it is insignificant because the probability value of 55.34% is greater than 5% significant level of the study.

From the results, it is clear that only board member size has significant effect on the environmental disclosure index of the firms studied. Board gender, nationality and independence have shown to be in significant because their probability values are more than 5% significant level of the study.

Conclusion

1. The study indicates that there is no impact of a large board on the rate of environmental sustainability reporting in Nigerian oil and gas enterprises, as seen a percent rise in board size will drop environmental disclosure index.
2. It was discovered that the number of female directors on board has little bearing on information disclosure in the majority of oil and gas firms. A study that was released in the "Corporate Governance and Human Resources" journal came to the conclusion that businesses that wish to prosper must make advancing gender equality as a top priority.
3. The results of the study also demonstrated that the diversity of countries represented on the board had no bearing on the reporting of environmental sustainability commitment. Although it may not seem like much, the inclusion of both international and domestic board members in Nigerian oil and gas companies would help to advance the concept of environmental sustainability reporting.
4. The results demonstrated that there was no appreciable impact of board independence on the disclosure of environmental sustainability commitments. Ensuring openness and accountability, as well as the exchange of critical information both inside and outside the organization, depends heavily on the oversight and monitoring role of the outside directors.

Recommendation

Thefollowing recommendations were given in light of the study's findings:

1. Diversity of board‘s members should be encouraged since it offers organizations more opportunities, resources, and ideas in addition to long-term information sharing.

4. Even while smaller boards have a major influence on environmental sustainability reporting, board independence, nationality, and gender have little or no effect on environmental sustainability reporting. A remarkable analysis of literatures shows that a diverse board is still necessary for a company's growth and development.

2. The government and the oil firms operating in the region need to make sure that the socio-economic and environmental wellbeing of the inhabitants are sustained for the benefit of future generations.

0. Communities could become irate if oil and gas firms fail to uphold their environmental commitments. The purpose of reporting on environmental sustainability is

to keep the public informed about the actions of the participating firms, particularly when it comes to delicate subjects like the environment. It is crucial to take into account the interests of the different stakeholders.

References

Adams, R & Ferreira, D. (2009).Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94, 291-309. Ajayi, P.O.S. (1998). Comprehensive geography for secondary schools. 178-184.

Adeola F.O. (2000). Endangered community, enduring people: Toxic contamination, health, and adaptive responses in a local context. Environmental behaviour.32:209–249. doi: 10.1177/00139160021972504.

Aifuwa, H. O., Embele, K. & Saidu, M., (2018). Ethical accounting practices and financial reporting quality. *EPRA International Journal of Multidisciplinary Research,* 4(12), 31- 44. 6.

Aifuwa, H.O., Saidu, M., Enehizena, C.O. & Osazevbaru, A. (2019). Accounting information and lending decisions: Does sustainability disclosure matter? *Copernican Journal of Finance and Accounting, 8*(4), 61-89.

Alexandra Gas. and Oil Connections, 2006. Nigeria Forms Oil Spill Detection Agency. News & Trends: Africa, 9(1).

Alnabsha, A., Abdou, H. A., Ntim, C. G., & Elamer, A. A. (2018). Corporate boards, ownership structures and corporate disclosures: Evidence from a developing country. *Journal of Applied Accounting Research,* 19(1), 20–41.

Al-Shaer, H. & Zaman,M. (2016). Board gender diversity and sustainability reporting quality. *Journal of Contemporary Accounting & Economics.*Volume 12, Issue 3, December 2016, 210-222.

Amahalu, N. N., Abiahu, M. F. C., Nweze, C. L., & Obi, J. C. (2017). Effect of corporate governance on borrowing cost of quoted brewery firms in Nigeria (2010-2015). EPH.International Journal of Business & Management Science, 2(3), 31-57.

Ayanlade, A & Proske, U. (2016)." Assessing wetland degradation and loss of ecosystem services in the Niger Delta, Nigeria. Marine and Freshwater Research 67(6) 828-836 https://doi.org/10.1071/MF15066

Barako, D.G. and Brown, A.M. (2008) Corporate Social Reporting and Board Representation: Evidence from the Kenyan Banking Sector. *Journal of Management & Governance*, 12, 309.https://doi.org/10.1007/s10997-008-9053-x

Biswas, P. K., Mansi, M., & Pandey, R. (2018). Board composition, sustainability committee and corporate social and environmental performance in Australia. *Pacific Accounting Review*, 30(4), 517-540.https://doi.org/10.1108/PAR-12-2017-0107

Cohen, L., Frazzini,A., & Malloy, C. J (2012). Hiring cheerleaders: Board appointments Of Independent directors. Management Science 58(6).https://doi.org/10.1287/mnsc.1110.148

Comyns B (2016) Determinants of GHG reporting: an analysis of global oil and gas companies. J Bus Ethics 136(2):349–369. https://doi.org/10.1007/s10551-014-2517-9

CPA Australia (2019). Sustainability reporting practices, performance and potential. A research project commissioned by CPA Australia, July.

Dibia, N. O., & Onwuchekwa, J. C. (2015) Determinants of environmental disclosures in Nigeria: a case study of oil and gas companies. *International Journal of Finance and Accounting*, 4(3), 145-152.

Duztas, R. (2008). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies, 37,* 235–255.

Ejoh, N.O., Orok, E.O. & Sackey, J.A. (2014). The development of environmental accounting and disclosure practice of manufacturing companies in Nigeria. Journal of Economics and Sustainable Development, 5(12), 70-79.

Ekundayo, O. (2016). The effect of corporate social responsibility on financial performance of listed industrial goods firms in Nigeria. *Journal of Management Sciences*, 1(1), 49-62.

Etuk, A. J., Uford, I. C., & Udonde, U. E. (2023). Airline Service Recovery Strategies and Passengers' Satisfaction in Nigeria. *International Journal of Business Management and Economic Review*, 6(4), 1-18.

Fakir, A., & Jusoh, R. (2020). Board gender diversity and corporate sustainability performance: Mediating role of enterprise risk management. *Journal of Asian Finance, Economics, and Business, 7*(6), 351-363.

Fontaine, C., Haarman, A., & Schmid, S. (2005). Stakeholder Theory of the MNC. The stakeholder theory: A European perspective.

Font, L. & Bonilla, A. (2016). Hiring cheerleaders: Board appointments of independent directors. *Management Science, 58*(6), 1039-1058.

Freeman, R. E. (1984). Strategic management: A stakeholder approach. Prentice-Hall.

Gallén, M. & Peraita, C . (2017). The relationship between femininity and sustainability reporting. Corporate Social Responsibility and Environmental Management, 24(6), 496-508.

Gaudencio, M. B., Khan, A., & Subramaniam, N. (2020). Firm characteristics, board diversity and corporate social responsibility: evidence from Bangladesh. *Pacific Accounting Review, 27*(3), 353-372.

Ibrahim, A. H., & Hanefah, M. M. (2016).Board diversity and corporate social responsibility in Jordan. *Journal of Financial Reporting and Accounting,* 14(2), 279-298.

Idemudia, U., & Ite, U. E. (2006).Corporate-Community Relations in Nigeria‘s Oil Industry: Challenges and Imperatives. Corporate Social Responsibility and Environmental Management Journal, 13, 194-206. https://doi.org/10.1002/csr.101

Jizi, I. M., Salama, A. , Dixon, R . & Stratling, R . (2014). Corporate governance and corporate social responsibility disclosure: evidence from the US banking sector. Journal of Business Ethics, 125(4), 601–615.

Kamer. L, (2021). Main oil producing countries in Africa 2019. Statista.https://www.statista.com/statistics/1178514/main-oil-Producing countries in Africa.

Kadafa, A.A., (2012). Environmental Impacts of Oil Exploration and Exploitation in the

Niger Delta of Nigeria. Global Journal of Science Frontier Research Environment and Earth Sciences, 12(3), 19-28.

Kwan, L.P., Lam, E.Y.K &Ofoefuna, J.O. (2011). New System Biology forSenior Secondary Schools. Singapore: Marshall Cavendish International (Singapore) Private Limited.

Lilik, A., Bambang, J., Sustrisno, I. & Erwin, C. (2015). Integrated reporting vs. sustainability reporting for corporate responsibility in South Africa. *Bulletin of Geography. Socio-economic Series,* (29)*,* 7–17.

Lincoln, A. & Adedoyin, O. (2012). Corporate governance and gender diversity in Nigerian boardrooms. International Journal of Humanities and Social Sciences, 6(11), 3286–3292.

Tang, Q, & Luo, L. (2014). Does Voluntary Carbon Disclosure Reflect Underlying Carbon Performance?. *Journal of Contemporary Accounting & Economics*10(3) 10.1016/j.jcae.2014.08.003

Masulis, W. R., Wang, C.&Xie, F. (2012). Globalizing the boardroom-The effects of foreign directors on corporate governance and firm performance. Journal of Accounting and Economics, 53(3), 527-554.

Muttakin, M. B.,& Subramaniam, N. (2015). Firm ownership and board characteristics: Do they matter for corporate social responsibility disclosure of Indian companies? *Sustainability Accounting, Management and Policy Journal*, 6(2), 138–165.

Nadeem, M., Zaman, R., & Saleem, I. (2017). Boardroom gender diversity and corporate sustainability practices: Evidence from Australian Securities Exchange-listed firms.*Journal of Cleaner Production*, 149, 874- 885.

Ohidia, T., Omokhudu, O.O & Oserogbo, L.A.F. (2016). Determinants of environmental disclosure. *International Journal of Advanced Academic Research, Social and Management Review* 5(3), 171-184.

Okafor, T.G. (2018). Environmental costs accounting and reporting on firms financial performance: A survey of quoted Nigerian oil companies, *International Journal of Finance and Accounting*, 7(1), 1-6.

Olayinka, A. & Oluwamayowa, I. (2014). Corporate environmental disclosure and marketvalue of quoted companies in Nigeria. The Business and Management Review, 5(3),171-184.

Ong, T. T., Tho, H. S., Goh, H. H., Thai, S. B., & The, B. H. (2016). The relationship between environmental disclosure and financial performance of public listed companies in Malaysia: Empirical review. *International Journal of Business Management*, 10(4), 461-467.

Onuoha, B. C.(2012). Business and Entrepreneurial Environments, A Nigerian Perspective. Port Harcourt: African Entrepreneurship Initiative.

Oti, P.A, & Mbu-Ogar, G.B. (2018). Analysis of environmental performance of selected quoted oil and gas companies in Nigeria. 4(2), 12.

Oxelheim, L. & Randoy, T. (2003). The impact of foreign board membership on firm value. *Journal of Banking and Finance*, 27, 2369-2392. DOI: 10.1016/ s0378-4266(02.

Munoz, E., Zhao, L., & Yang, D. C. (2017). Issues in sustainability accounting reporting. *Accounting and Finance Research Journal*, *6*(3), 64-71.

Nadeem, M., Zaman, R., & Saleem, I. (2017). Boardroom gender diversity and corporate sustainability practices: Evidence from Australian Securities Exchange listed firms.

Journal of Cleaner Production, 149, 874–885

Nriagu, J.O. (2011) Oil industry and the health of communities in the Niger Delta of Nigeria.

Encyclopedia of Environment. Health,4:558–567.

Perrault, E. & Clark, C. (2016). Environmental shareholder activism: considering status and tation in firm responsiveness. *Org Environ*, *29*(2), 194-211.

Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective.* Stanford, CA: Stanford University Press.

Sikand, P. (2013). Corporate Sustainability and Gender Diversity: a Study of Women on Board of Directors of Indian Companies (26 p.). Retrieved From https://pdfs.semanticscholar.org/bfca/0611d3b497f208de36b21a269ded1f01471.pdf

Tibiletti, V., Marchini, P. L., Furlotti, K., & Medioli, A. (2021). Does corporate governance matter in corporate social responsibility disclosure? Evidence from Italy in the era of sustainability. Corporate Social Responsibility and Environmental Management, 28 (2) , 896 - 907 . ht tps : / / doi.org/10.1002/csr.2097 .

Umoren, A., Isiavwe, E., & Morenike, T. (2016) . Corporate social responsibility and f i rm performance: A s tudy of quoted f i rms in Nigeria. A paper presented at ICAN 2 nd International Conference of Accounting and Finance, at Ikeja, Lagos on the18th to 20th May.

Uwaoma, I., & Ordu, P.A. (2016). Environmental reporting in the oil and gas industry in Nigeria. International Journal of Research in Business Studies and Management, 3(11), 121.

Van Vugt, M., . Jepson, S. F., Hart, C. M., & Cremer, D. D (2004). Autocratic leadership in social dilemmas: A threat to group stability. *Journal of Experimental Social Psychology*, 40 (1), 1–13.

World Commission on Environment and Development Definition (2013)) Sustainability In book: Encyclopedia of Corporate Social Responsibility , 2358-2363 DOI: 10.1007/978-3-642-28036-8_531.www.NOSDRA.gov.ng

Xie B., Davidson, W.N. & DaDalt, P.J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295-316.

Zaid, M. A.A., Wang, M., Adib, M., Sahyouni, A. & Abuhijleh, S.T.F. (2019). Boardroom nationality and gender diversity: implications for corporate sustainability performance. *Journal of Clean Production*, 251, 119652.