IJAAR PUBLISHING®
DOI: 10.46654

International Journal of Advanced Academic Research | ISSN: **2488-9849**
Vol. 7, Issue 11 (November, 2021) | www.ijaar.org

BOARD EXPERIENCE AND ENVIRONMENTAL REPORTING: EVIDENCE FROM QUOTED MANUFACTURING FIRMS IN NIGERIA

Aniefor, Sunday Jones
Department of Accountancy
Delta State University of Science and Technology, Ozoro,
Mail: anieforjones@yahoo.com

Ekwueme, Chizoba M.
Department of Accountancy
Nnamdi Azikiwe University, Awka
Mail: cm.ekwueme@unizik.edu.ng

Abstract
This study determined the relationship between Board Experience and Environmental Reporting of quoted Manufacturing Companies in Nigeria ranging from 2008-2020. The study employed secondary data extracted from Nigeria Stock Exchange fact books, annual reports and accounts, stand-alone sustainability reports of sample firms. The study adopted Ex-post facto research design while the panel data sets were analyzed using Descriptive Statistics, Multicollinearity Test, and Hausman test via E-Views 10.0. The result revealed that there is a significant and positive relationship between board experience and environmental reporting; (t-Statistic = 2.319331; p-value = 0.0210 < 0.05); It was recommended inter alia that firms should consider increasing the number of experienced board members because this will contribute to improving corporate disclosure and consequently reduce information asymmetry, which not only clarifies the conflicts of interests between shareholders and management but also makes management more accountable.

Keywords: Sustainability, Board Experience and Environmental Reporting

Introduction

Sustainability reporting emerged in the mid-90s with the first sustainability disclosures in accordance with the Global Reporting Initiative (GRI) sustainability reporting framework in 1997. In 1987, the United Nations World Commission on Environment and Development described sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs. The commission added that sustainable development must share certain general features and must flow from a consensus on the basic concept of sustainable development and on a broad strategic framework for achieving it. The GRI sustainability reporting guidelines explains that sustainability reporting is the practice of firms being accountable to both internal and external stakeholders by measuring and disclosing firms' performance in relation to the goal of sustainable development. Sustainability reporting is considered as a wider level of transparency and accountability to stakeholders for environmental, social and economic activities of firms. Sustainability report is used to measure quality of firm's sustainable development and strategic management towards sustaining the future. Sustainability reporting has become relevant because of the response of the public for greater financial accountability, transparency and integrity of financial reporting processes of organizations in recent times. The report of Global Reporting Initiative (2019) identified sustainability reporting (measured environmental reporting, social reporting, economic reporting and governance reporting) as an important corporate disclosure requirement that is capable of improving the economic stability and financial reporting process of any country. Sustainability report improves reporting on environmental, social and economic activities of companies and this will help improve reputation, continuous improvement and create value. Therefore, different countries of the world have incorporated sustainability reporting as part of their corporate governance and financial disclosure guidelines.

In Nigeria, sustainability reporting is not a listing requirement. The Nigerian Stock Exchange (NSE), a United Nations Sustainable Stock Exchanges (SSE) Partner Exchange, has published Sustainability Disclosure Guidelines for the Nigerian market. The publication of these new guidelines fulfills a commitment made by the Nigerian Stock Exchange, as part of the SSE's campaign to close the gap of environmental, social and governance (ESG) disclosure guidance by stock exchanges. Countries that adopted a mandatory sustainability reporting law include Austria, Canada, China, Denmark, Finland, France, Germany, Greece, Indonesia, Italy, Malaysia, Netherlands, Norway, Portugal, Singapore, Sweden and the United Kingdom. The effect is stronger in these countries because third-party assurance of sustainability reports was more common and government and legal agencies were more likely to enforce rules and regulations. In In UK quoted companies are required to produce a strategic report which includes information on annual greenhouse gas (GHG) emissions, diversity and human rights under the Companies Act 2006 (Strategic and Directors' Reports) Regulations 2013. In the United States, sustainability and ESG (environmental, social and governance) disclosures have been, for the most part, voluntary (one notable exception – the Dodd-Frank Act required U.S. publicly traded companies report on their use of conflict minerals). In Malaysia, Bursa Malaysia has made it mandatory for all listed companies to disclose Issues concerning social and environmental matters in their annual reports. Sustainability Reporting is not a mandatory requirement in India. Under the European Union (EU) Non-financial Reporting Directive, large companies and financial corporations operating in Europe are now required to disclose information on environmental, social, human rights and anti-corruption matters, necessary for understanding the company's impacts. South Africa is one of only a few emerging-market economies showing a significant increase in sustainability reporting. It is also the only one in Africa. Companies listed on the

Johannesburg Stock Exchange have to integrate sustainability reporting with financial reporting. Sustainability reporting is not mandatory in Australia and Brazil but many companies report voluntarily on social and environmental performance to meet annual disclosure obligations assist with stakeholder engagement and demonstrate a commitment to corporate social responsibility.

Over the last few decades there has been a growing public awareness of the role of corporations in society. Many of the firms which have been credited with contributing to economic and technological progress have been criticized for creating social problems. Sustainability investing continues to grow in popularity, but the lack of standardization in sustainability reporting poses a challenge for investors wishing to maximize the social responsibility, and minimize the social damage of their investments. Moreso, setting up a truly robust and thorough system of sustainability standards; the existence of competing frameworks; the absence of uniform reporting standards; different measures of materiality; inconsistent reporting measures; boilerplate language (A description of uniform language used normally in legal documents that has a definite, unvarying meaning in the same context that denotes that the words have not been individually fashioned to address the legal issue presented, some of which may not apply to every situation to favor and/or protect the provider); the difficulty of comparing companies; and a disparity between company and investor views poses a challenge to organizations. Another key challenge of sustainability reporting is deciding who the audience is. Sustainability reporting is a difficult line to walk, and compiling a report requires a huge organizational commitment and effort. Amahalu, Ezechukwu and Obi (2017) observe that sustainability reporting is voluntarily practiced by multinational companies in Nigeria; reporting was deficient as companies were not guided by any legislation on what to report. An unanswered question is how the factors such as leverage, ownership concentration, profitability, firm size, dividend payout ratio, growth rate, working capital ratio, shareholders power, board experience could determine sustainability reporting. This study thereby determines the relationship between Board Experience and Environmental Reporting of quoted Manufacturing Companies in Nigeria.

2.0 Review of related Literature

2.1 Board Experience

A board of directors is a group of people who jointly supervise the activities of an organization, which can be either a for-profit business, nonprofit organization, or a government agency. Such a board's powers, duties, and responsibilities are determined by government regulations (including the jurisdiction's corporation’s law) and the organization's own constitution and bylaws. These authorities may specify the number of members of the board, how they are to be chosen, and how often they are to meet (Hua, 2017). In an organization with voting members, the board is accountable to, and might be subordinate to, the organization's full membership, which usually vote for the members of the board. In a stock corporation, non-executive directors are voted for by the shareholders, with the board having ultimate responsibility for the management of the corporation. The board of directors appoints the chief executive officer of the corporation and sets out the overall strategic direction. In corporations with dispersed ownership, the identification and nomination of directors (that shareholders vote for or against) are often done by the board itself, leading to a high degree of self-perpetuation (Joost, Oscar & Abe, 2013). In a non-stock corporation with no general voting membership, the board is the supreme governing body of the institution, and its members are sometimes chosen by the board itself (Chhaochharia, & Grinstein, 2017). The board of directors represents shareholders and protects their interests in order to make them money over the long haul. The board is concerned with leadership, fiscal policies and the bottom line (Kinsey, 2019).

Experience is the knowledge or mastery of an event or subject gained through involvement in or exposure to it. It is an empirical knowledge or a posteriori knowledge which are used to refer to knowledge based on experience (Cai, Garner & Walkling, 2019). Experience is the knowledge that could be gained about life and the world by being in different situations and meeting different people, or the process of gaining this. Experience is awareness, understanding, or information that has been obtained by experience or study, and that is either in a person's mind or possessed by people generally. It is an event or occurrence which leaves an impression on someone (Maclean, Harvey and Kling, 2014). One criticism frequently leveled against boards of directors is that, when it comes to filling vacant board seats, they do not cast the net widely enough. The numbers clearly show that boards often fill seats with candidates that have previous board experience, it's even written right into the job description given to search firms in some cases. And, for many boards, that is an understandable request - bringing on a "proven" director can side-step some of the concerns that shareholders and other board members may have (Roe, 2017). But the flip side of the coin is that the seeming preference for directors with previous board experience may hamper efforts to bring new and diverse views into the boardroom. Some cynics wonder, if companies are simply cycling through the same individuals again and again to fill vacant seats, how many new views are companies actually bringing into the boardroom? (Stuart, 2019).

2.2 Sustainability and Environmental Reporting

A sustainability report is an organizational report that gives information about economic, environmental, social and governance performance (GRI, 2013). Sustainability reporting is not just report generation from collected data; instead it is a method to internalize and improve an organization's commitment to sustainable development in a way that can be demonstrated to both internal and external stakeholders (GRI, 2015).Sustainability reporting is the disclosure and communication of environmental, social, and governance (ESG) goals as well as a company's progress towards them (GRI, 2015).

Environmental reporting is the communication of environmental performance information by an organization to its stakeholders. Information on environmental performance includes among others: Impacts on the environment, Performance in managing those impacts, and Contribution to ecological and sustainable development (Wilkins, 2014). Environmental reporting is the process in which a company reports on its use of resources and its generation and disposal of waste (Freedman & Jaggi, 2011).). People who make decisions about the environment need accurate and reliable environmental information. With this information, they can make informed decisions about natural resource management and set environmental policy. Environmental reporting also helps us know whether policy initiatives or environmental management approaches are effective over time (Bernardi & Stark, 2018). An environmental indicator provides information on a specific aspect of our environment. Environmental reporting relies on using a range of indicators to measure and report on the overall health of our environment in a cost-effective, practical, and meaningful way. Environmental reporting uses environmental indicators to draw together scientific knowledge, information, and data to track:

- environmental trends
- activities that have an impact on the environment

- the effectiveness of environmental policies and management actions (Nazari, Hrazdil & Mahmoudian, 2017).

Environmental reporting has been described broadly as reporting by corporations regarding the environmental implications of their activities (Hassan & Guo, 2017). Environmental disclosure expands the responsibility of the firms beyond the conventional role of imparting financial information assuming the broad environmental responsibilities of the firms (Marimon, Alonso-Almeida & Rodríguez, 2012). Manifesting effective corporate governance practices and maintaining sound environmental performance are among the key challenges faced by the organization to ensure its sustainability. Environmental reporting can be reckoned as means of ascertaining effective corporate governance practices that incorporate transparency in its environmental practices. This rigorous operationalization of information disclosure in the environmental sphere is also attributed as "governance-by-disclosure"(Bonsón, & Bednárová, 2016). Disclosure on environmental performance helps firms to gain stakeholder's confidence, to evaluate potential risks involved in performing such activities and to moderate the impact of these activities on the environment. It considers impact of their operations on the surrounding environment and to reveal the results to multiple stakeholders such as employees, consumers, community, regulators, the media and shareholders which become critical for the long-lasting sustainability of the organizations (Margolis & Walsh, 2013). Environment Reporting offers an opportunity for firms to apprise stakeholders that their corporate operations and efforts are environmental friendly. Environmental reporting should be embraced by corporation as an opportunity rather than an impediment to the growth of business (Serafeim, 2014).

With the increasing global concern for the environment, environmental reporting occupies a significant place within a firm's strategy. Firms, especially those operating in environmentally sensitive industries such as the manufacturing industry, disclose environmental information to improve their image in the eyes of different stakeholder groups and the general public and in turn gain their legitimacy for existence. Thus, environmental disclosure is a tool that can help companies influence and improve society's perceptions about their operations (Mata, Fialho & Eugenio, 2018). Moreover, environmental disclosure is considered an obligation and a stakeholder right, as this type of information is utilized by different groups of stakeholders to assist in decision making. Environmental disclosure is also a medium for managing, negotiating, or manipulating stakeholders. Furthermore, there are several benefits a company could potentially gain as a result of its environmental disclosure, including gaining a competitive advantage over its peers (Ramírez & Palos-Sánchez, 2018). Investors tend to see companies in a more favorable light when they are open about environmental disclosure. Customers, communities, and employees also have a more positive opinion about companies that willingly disclose this type of information. The end result is an overall positive effect on corporate performance (Tagesson, Blank, Broberg & Collin, 2019). Companies could communicate environmental information through a number of venues such as annual reports (including supplements to the annual reports or generated at interim dates), environmental reports, social responsibility reports, sustainability reports, corporate websites, activities advertisements and articles, environmental brochure or corporate brochure, booklets or leaflets on the environmental performance addressing the company's activities and products labeling to promote environmental and other concerns, newspaper or magazine, CD reports, television and radio, video tapes, and websites(Moneva, Archel & Correa, 2016). Companies may also disclose environmental information via seminars or symposia, as well as in meeting with residents in affected communities. Thus, companies use different reporting media to disclose environmental information (Antal & Sobczak, 2017).

2.3 Board Experience and Environmental Reporting

The global debacles surrounding the accounting profession in recent times have impeded the confidence of users of accounting information. The fall of the so-called too big to fail firms, such as Enron, WorldCom, Parmalat, to mention a few, together with their respective external auditors have raised concern over the integrity of the profession. Ever since then, researchers have delved into the reasons behind the failures of these big firm, and have attributed it to low ethical standards (Ezelibe, Nwosu & Orazulike, 2017; .Aifuwa, Embele, & Saidu, 2018) and poor corporate governance mechanisms (Ilaboya & Lodikero, 2017; Ho, Li, Tam & Zhang, 2015). The Code of Corporate Governance recommended a unitary board structure where Non-Executive Directors (NEDs) are expected to bring an independent scrutiny to the board thereby separating decision management from decision control. But a key argument which tends to truncate this fact is that directors are basically selected by the same management, a practice which tends to jeopardize the sacred quality of board independence. The need for independent directors was heightened after the high-profile collapse of some business organizations locally and internationally such as Anderson, Enron, WorldCom, Parmalat, Xerox, Oceanic Bank Nigeria Plc, Intercontinental Bank Nigeria Plc, Savanna Bank Nigeria Plc, and the financial malfeasance of some entities such as Cadbury Nigeria Plc, Unilever Nigeria Plc, Bank of Montreal, and Koss corporation to mention a few.

A call for companies' environmental impact assessment and disclosure has assumed enormous dimensions over the decades. This clarion call aimed at providing a sustainable environment that will be conducive to the human and corporate organizations to operate efficiently (Zhou, Simnett & Green, 2017). Disclosure is a means through which a company reports its environmental activities to the stakeholders (Votsi, Kallimanis & Pantis, 2017). In recent times, corporate governance has been considered essential and relevant in sustainability reporting because research results reveal that it is a factor that influences the level of environmental disclosure (Rensburg & Botha, 2014). Through environmental disclosure, firms project their corporate governance effectiveness in promoting sustainability, accountability, and transparency (Rahim, Johari, & Takril, 2015). Several studies have examined the influence of corporate governance on environmental disclosure (Prasad, Mishra & Kalro, 2016; Ong, Tho, Goh, Thai & Teh, 2016; Odoemelam & Okafor, 2018). Collectively, these studies show that corporate governance mechanisms are essential for corporate environmental reporting.

2.4 Stakeholder Theory

Stakeholder theory was first described by F. Edward Freeman in 1984, a professor at the University of Virginia, in his landmark book, "Strategic Management: A Stakeholder Approach." It suggests that shareholders are merely one of many stakeholders in a company. Stakeholder theory suggests that a business must seek to maximize value for its stakeholders. It emphasizes the interconnections between business and all those who have a stake in it, namely customers, employees, suppliers, investors and the community. Stakeholder theory states that the purpose of a business is to create value for stakeholders not just shareholders. Business needs to consider customers, suppliers, employees, communities and shareholders. According to Waris and Muhammad (2013), the view of stakeholders plays a crucial role in making organizations adopt certain reporting practices; and by extension sustainability disclosures. The assertion of Elsakit and Worthington (2012) is that the importance of one stakeholder group can vary. Therefore, when one or more stakeholder groups' do not participate in the process of reporting, there is tendency to have low level disclosure practices. This signifies that there is a symbiotic relation between stakeholders and corporate

disclosures. However, when stakeholders choose to be less concerned about sustainability issues, the managers tend to withdraw from disclosing relevant sustainability information.
Traditionally, business organizations engage with shareholders through Annual General Meetings (AGM), during which the financial reports of the business are presented to the shareholders. While this is a form of engagement with capital providers, sustainability reporting requires involvement of other business stakeholders such as local communities, financial institutions, regulators, employees, customers and suppliers. According to Adams and McNicholas (2017), stakeholder engagement drives the needed change to incorporate stakeholders in the sustainability reporting process. This change occurs when organizations involves people who are affected either by the decisions they make, or influence implementation of the decision. Stakeholder engagement does not terminate at the level of preparing reports for a wide range of users; it includes communicating and consulting with business stakeholders by involving them in decision making. Stakeholder engagement requires identification of business stakeholders relevant to the particular company, identification of their needs and involving them in decision making. Stakeholder engagement is a consequence of the stakeholder approach to corporate governance. This approach to corporate governance recognizes that there are persons other than shareholders who are affected by the operations of business organizations. Thus, a company needs to be governed in the interest of its stakeholders (Ayuso, Rodriguez, Garcia-Castro, & Arino, 2014). Another reason for stakeholder engagement is that the externalities which organizations generate as a result of their operations affect stakeholders and overall company value. This is the reason for incorporating stakeholders' interests in decision making (Awang & Mohammad, 2015).

This study is anchored on Stakeholder theory because stakeholders are instrumental in ensuring that an organization acts in the public interest. Again, the business case for sustainability reporting is often premised on the need for a business to prepare sustainability reports for the purpose of financial stakeholders. On the other hand, sustainability reporting as an accountability mechanism implies organizations' readiness to report true and fair information on sustainability performance cutting across economic, environmental, social and governance aspects. Also, an accountability approach to sustainability reporting implies that an organization identifies the stakeholders in its internal and external business environment who are all pivotal to its success and continuity. Such awareness could foster greater co-operation and engagement between company managers and stakeholders, thereby, resulting in feedback from corporate stakeholders.

2.5 Empirical Studies

Ienciu, Popa and Ienciu (2012) identified the corporate governance characteristics such as the percentage of independent directors and the existence of an environmental committee as factors that explain the variation in environmental information disclosure. This archival data helped to present the level of environmental reporting within the world biggest companies that operate in the Petroleum and Petroleum Refining industry for the year 2009. The analysis of the hypothesis formulated was tested using correlation and multiple linear regression model. The study found a positive relationship between existence of environmental committee and Return on Equity. The study concluded that in order to secure the transparency of environmental performance within a company, the board should ensure a sufficiently number of independent members able to exercise an independent reasoning for solving potential conflicts of interests. Okoye, Oraka, and Ezejiofor (2013) investigated whether social sustainability reporting has influenced internal and external perceptions of a company. The survey research approach was used, and a questionnaire was given to a random sample of 80 employees, customers, and investors in manufacturing companies in Onitsha, Anambra state. The three quoted businesses for the study were chosen using a judgmental selection technique. The study discovered that social sustainability reporting has an effect on changes in internal and external perceptions of cork using a five-point likert scale analysis and the z-test statistical technique to assess the two hypotheses. The study found out that Social sustainability reporting has effect on the changes of internal and external perceptions of corporate organization and that Pressures from external factors have contributed to social sustainability reporting of corporate organization. Okoye and Ezejiofor (2013) evaluate the effectiveness of sustainability environmental accounting in boosting company performance and economic growth. Journal papers, publications, and other related resources were reviewed in this study. With Pearson Product Movement Correlation Co-efficient, this paper evaluated and tested two hypotheses. According to the findings, sustainable environmental accounting has a major impact on organizational productivity and growth. Nwobu (2015) examined the annual reports of eight (8) banks in Nigeria for the presence or absence of sustainability reporting. A content analysis of the banks' annual report was carried out against the study sustainability reporting checklist. Data on the independent variables namely Profit After Tax (PAT) and Shareholders Fund (SHF) were also extracted from the annual reports of the banks. The results of the study indicated that sustainability reporting has received substantial attention from2011-2014 in the Nigerian banking sector. Furthermore, the study found a positive correlation of 0.28 between sustainability reporting index and Profit After Tax (PAT). The study also found a positive correlation of 0.18 between sustainability reporting index and shareholders fund. Nulla (2015) explored the effect of sustainability costs on institutional ownership companies. The quantitative research method was used for the research study. The sample comprised of top forty US environmental companies from 2012 to 2014. The research found that there is a positive correlation among all the variables except for the sustainability costs. The increased strategy of the CSR practices did not motivate employee participation in the company's ownership structure, a negative correlation. Institutional ownership had a very weak positive effect on the employee stock ownership. Employee stock ownership had a strong correlation with the stock price. Tan, Benni & Liani (2016) examined the effect of firm size, media exposure and industry sensitivity to corporate sustainability reporting disclosure and its impact on investor reaction. The population of the study was the companies listed on Indonesian Stock Exchange. The sample was taken by purposive sampling method, and samples of 53 companies were obtained. Data were analyzed using partial least squares path modeling. The result reveals that firm size, media exposure and industry sensitivity have a significant effect on corporate sustainability reporting disclosure; firms size, media exposure and industry sensitivity have no direct effect on investor reaction; corporate sustainability reporting disclosure have direct effect on investor reaction and mediates relationship between firm size, media exposure, industry sensitivity and investor reaction. Geert, Weerd, Hauck and Huijbregts (2016) explored relationship between the level and nature of voluntary corporate environmental reporting (CER) practices, multiple corporate environmental performance metrics and external assurance. Measures of greenhouse gas emissions, waste production and water consumption were quantified and a distinction was made between corporate environmental reports with or without external assurance for a sample of Dutch companies during the period 2009–2011. The multivariate regression results showed that greenhouse gas emissions and water consumption, and external assurance play a significant, incremental role in explaining the variation in the level and nature of CER. The results supported the view that legitimacy plays an important role in companies' choices concerning environmental disclosure. Suneerat (2017) investigated the report choices used for corporate sustainability report (CSR) disclosure and the determinants of CSR disclosure of firms listed on the Stock Exchange of Thailand (SET). Since 2014, firms listed on the SET have been required to disclose CSR in either an annual registration statement or a separate report called a sustainability report. The independent variables were hypothesized under three dimensions; shareholder power (government ownership), corporate visibility (firm size and age), and economic performance (profitability and leverage). The results revealed that government-owned firms or large firms are more likely to prefer the sustainability report. In addition, content analysis of CSR disclosure was conducted in three industries: resources, technology and industrial products. Nine CSR components with 43 indices were developed and used to score the disclosure of firms in the three industries. The effect of sustainability accounting measures on the performance of corporate organizations in Nigeria was studied by Ezejiofor, John-Akamelu, and Chigbo Ben (2016). Time series data and an ex post facto study design were used. The study's data came from the company's annual reports and accounts in Nigeria. With the help of SPSS Version 20.0, hypotheses were tested using Regression Analysis. According to the findings, environmental costs do not have a good influence on corporate revenue in Nigeria, but they do have a positive impact on profit generation in Nigeria. Yasmin and Zuraida (2017) investigated the determinants of sustainability disclosure of non-financial companies listed on the Indonesia Stock Exchange (IDX) for the period 2013-2015. Sustainability disclosure was measured using sustainability factors disclosed in the companies' stand-alone sustainability reports. Data for the study is collected by using content analysis. Sustainability disclosure data was gathered from the companies' sustainability reports based on a 30-point sustainability disclosure metric from the Global Reporting Initiatives (GRI) guidelines. The hypotheses were tested using multiple linear regression analysis with SPSS 23 windows. Based on the theories and prior studies, however, the three independent (and control) variables ware positively associated with the disclosure of sustainability factors. Nwobu (2017) empirically assessed how institutional field and internal organizational process factors determined sustainability reporting based on new institutional theory and legitimacy theory. The study employed longitudinal and survey research design. Primary data were collected using questionnaire administered to companies to decipher the importance and performance of factors that determine sustainability reporting in Nigeria. Fifty four (54) corporate actors responded to the survey. Panel data regression techniques namely Fixed Effects estimation and Random Effects estimation in addition to Pooled Ordinary Least Squares regression was carried out on the secondary data collected from corporate reports. Based on the Hausman specification tests, the fixed effects model was more appropriate. The empirical results based on 2010 to 2014 data on sustainability reporting, institutional field factors and reporting process factors lend some support to the new institutional theory and legitimacy theory. The data analyses also showed that there was a statistical significant variation in sustainability reporting from year 2010 to 2014 in the sample companies. Paiva and Gavancha (2018) examined the determinants of sustainability reporting in 100 medium enterprises operating in Portugal in 2016 with an excellent financial performance over the past three years. Using multiple regression analysis, the main results demonstrated that firm characteristics, such as size, ownership structure, and sales growth, contributed significantly to explaining sustainability in these firms. The study also found that medium firms exhibit a lack of interest in changing their business conduct to improve sustainability. Rusyda (2018) the effect of ownership structure and sustainability report disclosure toward company value with financial performance as intervening variable on companies that publish sustainability report during 2013-2016. Research design was a causative research. The data population taken from companies publishes Sustainability Report and listed in Indonesia Stock Exchange (IDX) during 2013-2016. Sampling method used in this research is purposive sampling. There were10 companies that fulfilled the sample criteria. Analysis techniques consisted of multiple regression analysis and path analysis. The result of the research showed that: managerial ownership directly effects company value; institutional ownership does not directly affect on company value; sustainability report disclosure does not directly affect company value. Sanna-Lena and Karlsson (2019) analyzed the relationship between corporate sustainability performance and financial performance in Sweden. Furthermore, the study investigated the impact of board diversity on the relationship. With support from instrumental stakeholder theory and empirical findings, a positive relationship between sustainability performance and financial performance measured with return on equity (ROE) was hypothesized. The study found a positive impact of board diversity components on the relationship between corporate sustainability performance and financial performance. The study took a deductive approach in which a multivariate regression method was used. The sample constituted 1,015 observations of firms listed on the NASDAQ OMX Stockholm during 2009-2013. The multiple regression results indicate a positive relationship between corporate sustainability and financial performance. Eneh and Amakor (2019) examined the impact of firm attributes (firms size, leverage and profitability) on sustainability reporting in Nigeria. The study employed the ex-post causal research design. The sample consisted of 35 manufacturing companies selected listed on the Nigerian Stock Exchange. Both panel period and cross-sectional heteroskedasticity was examined and the estimations were found to be free from such. The Peseran cross-dependence test was employed to confirm the threat of the serial correlation in the errors and the statistic revealed the absence of cross-section dependence in the residuals. The analysis of coefficients revealed that on the overall, only firm size is seen as the only variable to having a positive and significant impact on sustainability reporting. Abdul-Rahman and Alsayegh (2021) investigated the determinants of the corporate environment, social and governance (ESG) reporting among Asian firms from 2005-2017. Three Asian countries with 1244 companies and 9954 firm-year observations provided the sample for the study. The study applied three static panel approaches, namely, the pooled ordinary least squares (OLS), fixed-effects and random-effects model, to address endogeneity problems. The result indicated that firm characteristics (economic performance, profitability, leverage and size) are found to disclose additional ESG information.

Historically, the primary aim of traditional corporate reporting is to communicate economic information and measurements about the resources and performance of the company's financial and non-financial indicators for informed decision making (Ekwueme, Egbunike & Onyali, 2013). There are basically two types of corporate reporting, namely, mandatory and voluntary. While mandatory disclosure refers to the disclosure required by laws from regulatory organizations or accounting standards, the voluntary disclosure refers to the information that the company willingly chooses to disclose for different reasons. In recent years, economic growth and development are perceived to have an adverse effect on the environment, thus it has become a matter of public concern both locally and internationally. The corporate world is increasingly being pressurized to provide more information about the effect of their operation activities on the environment (Uwalomwa, 2011). Thus, corporate sustainability reporting has become an important topic of national and international discourse.

3.0 Methodology

3.1 Research Design

Ex-post facto research design also seeks to determine the cause-effect relationship between the dependent and independent variables of the study. This study also employed content analysis technique.

3.2 Population of the Study

The population of this study comprised of all the seventy-six (76) quoted manufacturing companies trading on the floor of the Nigeria stock exchange as at 31st December 2020. This was categorized into five (5) sectors, consisting of Industrial goods sector (21 companies); Health Care sector (11 companies); Consumer goods sector (27 companies) ; Agriculture & Agro Allied sector (5 companies); Oil and Gas Sector (12). This study covered a thirteen (13) year period from 2008-2020.

3.3 Sample Size and Sampling Technique

The sample size for this study comprise of twenty-six (26) companies (see appendix II). Purposive sampling method was adopted based on the companies that consistently filed their annual financial statements with the Nigerian Stock Exchange (NSE) for the period of interest (2008-2020) and whose data sets are complete for the study period.

3.4 Source of Data

The data for this study would primarily be obtained from secondary source. Secondary data would be extracted from the published annual reports and accounts of the sampled companies and the Nigeria Stock Exchange (NSE) fact book for the relevant years, particularly stand-alone sustainability report, the comprehensive income statement and statement of financial positions of these firms as well as their respective notes to the accounts. The variables for which data would be extracted from this source are on cash and cash equivalents, return on assets, environmental performance, economic performance, social performance, governance performance, return on assets, return on equity, shareholders fund, leverage and firm size.

3.5 Model Specification

The research models for this would be adopted from Amahalu, Okoye and Obi (2018):

$EPS = \beta_0 + \beta_1 ENVR + \beta_2 OWNC + BDSZ + \mu$

Where:

EPS = Earnings per share

ENVR = Environmental reporting

OWNC = Ownership concentration

BDSZ = Board Size

To study the determinants of Sustainability Reporting, drivers such as, board experience, institutional ownership, firm size, profitability would be used as the independent variables, while, environmental reporting, governance reporting, social reporting and economic reporting would serve as the dependent variables.

The construct for this study would be modeled as:

$ENVR_{it} = \beta_0 + \beta_1 BEXP_{it} + \beta_2 BIND_{it} + \beta_3 LEV + \mu_{it}$ - - - - **i**

Where:

β_0 = Constant term (intercept) of the study model

β_1- β_3 = Coefficients of the explanatory variable

$\mu_{i,t}$ = Component of unobserved error term of firm *i* in period *t*

$ENVR_{it}$ = Environmental Reporting of firm *i* in period *t*

$BEXP_{it}$ = Board Experience of firm *i* in period *t*

$BIND_{it}$ = Board Independence of firm *i* in period *t*

LEV_{it} = Leverage of firm *i* in period *t*

í = individual firms (1, 2, 3...27)

t = time period (2009, 2010, … 2018)

3.6 Method of Data Analysis

Data to be collect in this study were analysed using content analysis and disclosure index which were subjected to preliminary and inferential analysis. Content analysis method is concerned with the number of words and sentences on particular information while disclosure index entails measuring the level of information reported in corporate reports using a set of pre-determined elements. Preliminary data analysis refers to use of descriptive statistics in interpretation of data. These descriptive statistics include mean, median, standard deviation, kurtosis, skewness, maximum and minimum. On the other hand, inferential data analysis entails the use of statistical tools to test the hypotheses:

i. Panel least square (PLS) regression analysis: was used to predict the effect of the independent variable on the dependent variable.
ii. Hausman specification test: was employed to determine the more appropriate model between the fixed effect model (FEM) and random effect model (REM) for this study. When the P-value of the Hausman specification test is less than 5 percent, the Fixed Effects model result is more appropriate than the Random Effects model (Torres-Reyna, 2007).

The disclosure indicators were measured by assigning a value to each of them, a value that is from zero (0) to five which reflects the quantity as well as quality of information. '0' is given to imply the absence of the disclosure. An indicator was assigned a value of 1, if there is only qualitative data; 2, if there is quantitative data (ACCURACY); 3, if there are quantitative data and also time series(COMPARIBITLITY & TIMELINESS); 4, if there are quantitative data, time series and targets(BALANCE & CLARITY); 5, if there are quantitative data, time series, targets and external assurance(RELIABILITY).

Thus, the maximum score for sustainability reporting is 270 (4+12+30+8 = 54 x 3 = 54x5 =270)
Therefore,
SRI =TDP/MP
Where;
SDI = Sustainability Reporting Index
TDP = Total Disclosure Points of a Firm
MP = Maximum Points for a Firm (270)

Decision Rule
The decision was based on 5% (0.05) level of significance. The null hypothesis (H_o) will be accepted, if the Prob (F-statistic) value is greater (>) than the stated 5% level of significance, otherwise reject.

4.0 DATA PRESENTATION AND ANALYSES

4.1 Data Analyses

Table 4.1 Descriptive Statistics

	ENVR	BEXP	FSZ	BIND	LEV
Mean	0.638	0.793	11.125	0.193	4.260
Median	0.670	0.320	11.240	0.220	4.560
Maximum	0.900	0.810	12.180	0.480	9.020
Minimum	0.080	0.030	9.930	0.020	1.460
Std. Dev.	0.228	0.674	0.837	0.156	1.874
Skewness	-1.147	3.071	-0.215	0.467	0.989
Kurtosis	3.816	10.677	1.507	1.902	4.399
Jarque-Bera	3.214	52.357	1.308	1.125	3.177
Probability	0.201	0.000	0.520	0.570	0.204
Sum	8.290	10.310	144.630	2.510	55.380
Sum Sq. Dev.	0.625	33.608	8.403	0.290	42.124
Observations	13	13	13	13	13

Source: E-Views 10.0 Descriptive Output, 2021

Interpretation

Table 4.1 presents the descriptive statistics for the different variables of the study. The 338 firm-year observations in table 4.1 is as a result of the panel data set with the combination of time series data and cross sectional data (i.e 26 firms x 13 years). Mean is the most commonly used measure of central tendency. The standard deviation shows the deviation/dispersion/variation from the mean. It is a measure of risk. The standard deviation is a measure that summarizes the amount by which every value within a dataset varies from the mean. It is the most robust and widely used measure of dispersion. The average environmental disclosure rate of manufacturing firms in Nigeria is 63.8% with a maximum of 90%, a minimum of 8% with a standard deviation of 0.228. The observed average rate of governance disclosure is 49%, with a maximum of 98%, a minimum of 6% and a standard deviation of 9%. The observed degree of the average social reporting of sample firms is 11.2% with a minimum of 9%, a maximum of 16% and a standard deviation of 2%. The observed average rate of economic disclosure in the sampled firms is 69.2 percent, with a maximum of 95%, a minimum of 12 percent and a standard deviation of 51 percent. The average number of directors with experience in environmental issues is 79.3%, a maximum of 81 percent, a minimum of 3 percent and standard deviation of 67.4%. The observed average for Institutional Ownership is 32.2 percent, a minimum of 4 percent, a maximum of 97 percent, with a standard deviation of 33.1%. The observed average for firm size is 11.125 a maximum of 12.180, a minimum of 9.93and a standard deviation of 0.837. The observed average for profitability is 25.8 percent, a minimum of 9 percent, a maximum of 57 percent, with a standard deviation of 16%. Skewness indicates the symmetry of the distribution. A skewed distribution which is positive indicates scores that are clustered to the left, and the tail of the distribution extending to the right while a negatively skewed distribution demonstrates scores that are clustered to the right and the tale of the distribution extends to the left. Kurtosis on the other hand, defines the peak of the distribution. Positive kurtosis is indicated by a peak. Negative kurtosis is indicated by a flat distribution. But for firm size with a negative value of -0.215 all other variables are positively skewed.

The above interpretation of the descriptive statistics of the dependent and independent variables is graphically represented as shown below:

4.2 Test of Hypotheses

Ho$_1$: Board Experience has no significant relationship with Environmental Reporting of quoted Manufacturing Companies in Nigeria

H$_1$: Board Experience has significant relationship with Environmental Reporting of quoted Manufacturing Companies in Nigeria

Table 4.2 Panel Least Square Regression Analysis testing the relationship between BEXP, BIND, LEV and ENVR

Dependent Variable: ENVR
Method: Panel Least Squares
Date: 09/02/21 Time: 16:12
Sample: 2008 2020
Periods included: 13
Cross-sections included: 26
Total panel (balanced) observations: 338

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.746220	0.117870	6.330855	0.0000
BEXP	0.134145	0.057838	2.319331	0.0210
BIND	0.025309	0.011124	2.275313	0.0235
LEV	-0.017865	0.004809	-3.715166	0.0002

R-squared	0.420900	Mean dependent var	0.759745
Adjusted R-squared	0.412106	S.D. dependent var	0.653211
S.E. of regression	0.649245	Akaike info criterion	1.985749
Sum squared resid	140.7872	Schwarz criterion	2.030992
Log likelihood	-331.5916	Hannan-Quinn criter.	2.003781
F-statistic	10.87899	Durbin-Watson stat	1.737205
Prob(F-statistic)	0.000026		

Source: E-Views 10.0 Panel Regression Output, 2021

Interpretation of Regression Result

The generated panel least regression result in table 4.2 indicates that:

ENVR = 0.746220 + 0.134145BEXP + 0.025309BIND - 0.0178651LEV

The implication of the regressed result is that taking all factors into account (BEXP, BIND, LEV) as constant at zero, ENVR will be 0.746220. The analyzed result also showed that taking all other independent variables at zero, a unit increase in BEXP will lead to 0.134145 unit increase in ENVR; a unit increase in BIND will lead to 0.025309 unit reduction in ENVR, a unit increase in LEV will lead to 0.017865 unit decrease in ENVR. The three independent variables that were studied, explained only 41.2% of the factors affecting ENVR among quoted manufacturing firms in Nigeria as represented by the adjusted R^2. This therefore means that other factors not studied in this research contribute about 58.8% influence on ENVR of sampled firms. The Durbin-Watson value of 1.737205 which is less than 2 is an indication that the model is fit and does not contain auto-correlation.

Decision:

On the whole, the overall significance value; Prob (F-statistic) = 0.000026 is less than the critical value of 5% (0.05), thus, inferring that the model is statistically significant in predicting how BEXP, BIND and LEV relate with ENVR of quoted manufacturing firms in Nigeria at 5% level of significance. Thus, H$_1$ is accepted which upholds that there is a significant positive relationship between Board Experience and Environmental Reporting of quoted Manufacturing Companies in Nigeria at 5% level of significance.

Table 4.3 Fixed Effect Model (FEM) between BEXP, BIND, LEV and ENVR

Dependent Variable: ENVR
Method: Panel Least Squares
Date: 09/02/21 Time: 16:17
Sample: 2008 2020
Periods included: 13
Cross-sections included: 26
Total panel (balanced) observations: 338

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.817199	0.145673	5.609809	0.0000
BEXP	0.124266	0.060152	2.065858	0.0397
BIND	0.119413	0.051005	2.341185	0.0198
LEV	-0.375798	0.073331	-5.124688	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.497994	Mean dependent var	0.759745
Adjusted R-squared	0.416259	S.D. dependent var	0.653211
S.E. of regression	0.647879	Akaike info criterion	2.051666
Sum squared resid	129.7017	Schwarz criterion	2.379679
Log likelihood	-317.7316	Hannan-Quinn criter.	2.182393
F-statistic	10.98922	Durbin-Watson stat	1.884277
Prob(F-statistic)	0.000000		

Source: E-Views 10.0 Panel Regression Output, 2021

Table 4.4: Random Effect Model (FEM) between BEXP, BIND, LEV and ENVR

Dependent Variable: ENVR
Method: Panel EGLS (Cross-section random effects)
Date: 09/02/21 Time: 16:18
Sample: 2008 2020
Periods included: 13
Cross-sections included: 26
Total panel (balanced) observations: 338
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.750181	0.119993	6.251871	0.0000
BEXP	0.133151	0.057931	2.298421	0.0222
BIND	0.669507	0.278409	2.404761	0.0167
LEV	-0.758664	0.264213	-2.871416	0.0043

Effects Specification	S.D.	Rho
Cross-section random	0.058266	0.0080
Idiosyncratic random	0.647879	0.9920

Weighted Statistics			
R-squared	0.420441	Mean dependent var	0.722700
Adjusted R-squared	0.411643	S.D. dependent var	0.650648
S.E. of regression	0.646849	Sum squared resid	139.7502
F-statistic	9.623290	Durbin-Watson stat	1.749845
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.420892	Mean dependent var	0.759745
Sum squared resid	140.7885	Durbin-Watson stat	1.736941

Source: E-Views 10.0 Panel Regression Output, 2021

Table 4.5 Hausman Test Comparing FEM and REM between BEXP and ENVR

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	9.939484	3	0.0251

Source: E-Views 10.0 Panel Regression Output, 2021

To decide whether to use fixed effect model (FEM) or Random Effect Model (REM), Hausman test was employed to choose the preferred model.

Hausman Test Rule

H_O: Random effect model is preferred to fixed effect model (If the P-value > 5% Accept H_O)
H_1: Fixed effect model is preferred to Random effect model (If the P-value < 5% Accept H_1)

Interpretation of Hausman Test

On comparison of the results between the fixed effect model (FEM) and random effect model (REM), the results of the Hausman specification test in table 4.5 showed that the chi-square probability is significant at 5% with P-values of 0.0251. The result suggests that the fixed effect regression model is most appropriate for the sampled data. Thus, this result corroborates the regression results in table 4.4 which uphold that there is significant positive relationship between Board Experience and Environmental Reporting of quoted Manufacturing Companies in Nigeria at 5% level of significance.

4.3 Discussion of Findings

This study ascertained the determinants of Sustainability Reporting of quoted manufacturing companies in Nigeria during the period 2008-2020. Board Experience, Institutional Ownership, Firm Size and Profitability served as the Determinants proxies while Sustainability Reporting was measured with Environmental Reporting, Governance Reporting, Social Reporting and Economic Reporting Moreover, this study employed Board Independence and Leverage as control variables in a bid to boosting the result of the regression analysis.

The analyzed result of hypothesis I showed that taking all other independent variables at zero, a unit increase in BEXP will lead to 0.134145 unit increase in ENVR; a unit increase in BIND will lead to 0.025309 unit reduction in ENVR, a unit increase in LEV will lead to 0.017865 unit decrease in ENVR. The three independent variables that were studied, explained only 41.2% of the factors affecting ENVR among quoted manufacturing firms in Nigeria as represented by the adjusted R^2. This therefore means that other factors not studied in this research contribute about 58.8% influence on ENVR of sampled firms. The Durbin-Watson value of 1.737205 which is less than 2 is an indication that the model is fit and does not contain auto-correlation. The findings of this study are consistent with the findings of Onwuka (2021), Mihai, Pavaloaia, Mihai-Bogdan and Georgescu (2019), Uwuigbe, Obarakpo, Uwuigbe, Ozordi, Asiriuwa, Eyitomi and Oluwagbemi (2018) but negates the results of Mehmood, Ahmed and Muhammad (2019), Ibrahim (2019).

Recommendations

In line with the conclusion, the study suggestions were offered, firms should consider increasing the number of experienced board members because this will contribute to improving corporate disclosure and consequently reduce information asymmetry, which not only clarifies the conflicts of interests between shareholders and management but also makes management more accountable.

References

Abdul-Rahman, R., & Alsayegh, M.F. (2021). Determinants of corporate environment, social and governance (esg) reporting among Asian Firms. *Journal of Risk and Financial Management*, *14*, 167.

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.

Amahalu, N.N., Ezechukwu, B.O., & Obi, J.C. (2017).Corporate social responsibility and financial performance of quoted deposit money banks in Nigeria. *Asian Journal of Science and Technology, 08*(12), 7183-7191.

Antal, A.B., & Sobczak, S. (2017). Corporate social responsibility in France: Amix of national traditions and international influences. *Bus. Soc. 46*, 9–32.

Awang, M., & Mohammad, A.H. (2015). Reliability and validity of facilities management competencies instrument using partial least squares. *International Journal of Social Science and Humanity, 5*(1), 95-99.

Ayuso, S., Rodriguez, M.A., Garcia-Castro, R., & Arino, M.A. (2014). Maximizing stakeholders' interests: An empirical analysis of the stakeholder approach to corporate governance. *Business & Society, 53*(3), 414-439.

Bernardi, C., & Stark, A.W. (2018). Environmental, social and governance disclosure, integrated reporting, and the accuracy of analyst forecasts. *Br. Account. Rev.* 50, 16–31.

Bonsón, E., & Bednárová, M.A. (2016). *Guide to corporate reporting analysis*. Pearson Education Limited: Edinburgh, UK, 2016.

Cai, J., Garner, J., & Walkling, R. (2019). Shareholder access to the boardroom: A survey of recent evidence. *Journal of Applied Finance. 20* (2), 15–26.

Chhaochharia, V., & Grinstein Y. (2017). Corporate governance and firm value: The impact of the 2002 governance rules. *Archived 11 June 2018 at the Wayback Machine. The Journal of Finance*.

Ekwueme, C.M., & Aniefor, S.J. (2019). Determinants of financial reporting quality: Evidence from listed manufacturing firms in Nigeria. *Journal of Global Accounting, 6*(2), 22-35.

Ekwueme, C.M., Egbunike, C.F., & Onyali, C.I. (2013). Benefits of triple bottom line disclosures on corporate performance: An exploratory study of corporate stakeholders. *J. Mgmt. & Sustainability, 3*(79), 193- 209.

Elsakit, O.M., & Worthington, A.C. (2012). The attitudes of managers and stakeholders towards corporate social and environmental disclosure. *International Journal of Economics and Finance, 4*(12), 240-251.

Eneh, O., & Amakor, I.C. (2019). Firm attributes and sustainability reporting in Nigeria. *International Journal of Academic Accounting, Finance & Management Research (IJAAFMR), 3*(6), 36-44.

Ezelibe, C.P., Nwosu, O., & Orazulike, S. (2017). Empirical investigation of corporate governance and financial reporting quality of quoted companies in Nigeria. *International Journal of Economics, Business and Management Research, 1*(5), 117-137.

Ezejiofor, R. A., John-Akamelu R., C. & Chigbo Ben_E. E. (2016). Effect of sustainability environmental cost accounting on financial performance of Nigerian corporate organizations. *International Journal of scientific research and management* (IJSRM) 4(8). Pages||4536-4549||2016|| Website: www.ijsrm.in ISSN (e): 2321-3418.

Freedman, M., & Jaggi, B. (2011). Global warming disclosures: Impact of Kyoto Protocol across countries. *J. Int. Financ. Manag. Account. 22*, 46–90.

Geert, J.M.,Weerd, L.U., Hauck, M.,Huijbregts, M.A. (2016). Determinants of corporate environmental reporting: the importance of environmental performance and assurance. *Journal of Cleaner Production*, 112(95), 724-734.

Global Reporting Initiative's (GRI). (2019). Measures of sustainability reporting. *https://www.globalreporting.org/standards/*. Retrieved 18/03/2020.

GRI (2013). The External Assurance of Sustainability Reporting. Global Reporting Initiative.

GRI (2015). G4: *Sustainability reporting guidelines. Global reporting initiative*.

Hassan, A., & Guo, X. (2017). The relationships between reporting format, environmental disclosure and environmental performance: An empirical study. *J. Appl. Account. Res.* 18, 425–444.

Ho, S.S., Li, A.Y., Tam, K., & Zhang, F. (2015). CEO gender, ethical leadership, and accounting conservatism. *Journal of Business Ethics, 127*(2), 351-370.

Hua, L.N. (2017). Does the number of interlocking directors influence a firm's financial performance? An exploratory meta-analysis. *American Journal of Management, 17* (2), 47–57.

Ibrahim, R.K. (2019). The nature and extent of corporate social responsibility disclosure in Tanzania. *Business Strategy and Development,2*(3), 253-264.

Ienciu, I.A., Popa, I.E., & Ienciu, N.M. (2012). Environmental reporting and good practice of corporate governance: Petroleum industry case study. *Procedia Economics and Finance 3,* 961 – 967.

Ilaboya, J. O., & Lodikero, O. (2017). Board independence and financial statement fraud: A moderating effect of female gender diversity. *Accounting and Taxation Review, 1*(1), 196-221.

Joost, J., Oscar, G., & Abe, J. (2013). The formative years of the modern corporation: The Dutch East India company 1602–1623. *The Journal of Economic History, 73*(04), 1050-1076.

Kilic, M., & Kuzey, C. (2018). *Factors influencing sustainability reporting: Evidence from Turkey*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3098812. Retrieved 12/08/2019

Kinsey, A. (2019). *Definiton of board of directors*. https://bizfluent.com/facts-5538820-definition-board-directors.html. retrieved 20/10/2019

Maclean, M.; Harvey, C., & Kling, G. (2014). *Pathways to power: Class, hyper-agency and the French corporate elite*. *Organization Studies, 35*(6), 825–855.

Margolis, J.D., & Walsh, J.P. (2013). Misery loves companies: Rethinking social initiatives by business. *Admin. Sci. Q.* 48, 268–305.

Marimon, F., Alonso-Almeida, M.M., & Rodríguez, M.P. (2012). The worldwide diffusion of the global reporting initiative: What is the point? *J. Clean. Prod. 33,* 132–144.

Mata, C., Fialho, A., & Eugenio, T.A. (2018). Decade of environmental accounting reporting: What we know? *J. Clean. Prod. 198,* 1198–1209.

Mihai, C., Pavaloaia, L., Mihai-Bogdan, A., & Georgescu, I.E. (2019). Is sustainability reporting a business strategy for firm's growth? Empirical study on the Romanian capital market. *Sustainability, 11*(658), 1-21.

Moneva, J., Archel, P., & Correa, C. (2016). GRI and the camouflaging of corporate Unsustainability. *Account. Forum, 30,* 121–137.

Nazari, J.A., Hrazdil, K., & Mahmoudian, F. (2017). Assessing social and environmental performance through narrative complexity in CSR reports. *J. Contemp. Account. Econ. 13,* 166–178.

Nulla, Y.M. (2015). Institutional ownership and social and sustainability reporting in green companies. *Corporate Ownership & Control, 13*(1), 748-755.

Nwobu, O. (2015). The Relationship between corporate sustainability reporting and profitability and shareholders fund in Nigerian Banks. *Journal of Accounting and Management, 5*(3), 278-291.

Nwobu, O.A. (2017). *Determinants of corporate sustainability reporting in selected companies in Nigeria*. Thesis submitted to Covenant University, Ota, 34-127.

Odoemelam, N., & Okafor, R.G. (2018). The influence of corporate governance on environmental disclosure of listed non-financial firms in Nigeria. *Indonesian Journal of Sustainability Accounting and Management, 2*(1), 25–50.

Okoye, P.V.C. & Ezejiofor R. A., (2013). An appraisal of sustainability environmental accounting in enhancing corporate productivity and economic performance. *International Journal of Advanced Research.* 1(8) 685-693 685; Journal homepage: http://www.journalijar.com.

Okoye, P.V.C., Oraka A.O., & Ezejiofor R. A (2013). Effects of sustainability reporting on the growth of corporate organizations in Nigeria. *European Journal of Economics, Finance and Administrative Sciences* ISSN 1450-2275 59(8) http://www.europeanjournalofeconomicsfinanceandadministrativesciences.com/

Ong, T.S., Tho, H.S., Goh, H.H., Thai, S.B., & Teh, B.H. (2016). The relationship between environmental disclosures and financial performance of public listed companies in Malaysia. International Business Management, 10(4), 461–467.

Onwuka, G. (2021). Determinants of sustainability reporting: A review of literature. *Journal of Social and Administrative Sciences Studies, 5(1),* 89-105.

Paiva, I.S., & Gavancha, I.F. (2018). *Determinants of sustainability reporting in medium enterprises.* https://www.igi-global.com/chapter/determinants-of-sustainability-reporting-in-medium-enterprises/206400. Retrieved 11/12/2019

Prasad, M., Mishra, T., & Kalro, A. D. (2016). Environmental disclosure by Indian companies: An empirical study. *Environment, Development, and Sustainability,* 1–24.

Rahim, M. F., Johari, R.J., & Takril, N.F. (2015). Revisited note on corporate governance and quality of audit committee: Malaysian perspective. *Procedia Economics and Finance, 28,* 213–221.

Ramírez, R.R., & Palos-Sánchez, P.R. (2018). Environmental firms' better attitude towards nature in the context of corporate compliance. *Sustainability, 10,* 3321.

Rensburg, R., & Botha, E. (2014). Is integrated reporting the silver bullet of financial communication? A stakeholder perspective from South Africa. *Public Relations Review, 40*(2), 144–152.

Roe, J.(2017). Balancing board experience and expertise. Institutional Shareholder Services, Inc

Rusyda, Z.T. (2018). *The effect of ownership structure and sustainability report disclosure towardcompany value with financial performance as intervening variable.* Thesis submitted to Yogyakarta State University, 23-78.

Sanna-Lena, B., & Karlsson, J. (2019). *Corporate sustainability and financial performance: The influence of board diversity in a Swedish context.* Thesis submitted to Uppsala University, 1-63

Serafeim, G. (2014). The role of the corporation in society: An alternative view and opportunities for future research. *HBS Work. Pap.* 14-110, 1–28

Stuart, R.L. (2019). *Build your experience through board service*. https://www.forbes.com/sites/forbesinsights/2016/03/24/build-your-experience-through-board-service/#6c33486f7cef

Suneerat, W. (2017). Corporate social responsibility disclosure - Choices of report and its determinants: Empirical evidence from firms listed on the Stock Exchange of Thailand. *Kasetsart Journal of Social Sciences*, *38*(2), 156-162.

Tagesson, T., Blank,V., Broberg, P., & Collin, S. (2019). What explains the extent and content of social and environmental disclosures on corporate websites: A study of social and environmental reporting in Swedish listed corporations. *Corp. Soc. Res. Environ. Manag. 16*, 352–364.

Tan, A., Benni, D., & Liani, W. (2016). Determinants of corporate social responsibility disclosure and investor reaction, 2(45) https://www.econjournals.com/index.php/ijefi/article/view/2683

Uwuigbe, U., Obarakpo, T., Uwuigbe, R., Ozordi, E., Asiriuwa, O., Eyitomi, G.A., & Oluwagbemi, S.T. (2018). Sustainability reporting and firm performance: A bi-directional approach. *Academy of Strategic Management Journal, 17*(3), 1-16.

Votsi, N.E., Kallimanis, A.S., & Pantis, I.D. (2017). An environmental index of noise and light pollution at EU by spatial correlation of quiet and unlit areas. *Environmental Pollution*, *221*, 459–469.

Waris, A., & Muhammad, R. (2013). Factors influencing corporate social and environmental disclosure (CSED) practices in the developing countries: an institutional theoretical perspective. *International Journal of Asian Social Science*, *3*(3), 590-609.

Yasmin, S.N., & Zuraida, Z. (2017). Determinants of sustainability disclosure: Evidence from non-financial companies listed on the Indonesia stock exchange 2013-2015. *Prosiding Seminar Nasional Pascasarjana (SNP) Unsyiah, Banda Aceh, Indonesia*

Zhou, S., Simnett, R., & Green, W. (2017). Does integrated reporting matter to the capital market? *Abacus*, *53*(1), 94–132.