

ENHANCING FIRM PERFORMANCE: THE INFLUENCE OF SUSTAINABILITY PRACTICES ON RETURN ON CAPITAL EMPLOYED IN NIGERIA'S INDUSTRIAL GOODS SECTOR

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ABSTRACT

The study examined the effect of sustainability practices on the return on capital employed of industrial goods firms listed in Nigeria. The study specifically ascertained the effect of social sustainability reporting, economic sustainability reporting and environmental sustainability reporting affects return on capital employed of listed industrial goods firms in Nigeria. Ex-post facto research design was used in the study. Thirteen (13) listed industrial goods firms made up the population of the study, from which a purposive sample of seven (7) firms were chosen based on data availability. Secondary data were collected from the annual reports of the firms over a ten year period, from 2014 to 2023. Descriptive and Pearson Correlational analyses were used to give a summary of the nature of the data. Panel data regression was used in testing the hypotheses and the findings showed the following: Social Sustainability Reporting (SSR) has a significant positive effect on return on capital employed among listed industrial goods firms in Nigeria ($\beta = 0.111156$, $p = 0.0000$); Economic Sustainability Reporting (ECSR) has a significant positive effect on the return on capital employed among listed industrial goods firms in Nigeria ($\beta = 0.953084$, $p = 0.0000$); Environmental Sustainability Reporting (ENSR) has a significant negative effect on return on capital employed among listed industrial goods firms in Nigeria ($\beta = -0.101237$, $p = 0.0000$). In conclusion, by embedding sustainability into the fabric of their business operations, firms not only address stakeholder concerns but may also secure a competitive edge that supports sustained financial growth. The study recommends that managers of listed industrial goods firms in Nigeria should leverage social sustainability reporting by focusing on initiatives that align with community engagement and workforce development.

Key words: Economic Sustainability Reporting, Environmental Sustainability Reporting, Return on Capital Employed, Social Sustainability Reporting, Sustainability Practices.

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INTRODUCTION

Sustainability reporting (SR) encompasses the disclosure of a company's economic, environmental, and social performance—the “triple bottom line” of business accountability. It reflects how operations affect present and future environments, society, and the economy. In manufacturing and industrial sectors, particularly in Nigeria, SR has become essential due to challenges such as flooding, erosion, pollution, emissions, degradation, waste disposal, oil

spillage, gas flaring, and product safety concerns (Emenyi & Okpokpo, 2023; Elom et al., 2025). Globally, SR has evolved from being an optional corporate practice to an expected component of business transparency and stakeholder engagement (Ernst & Young, 2009; Borial, 2013). The Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) offer frameworks for such disclosures. SR is often aligned with the Brundtland Report's (1987) definition of sustainable development: meeting present needs without compromising future generations' ability to meet theirs. Studies have shown mixed evidence on the financial implications of SR. Some find that it enhances profitability, shareholder value, and corporate image (Hongming, Ahmed & Hussan, 2020), while others report no direct performance link (Ordu & Amah, 2021; Wasara & Ganda, 2019). Nevertheless, SR improves transparency, risk management, and stakeholder trust (Popa, Blidisel & Bodga, 2009).

In Africa, South Africa leads in SR adoption through integrated reporting requirements under the King Codes (Integrated Reporting and Assurance Services, 2012). Nigeria has also taken steps, including the SEC's 2019 sustainability code for private sector companies, though uptake remains inconsistent (Whetman, 2018). Given the environmental, social, and governance pressures facing firms, SR is increasingly recognized not as an end but as a strategic tool for sustainable growth, long-term value creation, and enhanced corporate responsibility (Nworie & Orji-Okafor, 2024; Ezeokafor & Amahalu, 2019; Ching, Gerab & Toste, 2017). Unerman, Bebbington and O'Dwyer (2017) state that human activities taking which took place today were regarded by some people as having a detrimental impact on society, ecology and economy which future generations would experience. Indeed, this is a position ever more widely accepted by a growing number of people all over the world. Furthermore, studies such as those of Baboukardos and Rimmel (2016) and Abdullah, Ashraf and Sarfraz (2017), have shown that there is continuing concern about nature fragmentation and loss of biodiversity, shortages in freshwater availability, over-fishing of the seas, global warming, extreme weather events, air pollution, water pollution, environmental noise and utter neglect of and disregard for the protection of the immediate environment, much more the future environment. Despite its adoption sustainability reporting in Nigeria was still unregulated and voluntary (Aondoakaa, 2015), and many corporate organisations do not present their report to reflect their suitability impact on society.

This type of environmental unsustainability associated with continuously rising demand and a shrinking resource base now spills over into social and economic instability. Therefore, from the foregoing, it is seen that many businesses now look to be part of the solutions because of

a business organization is central to the problem hence, it must be central to the solution (Choi & Lee, 2018). For the past few years, considerable studies have been carried out on sustainability reporting; most researchers focuses on corporate social responsibility dimension, like were; Uwuigbe and Egbide (2012), Macarulla and Talalweh (2012), Ebiringa, Yadirichukwu, Chigbu, and Ogochukwu (2013) Ada and Daniel (2020) and environmental dimension of sustainability reporting researchers such as; Didia and Onwuchekwa (2015), Abubakar (2017), Ezeagba, Racheal, and Chiamaka (2017), few were measured on the area of economic performance of business organization in relative to the economic disclosure indicators according to Global Reporting Initiatives. Furthermore, evidence from preliminary literature reviewers indicated that most previous studies failed to extend the scope of their research beyond five financial years, reviewers were: Ofoegbu, and Asogwa, (2020), Al-Dhaimesh and Al Zobi (2019), Asuquo, Dada, Temitayo and Onyeogaziri, (2018). Some other studies failed to employ content analysis approach in determining economic disclosure index which is a more ideal parameter to measure such variable. Other studies on environmental reporting, which convey information on environmental performance. Studies such as Nwaiwu and Oluku (2018), Asaolu, Agboola, Ayoola and Salawu (2011), Obiamaka, Akintola and Francis (2017), Uwuigbe (2018), Asuquo, Dada and Onyeogaziri (2018) focus on oil and gas sector, deposit money bank and brewery firms in Nigeria.

The use of only one performance index was also found to have dominated most existing research works. Therefore, to contribute in closing the aforementioned gaps, this study seeks to extend the line of research on sustainability reporting and financial performance of listed industrial goods firms in Nigeria by empirically ascertaining the effect of environmental, economic and social disclosures index on financial performance of industrial-goods firms quoted on the Nigerian Stock Exchange. Also proxied financial performance using three (3) variable ROCE, EPS and EVA for the period of (12) years (2014 to 2023). However, a notable gap emerges concerning the concentrated investigation of specific sustainability reporting dimensions—social, economic, and environmental—and their individual effects on return on capital employed (ROCE) in the context of industrial goods firms in Nigeria. While studies like those by Ighosewe and Asaba (2010-2019), Akpan and Simeon (2021) provide insights into sustainability disclosures and their general impact on financial metrics such as Tobin's Q and economic value added (EVA), the nuanced impact of these specific dimensions on ROCE has not been exhaustively examined. Furthermore, research by Aifuwa (2020) and Akpan and Emenyi (2020) highlights the influence of aggregate corporate environmental and triple bottom-line reporting on broader financial outcomes but lacks a detailed analysis focusing on

industrial goods firms' capital efficiency. Moreover, studies by Effiong Oti and Akpan (2019) and Nwaiwu and Oluka (2018) have explored sustainability reporting's effects in the oil and gas sector, while research such as Uwuigbe (2018) and Asuquo, Dada, and Onyeogaziri (2018) have delved into similar themes in banking and brewery sectors. However, the industrial goods sector, with its unique operational and environmental challenges, remains underexplored regarding how specific sustainability disclosures influence ROCE, a key measure of capital efficiency. Additionally, while some studies like Silva (2019) in Sri Lanka and Natasha has assessed international contexts, there is an evident scarcity of research addressing the interplay between social, economic, and environmental sustainability reporting and ROCE within the specific Nigerian industrial landscape, making this study pivotal to filling this literature gap.

Objectives

The main objective of the study is to empirically examine the effect of sustainability practices on the return on capital employed of industrial goods firms listed in Nigeria. The study specifically seeks to:

1. evaluate the effect of social sustainability reporting on the return on capital Employed of listed industrial goods firms in Nigeria.
2. determine the extent to which economic sustainability reporting affects return on capital Employed of listed industrial goods firms in Nigeria.
3. examine the extent of environmental sustainability reporting affects return on capital Employed of listed industrial goods firms in Nigeria.

LITERATURE REVIEW

Sustainability Reporting Practices

Sustainability reporting practice as described by Elkington (2004) is the practice of integrating reporting and accounting for social, environmental and economic development in corporate reporting. The concept of sustainability reporting itself maintains that while a firm strives to achieve its traditional objectives of maximizing profit, it is important that this profit is maximized through activities that seek to incorporate social and environmental considerations into the process of making profit (Ukoh, Nduokafor & Nworie, 2024). Sustainability Reporting has no single, generally accepted definition. It is a term generally used to describe a company's reporting on its economic, environmental and social performance. It can be synonymous with triple bottom line reporting, corporate responsibility reporting and sustainable development reporting, but increasingly these terms are becoming more specific

in meaning and therefore subsets of Sustainability Reporting (KPMG, 2008). GRI (2011) defines sustainability reporting as the practice of measuring, disclosing and being accountable to internal and external stakeholders for organizational performance towards the goals of sustainable development. Sustainability index in KPMG (2008) looks at Sustainability Reporting as a business approach that creates long term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments.

According to GRI (2019), sustainability reporting is the practice of measuring, disclosing and being accountable to internal and external stakeholders to achieve the goals of sustainable development. Similarly, Umoren and Ukpung (2022) define sustainability accounting as the sub branch of accounting which handles the activities, methods and systems of the business to record, analyze and report first, the financial effects caused by environmental and social factors and second, the ecological and social effects of a defined economic system. It is not just reported 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 (Mmadubuobi, Nworie & Aziekwe, 2024). According to Akpan and Simeon (2021), by making these disclosures, companies make stakeholders aware of how they are integrating the principles of sustainable development into their organizational goals and daily operations. Sustainability reporting is the term which is widely used to communicate the companies' effect on social, environmental, and economic performance. Such report is disseminated and published to fulfill the needs of a wide range of stakeholders such as investors, creditors, employees, customers, suppliers, governments, activist groups, and the general public. It is recently used to cover the disclosure of a company's commitment to sustainable practice (Burhan & Rahmanti, 2012).

SR is a tool through which businesses communicate their operations' economic, social, and environmental implications to various stakeholders. SR informs external and internal stakeholders of an entity's economic, social, and environmental achievements. GRI (2006) sees SR as a practice by firms to reveal the most significant economic, environmental, and social consequences of their business actions, thus being held accountable for and responsible for managing these impacts. Sustainability reporting, according to Sumaryati and Rohman (2019) as well as Jasch and Stasiskiene (2005), is a subsection of accounting and reporting that deals with operations, methods, and systems for recording, analyzing, and reporting environmental and socially induced financial impacts, as well as ecological and social impacts of a defined economic system (example, a company, production site, and nation).

Sustainability reporting can be a tool to attain cost savings, because it encourages an organization to use natural resources more efficiently, improve process efficiency, and use recoverable resources (Saridewi & Koesrindartot, 2014; Uwuigbe, 2011). It provides a framework for measurement and target setting of organizational goals (Corporate Citizenship, 2012). It helps companies to discover weaknesses, opportunities and set a new goal (Buniamin, Alrazi, Johari & Abd-Rahman, 2011). Finally, sustainability reporting can be used to address the demand for more transparency and better accountability brought about by the global financial crises and the sustainability issues currently facing the world today (INTOSAI WGEA, 2013).

Deegan (2002) posited that sustainability reporting comprises of “social, economic and environmental factors”. People,” planet and profit”, these were carried out by Elkington in 1995 which can be said to be community building reporting, environmental protection reporting, social equity reporting, employee relations reporting and corporate governance. Nigeria as a member of the United Nation had also adopted the UN global compact on global reporting initiative (GRI) which provided sustainability reporting guideline in year 2000, designed and built to accept a common framework for reporting on the linked aspects of sustainability. It in the light of the above amidst growing demand by the society, over the economic, social and environmental accounting of company’s performance that more research work on sustainability accounting becomes imperative. According to Jones and Jonas (2011), sustainability reporting (SR) is simply a company's disclosure of information on the following topics: economic, environmental, human rights, labor practices and decent work, society, and product responsibility. It is also known as the triple bottom line reporting, non-financial reporting, corporate responsibility reporting, and sustainable development reporting. Sustainability reporting activities are any actions a business takes to further a social good beyond its own interests, beyond compliance and beyond legal obligations (such as charitable endeavors, fair labor practices, mitigating negative environmental impacts, fair trade, and sustainability practices like reclaiming packaging materials and minimizing water usage and waste product). Chandler and Werther (2014) define sustainability as the ability to meet current needs without compromising the ability of future generations to meet their own needs. Sustainability reporting requires organizations to take the initiative to include social and environmental issues in their work with diverse stakeholders in order to accomplish this. All individuals who are a part of the social environment of the company and who are either positively or negatively impacted by its operations are considered stakeholders. However, corporate social responsibility focuses only on environmental and social disclosure, while the

concept of sustainable development tied in sustainability reporting involves broader area that covers environmental, social and economic performances. As the campaign of sustainable development has been on increase, many corporate non-financial reports, corporate social responsibility reports, now have been re-packaged as sustainability report (Lopez, Garcia & Rodriguez, 2007). According to Sridhar, (2012) regardless what drives companies to produce sustainability reports and the facts that they are not a mandatory report in most countries, these documents are being integrated in the culture of big companies over time. In fact, the ability to build a performance appraisal system and information management system that provides information about the balance of social, environmental and financial information is essential to maintain the company's culture of sustainability (Rahardjo, Idrus, Djumilah & Siti, 2013).

Sustainability reporting boosts investors' confidence and gives companies the leverage to choose their partners wisely. It also garners employee trust and loyalty, increases access to capital and leads to reduction in waste. It is a virtuous cycle where one sustainable activity benefits the next and keeps the wheel turning. Managers are encouraged to reorient their company in the direction of a new strategy and expansion into new markets by sustainability as an integrated framework. It makes it easier to connect the capabilities of business leadership and employees' capabilities and skills to the resources of the organization. Sustainability has been used to attract new employees who care about the environment and their future lifestyles as well as to motivate existing employees. While other concepts, such as corporate social responsibility (CSR), have been proposed over time to conceptualize relationships between businesses and society, CS has emerged as the most widely used one. Despite the fact that some authors make distinctions between corporate sustainability and CSR (Cheung, 2011; According to Lo and Sheu (2007), CSR is associated with sustainable development in widely accepted definitions. Holme and Watts (2000) defined corporate social responsibility (CSR) as a company's commitment to working with employees, their families, local communities, and society as a whole to improve quality of life. The European Commission (2002) asserts that these two ideas are "intrinsically linked," and corporate social responsibility (CSR) can be understood as a company's contribution to sustainable development. By "managing their operations in such a way as to enhance economic growth and increase competitiveness while ensuring environmental protection and promoting social responsibility, including consumer interests," businesses are seen as contributing to sustainable development.

Economic Sustainability Reporting

Economic reporting is a reference to stable economic capital. Examining an organization's external economic effects on society and then attempting to comprehend how these effects might impact the organization's own sustainability constitute the concept of economic sustainability (Makori & Jagongo, 2013). Economic reporting, according to GRI (2011), is the process by which a business provides information about its range of economic operations, including benefits and wages, labor productivity, job creation, research and development, and investment, to its many stakeholders. This study uses salary along with other benefits in accordance with GRI 200 to evaluate the financial aspect of sustainability reporting. The economic performance can be measured through analyzing the impact of the organizations on the stakeholders on a local, national and global level (Okudo, & Ndubuisi, 2021). The increase in competitiveness and the development of an economy based on knowledge with an emphasis on the improvement of the energetic efficiency and the use of alternative bio-regenerating resources, the protection and improvement of the quality of the environment, the improvement of the living standards, the development and a more efficient usage of the human capital through social promotions are relevant requirements for a sustainable development (Omojolaibi, Okudo & Shojobi, 2019).

A firm's decision in financing, investing and any other decision pattern is primed on the trend of the behavior and disposed characters of its operating environment. Organisational performance has been a source of influence on the actions taken by companies and the degree to which an organisation realizes its goals as well as the stated objectives through the stated strategies and policies of the organisation (Egolum, Amahalu & Obi (2019). The increase in competitiveness and the development of an economy based on knowledge with an emphasis on the improvement of the energetic efficiency and the use of alternative bio-regenerating resources, the protection and improvement of the quality of the environment, the improvement of the living standards, the development and a more efficient usage of the human capital through social promotions are relevant requirements for a sustainable development (Omojolaibi, Okudo & Shojobi, 2019). Cimpoeu, Radu and Cimpoeu (2011) proved a positive relationship between economic reporting and financial performance.

H₀₂: Economic sustainability reporting does not significantly affect return on capital Employed of listed industrial goods firms in Nigeria.

Social Sustainability Reporting

Social reporting refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society (Amahalu, Ezechukwu & Obi, 2017; Nworie & Aniefuna, 2024). The Global Reporting Initiative (GRI) (2011) defines social reporting as a reporting category that comprises information on jobs, careers, training and education, diversity and opportunity, community involvement, employee health and safety, and consumer health and safety. This implies that it provides information on social responsibility policies and practices that have the potential to improve a business's standing while reducing potential legal risks and associated costs. When a corporation shares its social engagement, investors are better able to make decisions. This research uses instruction and training as a gauge for social reporting in accordance with GRI 400.

The social impact of corporations is becoming a very important issue in business entity. Some proponents of the sustainability reporting (Pava & Krausz 2016) find that investment in Corporate Social Responsibility have a big return in terms of image and overall, financial result; the related benefits, in fact are bigger than the related costs. Literature reveals the existence of many positive externalities that are linked to CSR in its bid to respond to stakeholders' requirements. Amahalu and Obi (2020) believe that satisfying the interest of stakeholders (shareholders, employees, suppliers, community, environment and so on) and being accountable to them may actually have a positive impact on all firm dimensions, particularly financial performance. Positive reputations have often been linked to positive financial returns. Okegbe, Eneh and Amahalu. (2019) posited that CSR initiatives can lead to reputation advantage as improvements in invested trust, new market opportunities and positive reactions of capital market would enhance organisation's financial performance, while Aupperle, Carroll and Hatfield (2015) found no relationship between social reporting and corporate financial performance.

H₀₁: Social sustainability reporting has no significant effect on the return on capital Employed of listed industrial goods firms in Nigeria.

Environmental Sustainability Reporting

Amahalu, Abiahu, Okika and Obi (2016) conceptualized environmental reporting is to fulfill its accountability regarding environmental efforts in their activities, and to provide useful information to decision making of interested parties. Environmental reporting is the process by which a corporation communicates its information regarding range of its environmental

activities to a variety of stakeholders (Okafor, Nworie & Onyebuchi, 2024). Herrera, Larrán, Martínez, Martínez-Martínez (2015) defined environmental reporting as the assessment of the impact of environmental issues on the company's financial performance and that it requires changes to the way company discloses environmental issues in their annual/financial report. It is difficult for firms to operate in today's business world where consumers have, and require, more knowledge regarding firms' products and services, their ways of operating and about the firm itself (Okudo, Omojolaibi & Oladele, 2021). Consumers in today's world are more aware and wide awake when it comes to their society and environment's prosperity and how it is been treated by the firms. Thus, it is a huge responsibility for organizations to carry out their operations in a social and responsible manner as it not only affects the societies but also the consumer's decision on involving themselves with the specific organizations (Sridhar & Jones, 2013). Several theoretical models and frameworks have been applied in past researches to have a better understanding of the relationship between the concept of environmental reporting and firms' performances. For example Rokhmawati (2015) found a negative relationship between environmental reporting and firms' performances.

H₀₃: Environmental sustainability reporting does not significantly affect return on capital Employed of listed industrial goods firms in Nigeria.

Financial Performance

Evaluating the financial performance of manufacturing firms enables decision-makers to assess the outcomes of strategies and activities in measurable monetary terms. Financial performance can be broadly categorized into investor returns and accounting returns (Asuquo, Dada & Onyeogaziri, 2018). Investor returns focus on shareholders' perspectives, while accounting returns measure how earnings respond to managerial policies (Abdulsalam, Abdulrahman, Mohammed & Abubakar, 2020). Profitability remains a core indicator, reflecting the ability to generate revenues exceeding costs in relation to capital employed. Highly profitable firms reward owners with strong returns, signaling economic success (Victor, Samuel & Eric, 2013).

Performance is a multidimensional construct encompassing both financial and non-financial indicators (Gavrea, Ilies & Stegorean, 2011). In manufacturing, the focus often lies on financial measures such as Return on Capital Employed (ROCE), Earnings Per Share (EPS), and Economic Value Added (EVA), which capture efficiency in resource utilization and wealth creation (Ngatia, 2015). These measures allow for industry-wide comparison and trend

analysis over time. Corporate performance reflects the degree to which organizations meet objectives through efficient resource use (Aifuwa, 2020). While profitability is central, performance also indicates operational capacity and stakeholder value creation. As Amalendu (2010) notes, measuring financial performance assesses operational and financial attributes as reported in financial statements. However, interpretation may vary due to differing views on wealth and profit measurement (Akinsulire, 2008).

In recent years, rising stakeholder pressure and environmental challenges have heightened the demand for transparent reporting (Cleverline, 2021; Alshbili & Elamer, 2019). Sustainability disclosures—economic, environmental, and social—now complement traditional performance metrics, reflecting broader corporate responsibilities (Krkac, 2007). This integrated approach ensures that performance measurement not only guides strategic decisions but also addresses societal expectations..

Return on Capital Employed

Return on capital employed (or return on Investment) which is an efficiency gauge to show the intensity and profitability of overall capital employed. It is given by the formula: $\text{Net profit (before interest and taxes) / Capital employed}$. ROCE is an indicator that measure show good a business is at generating profits from capital employed, especially capital invested in sustainable developments. Companies that disclose their sustainability strides have the advantage over others as it constitutes one of the criteria used in assessing and rating sustainable companies. Proponents of the positive effects of corporate sustainability reporting observe that sustainability enhances a company's value and image as well as improves the firm's brand positions, reputation and image which in turn improve financial performance in the long run (Lee, Lee & Cho, 2019). It is often assumed that the proper application of economic, social and governance (ESG) standards imply higher returns and financial performance (Hill, 2020).

Theoretical Review

Legitimacy Theory

Legitimacy is a status that is an outcome of society's collective perception of the organization's operation. It is a social assessment or appraisal of corporate conduct that is considered acceptable, appropriate, or/and desirable (Lim, Wilmshurst & Shimeld, 2010). Therefore, it is expected that firms will undertake acceptable behaviour or at least to be perceived as such so that they are perceived to be 'good' corporate citizens. Legitimacy is 'a generalized

perception or assumption that the actions of an entity are desirable proper or appropriate within some socially constructed systems of norms, values, beliefs, and definitions' (Lim et al., 2010). Theory of legitimacy asserts that the organization seeks to ensure that they are perceived as operating within the bounds and norms of their respective societies, that is they attempt to ensure, that outside parties perceive their activities as being 'legitimate.' These bounds and rules are not considered to be fixed but change over time, thereby requiring organizations to be responsive to the ethical environment in which they operate (Ismail & Haddow, 2014). According to this theory, it is essential to meet the societal norms and expectations to ensure the survival of a firm in the long-term (Aggarwal, 2013). The proponents of legitimacy theory argue that corporate social and environmental responsibility tends to reduce the risk of regulatory actions and boycotts by stakeholders and strengthens the firm's license to operate. (Aggarwal, 2013).

According to legitimacy theory there is a contract between an organization and society which states that an organization owe the society an obligation to disclose the activities within the society and this makes them disclose these activities. Deegan (2000) states that legitimacy theory asserts that organizations continually seek to ensure that they operate within the bounds and norms of their respective societies, that is they attempt to ensure that their activities are perceived by outside parties as being legitimate. Legitimacy theory relies upon the notion that there is a "social contract" between the organization in question and the society in which it operates. The concept is used to represent the multitude of implicit and explicit expectations that society has about how the organization should conduct its operations. It is assumed that society allows the organization to continue operations to the extent that it generally meets their expectations. Legitimacy theory emphasizes that the organization must appear to consider the rights of the public at large, not merely those of its investors. Failure to comply with societal expectations may lead to sanctions being imposed by the society. According to this perspective, a company would voluntarily report their activities if management perceived that those activities were expected by communities in which it operate. The legitimacy theory states that in order to maintain its business activities, companies need to behave as to what is expected from society (O'Donovan, 2002). The company's need to legitimate its activities drive companies into making sustainability reports, as the information disclosed in these documents is important to change society's perception towards the company (Deegan, 2002). Cho and Patten (2007) also support the argument that companies use disclosure as a legitimizing tool. Hedberg and Malmberg (2003) have found in their empirical evidence from

Sweden companies, that they produce corporate sustainability reports to seek organizational legitimacy.

Empirical Review

Ighoseweq and Asaba, (2021) examine corporate sustainability disclosure and the Nigerian industrial /consumer goods sector's performance, from 2010 to 2019 culminating into 100 cross-sectional units with sample of 10 firms quoted in the Nigerian industrial/consumer goods sector. Using sustainability disclosure measured by Corporate Social Responsibility Disclosure (COSRD), Employee Disclosure (EMPD), Firm Size (FSIZE), Environment Disclosure (ENVID), and Research and Development Disclosure (REDED) and is firm performance measured by Tobin Q. Both the regressors and regressed were extracted from the financial statement through content analysis in line with Global reporting initiatives (GRI, 2013). The findings revealed that employee disclosure, firm size, and environmental disclosure reduce Tobin Q significantly. While development disclosure increases the Tobin Q significantly also, corporate social responsibility reduces Tobin Q insignificantly.

Akpan and Simeon (2021) examined the effect of sustainability disclosures on cash flow return on investment of shareholders of oil and gas companies in Nigeria. The secondary source of data was used and the research design adopted was *ex post facto*. The study adopted a time series and cross sectional analysis of selected oil and gas firms quoted on the Nigerian Exchange Group as of 31st December 2020 for a period of seven years, spanning 2014-2020. Content analysis methodologies were employed to get data for the sustainability parameters. The results from the study revealed that social sustainability disclosure has a positive significant effect on the cashflow return on investment of listed oil and gas firms in Nigeria; health and safety and that environmental disclosure have an insignificant effect on cash flow return on investment of the studied companies.

Contrary to these findings, Ofoegbu and Asogwa (2020), using a t-test for analysis, established that SR does not significantly influence the profitability of 15 publicly listed consumer goods in Nigeria. This was further supported by Gonçalves et al. (2023) after examining the impact of SR on the EVA of firms listed in the STOXX Europe 600 Index from 2012 to 2020. Due to the nature of the data obtained, panel regression was used, and the findings revealed that SR significantly influences EVA.

Aifuwa (2020) conducted a study on Corporate Environmental Disclosure and the Market Value of Nigerian Quoted Companies. The overall goal of this research was to determine the

aggregate and individual impact of Corporate Environmental Disclosure when market value was regressed. The study employed a descriptive research approach and solely used secondary data. A total of fifty companies listed on the Nigerian Stock Exchange (NSE) were chosen for examination based on the presence of environmental disclosures in their annual reports. The correlation coefficient was used to test the hypothesis. According to the research, including environmental information will increase market value. According to the survey, businesses should Exercise prudence in places where environmental operations have a detrimental influence on the firm's value.

Akpan and Emenyi (2020) investigated the effect of the triple bottom-line reporting on the financial and operating performance of oil and gas firms in Nigeria. Data used in the study were mainly secondary obtained from the Nigerian Exchange Group fact book and annual financial statements of oil and gas companies. A disclosure checklist based on GRI guidelines was developed, and the research design adopted was ex post facto. The results showed that triple bottom line reporting has a significant effect on earnings per share (EPS), return on equity (ROE) and return on total assets.

MATERIALS AND METHOD

This study employs an ex-post facto research design to assess the effect of sustainability reporting on the return on capital employed of industrial goods firms listed in Nigeria. This design is particularly suitable for analyzing historical data to identify relationships between already occurring variables (Ikwuo et al., 2025), enabling the exploration of how sustainability practices, including social, economic, and environmental reporting, impact the financial performance of these firms. The population of this study consists of thirteen (13) publicly listed industrial goods firms in Nigeria, as identified from the NGX factsheet (2024). These firms are listed below:

Table 1: Population

1. Austin Laz & Company Plc.
2. Berger Paints Plc.
3. Beta Glass Plc.
4. Bua Cement Plc.
5. Cap Plc.
6. Cutix Plc.
7. Dangote Cement Plc.
8. Greif Nigeria Plc.
9. Lafarge Africa Plc.
10. Meyer Plc.
11. Notore Chemical Industries Plc.

12. Premier Paints Plc.
13. Tripple Gee And Company Plc.

Source: NGX Factsheet (2024)

Using a judgmental sampling technique, seven firms out of the thirteen listed were selected based on their availability of comprehensive sustainability reporting and complete financial records from 2014 to 2023. This approach ensures a robust analysis of the nexus between sustainability reporting and firm performance. The selected firms are:

Table 2: Sample Size

1. Berger Paints Plc.
2. Dangote Cement Plc.
3. Lafarge Africa Plc.
4. Beta Glass Plc.
5. Cap Plc.
6. Cutix Plc.
7. Tripple Gee And Company Plc.

Source: Researcher's Compilation (2024)

The study will utilize secondary data sourced from the annual sustainability and financial reports of the selected firms. These reports, which can be accessed through the NGX and the firms' corporate websites, cover the period from 2014 to 2023. The data will include metrics necessary for calculating ROCE and various sustainability indicators, ensuring data accuracy and reliability, given the auditing standards applied to these reports. The key variables in this study include sustainability reporting (social, economic, and environmental) and the financial performance (measured using return on capital employed). Return on capital employed is measured using the ratio of earnings before interest to the capital employed.

The operational definitions of the independent variables are as follows:

Table 3 Operationalization of Sustainability Reporting Using GRI Indices

GRI ITEMS	DISCLOSURE
Environmental Sustainability Reporting: GRI 306 (Waste Management)	Number of Total of GRI 306 Items disclosed/5
Waste generation and significant waste-related impacts	"1" if disclosed or "0" if not disclosed
Management of significant waste-related impacts	"1" if disclosed or "0" if not disclosed
Waste generated	"1" if disclosed or "0" if not disclosed
Waste diverted from disposal	"1" if disclosed or "0" if not disclosed
Waste directed to disposal	"1" if disclosed or "0" if not disclosed
Social Sustainability Reporting: GRI 413 (Local Community)	Number of Total of GRI 413 Items disclosed/4
Operations with local community engagement	"1" if disclosed or "0" if not disclosed
Social impact assessments	"1" if disclosed or "0" if not disclosed
Social development Programs	"1" if disclosed or "0" if not disclosed
Significant actual and potential negative impacts of operations	"1" if disclosed or "0" if not disclosed
Economic Sustainability Reporting: GRI 201 (Economic Performance)	Number of Total of GRI 201 Items disclosed/4

Direct economic value generated and distributed	"1" if disclosed or "0" if not disclosed
Financial implications and other risks and opportunities due to climate change	"1" if disclosed or "0" if not disclosed
Defined benefit plan obligations and other retirement plans	"1" if disclosed or "0" if not disclosed
Financial assistance received from government	"1" if disclosed or "0" if not disclosed

Source: Author's Compilation from GRI (2024)

To estimate the effects of sustainability reporting on financial performance, the independent variables (social, economic, and environmental sustainability reporting) are analyzed in relation to the dependent variable (ROCE) using panel regression analysis. The model representing these relationships was adapted from the study by Ezeokafor and Amahalu (2019) whose model is presented below:

$$EPS_{it} = \beta_0 + \beta_1 ECPD_{it} + \beta_2 SOPD_{it} + \beta_3 ENPD_{it} + E_{it} \dots\dots\dots \text{Eqn 1.}$$

Where:

ROE_{it} = Return on Equity for firm *i* in period *t*
 NPM_{it} = Net Profit Margin for firm *i* in period *t*
 EPS_{it} = Earnings per Share for firm *i* in period *t*
 ECPD_{it} = Economic performance disclosure for firm *i* in period *t*
 SOPD_{it} = Social performance disclosure for firm *i* in period *t*
 ENPD_{it} = Environmental performance disclosure for firm *i* in period *t*

The above model was modified into what we have below:

$$ROCE_{it} = \alpha_0 + \beta_1 SSR_{it} + \beta_2 ECSR_{it} + \beta_3 EnSR_{it} + \epsilon_{it} \dots\dots\dots \text{Eqn 2.}$$

Where:

ROCE_{it} = Return on Capital Employed for firm *iii* in period *t*
 SSR_{it} = Social Sustainability Reporting for firm *iii* in period *t*
 ECSR_{it} = Economic Sustainability Reporting for firm *iii* in period *t*
 ENSR_{it} = Environmental Sustainability Reporting for firm *iii* in period *t*
it = Stochastic term for firm *iii* in period *t*
 α = Constant
 β_{1-3} = Coefficients

Data analysis is conducted using Eviews 10 software. Descriptive statistics, such as mean and standard deviation, was calculated for each variable. The panel regression analysis is applied to investigate the effect of the independent variables (sustainability reporting) on the dependent variable (firm financial performance). The essence of the descriptive statistics computed for each variable is to summarize the data characteristics. Panel regression analysis is chosen due to its ability to account for variations over time and differences across firms,

providing more accurate and comprehensive insights into how sustainability practices influence financial performance metrics. The significance level for the analysis will be set at 5%. A p-value less than 0.05 will lead to the rejection of the null hypothesis, indicating a significant effect of sustainability reporting on ROCE. Conversely, a p-value greater than 0.05 will support the null hypothesis, suggesting no significant effect.

RESULT AND DISCUSSIONS

Descriptive Analysis of Data

Table 4 Descriptive Analysis

	ROCE	SSR	ECSR	ENSR
Mean	0.267879	0.892857	0.839286	0.514286
Median	0.170578	1.000000	0.750000	0.800000
Maximum	1.819770	1.000000	1.000000	0.800000
Minimum	0.022439	0.250000	0.750000	0.000000
Std. Dev.	0.306569	0.264340	0.120654	0.338062
Skewness	3.079710	-2.041241	0.596285	-0.396019
Kurtosis	14.04627	5.166667	1.355556	1.307183
Jarque-Bera	466.5456	62.30324	12.03539	10.18778
Probability	0.000000	0.000000	0.002435	0.006134
Sum	18.75151	62.50000	58.75000	36.00000
Sum Sq. Dev.	6.484936	4.821429	1.004464	7.885714
Observations	70	70	70	70

Source: Eviews 10 Output (2024)

The analysis of Return on Capital Employed (ROCE) for industrial goods firms listed in Nigeria reveals a mean value of approximately 0.268. This suggests that, on average, these firms generate a return of 26.8% on their capital employed, indicating a relatively strong performance in utilizing capital to produce profits. The maximum ROCE observed is 1.820, indicating that at least one firm effectively utilized its capital to achieve an exceptionally high return, while the minimum ROCE of 0.022 suggests that some firms performed poorly in capital utilization. The standard deviation of 0.307 points to significant variability in ROCE among firms, suggesting disparities in financial performance. The skewness value of 3.080 indicates a positive skew in the distribution, meaning that while most firms cluster around lower ROCE values, a few achieve very high returns, thus impacting the average. The kurtosis of 14.046 suggests a leptokurtic distribution, indicating a higher peak and heavier tails compared to a normal distribution, which points to the presence of outliers. Finally, the Jarque-Bera test statistic has a probability of 0.000, indicating that the ROCE distribution significantly deviates from normality.

Social Sustainability Reporting (SSR) shows a mean of 0.893, suggesting that firms, on average, disclose a substantial portion of the required social sustainability information, with

nearly 89.3% of possible items reported. The maximum disclosure rate reaches a full 1.000, indicating that some firms fully comply with SSR guidelines, while the minimum is at 0.250, suggesting that at least one firm has disclosed only a quarter of the items. The standard deviation of 0.264 implies moderate variability among firms in their SSR practices, reflecting differing levels of commitment to social sustainability. The skewness of -2.041 indicates a negative skew, suggesting that a greater number of firms have higher disclosure rates, thus pulling the average up. Kurtosis of 5.167 indicates a distribution that is more peaked than normal, suggesting a concentration of firms with high SSR, while the probability of the Jarque-Bera statistic being 0.000 denotes a significant deviation from normality.

Economic Sustainability Reporting (ECSR) shows a mean of 0.839, indicating that firms are reporting around 83.9% of the economic sustainability items on average. The maximum value of 1.000 implies that some firms disclose all relevant economic sustainability information, while the minimum of 0.750 indicates that the lowest level of reporting is still quite high compared to other dimensions. The standard deviation of 0.121 reveals that there is less variability among firms regarding ECSR compared to SSR, which may reflect a more uniform approach to economic disclosures across the industry. The skewness value of 0.596 suggests a slight positive skew, indicating that while most firms perform well in ECSR, there are a few that fall short. The kurtosis of 1.356 indicates a relatively flat distribution, and the probability of Jarque-Bera at 0.002 indicates that the distribution of ECSR also significantly departs from normality, albeit less drastically than SSR.

Environmental Sustainability Reporting (ENSR) has a mean of 0.514, indicating that, on average, firms disclose about 51.4% of the relevant environmental sustainability items, suggesting moderate engagement in environmental reporting. The maximum of 0.800 shows that some firms are more committed to environmental sustainability than others, while the minimum value of 0.000 indicates that at least one firm has not disclosed any of the required environmental items. The standard deviation of 0.338 suggests substantial variability among firms regarding ENSR, indicating that while some firms are proactive in environmental disclosures, others may lag significantly. The skewness value of -0.396 points to a negative skew, suggesting that many firms are reporting at higher rates, with fewer firms disclosing at lower rates. The kurtosis of 1.307 indicates a distribution that is somewhat platykurtic, meaning it has lighter tails compared to a normal distribution, reflecting fewer extreme values. The Jarque-Bera statistic probability of 0.006 indicates a significant deviation from normality for ENSR as well.

Test of Hypotheses

The hypotheses were tested using panel data regression analysis, as shown in Table 5 below.

The multiple linear model tested is re-stated below:

$$ROCE_{it} = \alpha_0 + \beta_1 SSR_{it} + \beta_2 ECSR_{it} + \beta_3 EnSR_{it} + \epsilon_{it}$$

Table 5 Panel Data Regression for Hypotheses Testing

Dependent Variable: ROCE
 Method: Panel EGLS (Cross-section SUR)
 Date: 10/25/24 Time: 08:19
 Sample: 2014 2023
 Periods included: 10
 Cross-sections included: 7
 Total panel (balanced) observations: 70
 Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SSR	0.111156	0.009606	11.57206	0.0000
ECSR	0.953084	0.088996	10.70924	0.0000
ENSR	-0.101237	0.018018	-5.618562	0.0000
C	-0.589139	0.063023	-9.348054	0.0000
Weighted Statistics				
R-squared	0.775105	Mean dependent var	3.797686	
Adjusted R-squared	0.764882	S.D. dependent var	3.701670	
S.E. of regression	1.020494	Sum squared resid	68.73292	
F-statistic	75.82323	Durbin-Watson stat	1.673472	
Prob(F-statistic)	0.000000			

Source: Eviews 10 Output (2024)

The panel data regression analysis aims to ascertain the effect of sustainability reporting on the financial performance of industrial goods firms listed in Nigeria, measured through Return on Capital Employed (ROCE). The adjusted R-squared value of 0.765 indicates that approximately 76.5% of the variation in ROCE can be explained by the independent variables of social, economic, and environmental sustainability reporting. This high value suggests that the model fits the data well, capturing a significant portion of the factors affecting ROCE. The Prob(F-statistic) value of 0.0000 indicates that the overall model is statistically significant, meaning at least one of the predictors significantly affects ROCE. The Durbin-Watson statistic of 1.673 is close to 2, which suggests that there is no significant autocorrelation in the residuals, further validating the robustness of the model.

Hypothesis One

- H₀₁: Social sustainability reporting has no significant effect on the return on capital Employed of listed industrial goods firms in Nigeria.
- H₁₁: Social sustainability reporting has significant effect on the return on capital Employed of listed industrial goods firms in Nigeria.

The coefficient for Social Sustainability Reporting (SSR) is 0.111156, indicating a positive effect on ROCE. This coefficient means that for every one-unit increase in SSR, ROCE increases by approximately 11.12%, demonstrating a marginal effect that is economically significant. The p-value associated with SSR is 0.0000, which is below the 5% significance level, confirming that this effect is statistically significant. This suggests that greater transparency and engagement in social sustainability practices contribute positively to the financial performance of firms in this sector. Thus, we accept the alternate hypothesis that Social Sustainability Reporting (SSR) has a significant positive effect on return on capital employed among listed industrial goods firms in Nigeria ($\beta = 0.111156$, $p = 0.0000$).

This finding indicates that when firms invest in social responsibility activities, such as community engagement, employee welfare, and corporate social responsibility initiatives, they experience enhanced financial performance. This positive relationship may be attributed to improved stakeholder relationships, which can lead to better brand loyalty and employee productivity, ultimately boosting financial returns. Empirical studies provide varied support for this finding. For instance, Akpan and Emenyi (2020) found that triple bottom-line reporting, including social sustainability, significantly impacts the financial performance of oil and gas firms in Nigeria, confirming the potential financial benefits of social disclosures. Similarly, Amahalu, Ezechukwu, and Obi (2017) reported a significant positive relationship between return on assets and corporate social responsibility (donations) among quoted banks in Nigeria. Effiong, Oti, and Akpan (2019) also highlighted that social disclosures positively affect shareholders' value-added metrics, such as cash flow return on investment. However, contrary results were noted by Omesì and Berembo (2020), who found no significant relationship between social accounting and financial performance in listed oil and gas companies, suggesting that the impact of social reporting may vary across industries.

Hypothesis Two

- H₀₂: Economic sustainability reporting does not significantly affect return on capital Employed of listed industrial goods firms in Nigeria.
- H_{i2}: Economic sustainability reporting significantly affects return on capital Employed of listed industrial goods firms in Nigeria.

The coefficient for Economic Sustainability Reporting (ECSR) is notably higher at 0.953084, suggesting a substantial positive effect on ROCE. This indicates that for each additional unit of ECSR reported, ROCE increases by approximately 95.31%, highlighting a significant marginal effect that underscores the importance of economic sustainability in driving financial performance. The p-value for ECSR is also 0.0000, indicating that this effect is statistically significant at the 5% level. This finding suggests that firms prioritizing economic sustainability practices may experience considerably enhanced financial outcomes. Thus, we accept the alternate hypothesis that Economic Sustainability Reporting (ECSR) has a significant positive effect on the return on capital employed among listed industrial goods firms in Nigeria ($\beta = 0.953084$, $p = 0.0000$).

This indicates that firms that provide detailed disclosures on their economic activities, including profitability, growth, and long-term value creation, tend to perform better financially. This outcome can be attributed to the confidence such transparency inspires in investors, which may translate to increased investment and better capital allocation. Several studies align with this result. Al-Dhaimesh and Al Zobi (2019) found that economic, social, and environmental reporting had a substantial positive effect on the financial performance of Jordanian banks. Uwalomwa, Obarakpo, and Ozordi (2018) also demonstrated a bidirectional relationship between sustainability reporting and the performance of commercial banks in Nigeria, suggesting that economic disclosures drive better financial outcomes. On the other hand, Memed and Amir (2020) observed that sustainability reports did not significantly influence ROA or ROE in Indonesian mining firms, indicating that the impact of ECSR may depend on the industry and geographic context.

Hypothesis Three

- H₀₃: Environmental sustainability reporting does not significantly affect return on capital Employed of listed industrial goods firms in Nigeria.
- H_{i3}: Environmental sustainability reporting significantly affects return on capital Employed of listed industrial goods firms in Nigeria.

In contrast, the coefficient for Environmental Sustainability Reporting (ENSR) is -0.101237, indicating a negative effect on ROCE. This suggests that for every one-unit increase in ENSR, ROCE decreases by approximately 10.12%, reflecting a marginal effect that could signify inefficiencies or challenges associated with environmental sustainability practices. The p-value for ENSR is 0.0000, indicating that this effect is statistically significant at the 5% level. This result raises concerns regarding the costs or investments in environmental reporting that may not yield immediate financial benefits for firms, suggesting a need for a strategic evaluation of environmental initiatives. Thus, we accept the alternate hypothesis that Environmental Sustainability Reporting (ENSR) has a significant negative effect on return on capital employed among listed industrial goods firms in Nigeria ($\beta = -0.101237$, $p = 0.0000$).

This implies that increased environmental disclosures may be associated with lower financial performance in the short term. This result could be due to the costs associated with environmental compliance, reporting, and the implementation of green initiatives, which may not immediately translate into higher profitability. Empirical evidence provides mixed hints into this finding. Abubakar (2017) found that environmental disclosure negatively but significantly influenced financial performance among breweries in Nigeria, aligning with the notion that environmental costs can burden firms. Umobong and Agburuga (2018) also reported a negative significant link between community relation costs (a component of environmental reporting) and financial performance measures, such as ROA and ROCE, in Nigerian firms. In contrast, Aifuwa (2020) highlighted that including environmental information could potentially enhance market value, showcasing the diverse effects that environmental reporting can have depending on context and stakeholder expectations.

5.0 CONCLUSION AND RECOMMENDATIONS

Sustainability reporting has become a crucial aspect of modern corporate governance, reflecting how firms disclose their social, economic, and environmental impacts. This reporting is essential for stakeholders, including investors, regulatory bodies, and the public, as it informs decision-making and promotes transparency. The effect of sustainability reporting on financial performance metrics, such as return on capital employed (ROCE),

varies depending on the specific dimension of sustainability disclosed. The findings of this study, which examined the effect of sustainability reporting on the financial performance of listed industrial goods firms in Nigeria, highlight significant implications for the business and regulatory environment. The study's results demonstrate that sustainability reporting—encompassing social, economic, and environmental aspects—can affect the return on capital employed (ROCE) of these firms. This effect suggests that firms that engage in comprehensive sustainability reporting practices may experience notable changes in their financial performance, underscoring the relevance of incorporating sustainability as a core business consideration. The implications of these effects extend to the strategic positioning of firms within the industry. Companies that prioritize and effectively communicate their sustainability efforts can benefit from enhanced financial performance, likely as a result of improved stakeholder trust and investor confidence. This implies that sustainability reporting is not merely a compliance exercise but a strategic tool that can influence the financial outcomes of a firm. Consequently, firms may need to view sustainability practices as integral to their operational strategies, aligning their activities with broader environmental, social, and governance (ESG) goals.

From a regulatory perspective, the findings underscore the importance of promoting consistent and transparent sustainability reporting standards. The demonstrated effect of sustainability reporting on financial performance supports the notion that regulatory bodies should encourage or require firms to adopt comprehensive reporting practices. Such measures can help standardize the evaluation of sustainability efforts across the sector and contribute to a more transparent investment landscape. Additionally, the study's findings point to broader implications for corporate governance. As sustainability reporting proves to have an effect on financial performance, boards and management teams may recognize the value of integrating sustainability into their governance frameworks. This can shift corporate focus toward long-term sustainability planning, thereby influencing resource allocation, risk management, and strategic decision-making. By embedding sustainability into the fabric of their business operations, firms not only address stakeholder concerns but may also secure a competitive edge that supports sustained financial growth.

Based on these, the study recommends that:

- 1) Managers of listed industrial goods firms in Nigeria should leverage social sustainability reporting by focusing on initiatives that align with community engagement and workforce development.

- 2) Senior management and financial planners should capitalize on economic sustainability reporting by integrating comprehensive financial data and economic contributions into their reports by showcasing growth metrics, job creation, and economic impacts that resonate with stakeholders, thereby reinforcing the positive relationship with financial performance.
- 3) Environmental policy developers should look for ways to refine the approach to environmental sustainability reporting. This can include integrating cost-effective, eco-friendly initiatives that align with profitability, ensuring that environmental efforts contribute positively to the firm's performance.

REFERENCES

- Abdullah, M.I., Ashraf, S. & Sarfraz, M. (2017). The organizational identification perspective of CSR on creative performance: the moderating role of creative self-efficacy, *Sustainability*, 9 (11), 21-25.
- Abdulsalam, N. K., Abdurrahman, B. S., Mohammed, B. A. & Abubakar, S. Y. (2020). Assessment of the Relationship between Sustainability Activities and Financial Performance of Oil and Gas Companies in Nigeria. *Journal of Business and Management*, 22(1), 1-8.
- Abubakar, A. (2017). Influence of firms attributes on environmental disclosure in listed brewery companies in Nigeria. *Research Journal of Finance and Accounting*, 8(21), 31 – 35.
- Aggarwal, P. (2013). Impact of sustainability performance of company on its financial performance: A study of listed Indian companies. *Global Journal of Management and Business Research Finance*, 13(11), 60 – 70.
- Aifuwa, H. O. (2020). Sustainability reporting and firm performance in developing climes: A review of literature. *Copernican Journal of Finance & Accounting*, 9(1), 9-29.
- Akinsulire, O. (2008). *Financial management* (5th ed.). Lagos: El-Toda Ventures Ltd
- Akpan, D. C. & Emenyi, E. O. (2020). Effect of triple bottom line reporting on financial and operating performance: Implications for Nigeria oil and gas sector. *FUO Quarterly Journal of Contemporary Research*, 8(4), 64-95.
- Akpan, D. C. & Simeon U. J. (2021). Corporate sustainability disclosures and cash flow return on investment of shareholders of oil and gas companies in Nigeria. *International Journal of Innovative Finance and Economics Research*, 9(3), 111-124.

- Al Hawaj, A. Y., & Buallay, A. M. (2021). A worldwide sectorial analysis of sustainability reporting and its impact on firm performance. *Journal of Sustainable Finance & Investment*, 1–25. <http://doi.org/10.1080/20430795.2021.1903>.
- Al-Dhaimesh, O. H., and Al Zobi, M. K. (2019). The effect of sustainability accounting disclosures on financial performance: an empirical study on the Jordanian banking sector. *Banks and Bank Systems*, 14(2), 1-8.
- Alshbili, I.A & Elaner, A.A (2019). The influence of institutional context on corporate social responsibility disclosure: a case of a developing country. *Journal of Sustainability Finance & Investment* 10(1), 1-19.
- Amahalu, N.N, Okoye, P.V.C & Obi, J.C. (2018). Effect of sustainability reporting on Economic Value Added of Quoted Brewery Firms in Nigeria. *Journal of Accounting, Jos*, 7 (1):1-20
- Amahalu, N.N., & Obi, J.C. (2020). Effect of audit quality on financial performance of quoted conglomerates in Nigeria. *International Journal of Management Studies and Social Science Research*, 2(4), 87-98.
- Amahalu, N.N., Abiahu M-Fidelis., Okika E.C., & Obi J.C. (2016). Determinants of capital structure: Empirical evidence from quoted electrical and electronic firms in Nigeria (2010-2015). *Managing diversification for sustainable development in sub-Saharan Africa, Faculty of Management Sciences, 2016 International Conference*, 8-10, November, 2016.
- 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.
- Amalendu, B. (2010). Financial performance of Indian pharmaceutical industry: A Case Study. *Asian Journal of Management Research*, 3(3), 269.
- Anumaka, Chikaodi J. M. (2023). Economic Sustainability Reporting and Financial Performance of quoted industrial goods sector in Nigeria. (2011 – 2017). *Journal of Research in Business and Management Volume 11 ~ Issue 3 (2023) pp: 01-13*.
- Anyanwu, N. (2015). The impact of statutory money supply management and commercial bank loans and advances (Cbla) on economic growth: An empirical evidence in Nigeria. *Nigerian Chapter of Arabian Journal of Business and Management Review*, 3.1-10.
- Aondoakaa, K. (2015). Impact of Sustainability Reporting on Corporate Performance of Selected Quoted Companies in Nigeria (thesis). Retrieved from University of Nigeria Virtual Library.

- Ariyani, A. P., & Hartomo, O. D. (2018). Analysis Of Key Factors Affecting The Reporting Disclosure Indexes Of Sustainability Reporting In Indonesia. *International Journal of Business, Economic and Law*, 16(1), 15–25.
- Asaju, K & Arome.S (2015). Environmental degradation and sustainability in Nigeria: The Need for environmental education. *Journal of Social Sciences*. 3(3), 56-61.
- Asaolu T. O., Agboola A. A., Ayoola T. J. & Salawu M. K. (2011) Sustainability Reporting in the Nigerian Oil and Gas Sector. *Proceedings of the Environmental Management Conference, Federal University of Agriculture, Abeokuta, Nigeria*.
- Association of Chartered Certified Accountants and Net Balance Foundation (2004). The state of sustainability report assurance in the ASX 100.
- Asuquo, A. I., Dada, E. T. & Onyeogaziri, U. R. (2018). The Effect of Sustainability Reporting on Corporate Performance of Selected Quoted Brewery Firms in Nigeria. *International Journal of Business & Law Research*, 6(3):1-10.
- Asuquo, A. I; Dada, E.T. & Raphael, O. U.(2019).The effect of sustainability reporting on corporate performance of selected quoted brewery firms in Nigeria. *Int. J. Business & Law Research* 6(3):1-10, 2018.
- Atanu, F.H. & Olorundare, J. (2007).Rural Development and Sustainable Development in Nigeria. *Ankpa Journal of Arts and Social Sciences*, 2(4),14-26.
- Atanu, F.H. & Olorundare, J. (2007).Rural Development and Sustainable Development in Nigeria. *Ankpa Journal of Arts and Social Sciences*, 2(4),14-26.
- Aupperle, K.E. Carroll, A.B. & Hatfield, J.B. (2015). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal*, 28(2), 446- 463.
- Baboukardos D., & Rimmel, G. (2021). Value relevance of accounting information under an integrated reporting approach: A Research Note. *Economic Journal of Accounting and Public Policy*, 35(4), 56-63.
- Bassey, I (2019). Environmental degradation and sustainable development in Nigeria: A study of the south-south region in Nigeria. *International journal of humanities, social sciences and education*, 6(8)33-42.
- Beredugo, S. B., & Mefor, I. P. (2012).The Impact of environmental accounting and reporting on sustainable development in Nigeria. *Research Journal of Finance and Accounting*,3(7) 1-7.
- Borial, O. (2013). Sustainability reports as simulacra? A counter-account of and A+ GRI reports. *Accounting, Auditing and Accountability Journal*,26, 1036-1071.

- Brundtland, G. H. (1987). Our common future. United nations world commission on environment and development (Brundtland commission). Oxford:Oxford university press.
- Buniamin, S., Alrazi, B., Johari, N. H. & Abd Rahman, N. R. (2011). Corporate Governance Practices and
- Burhan, A. H., & Rahmanti, A (2012). The impact of sustainability reporting on company performance. *Journal of Economics, Business, and Accountancy Ventra*, 15(2), 257 – 272.
- Business for Social Responsibility, BSR. (2020). Five steps to good sustainability reporting: A practical guide for companies. BSR November 2020 Report. NY, USA.
- Chandler, D. & Werther, W. B. (2014). Strategic Corporate social responsibility: stakeholders' globalization and sustainable value creation. Third edition. Thousand Oaks, CA: Sage Publications.
- Cheung, A. (2011). Do stock investors value corporate sustainability? Evidence from an event study. *Journal of Business Ethics*, 99(2), 145-165.
- Ching, H. Y., Gerab, F. and Toste, T. H. (2017). The Quality of Sustainability Reports and Corporate Financial Performance: Evidence from Brazilian Listed Companies, *Journal of Indexing & Metrics*, 1 – 9. DOI: 10.1177/12158244017712027.
- Cho, C. G. & Pattern, D. M. (2007). The role of environmental disclosures as tools of legitimacy: A research more. *Accounting, Organization and Society Journal*, 32 (7-8), 639-647. <http://dx.doi.org/10.1016/j.aos.2006.09.009>.
- Choi, S. & Lee, S. (2018). Revisiting the financial performance–corporate social performance link, *International Journal of Contemporary Hospitality Management*, 30(7) 2586-2602.
- Cimpoeru, M.V, Radu, M., & Cimpoeru, V. (2011). Empirical study regarding key indicators correlations for sustainable performance budgeting. In: The Faculty of Accounting and Management Information Systems of the Bucharest Academy of Economic Studies, *The International Conference Accounting and Management Information Systems - The sixth edition AMIS 2011..* Bucharest, Romania, 8-9 June 2011. Bucharest: Ed. ASE.
- Clarissa, S.V & Rasmini, N.R (2018). The Effect of Sustainability Report on Financial Performance with Good Corporate Governance Quality as a Moderating Variable. *International Journal of Sciences: Basic and Applied Research*, 139-149.
- Cleverline, B (2021). Combating environmental degradation in Nigeria through the recognition of the rights of nature. [Doi.org/10/2139/ssrn.3843333](https://doi.org/10.2139/ssrn.3843333).
- de Klerk, M., & De Villiers, C. (2012). The value relevance of corporate responsibility reporting: South African evidence. *Mediterranean Accountancy Research*, 20(1). 19-33.

- Deegan, C. (2000). Financial Accounting Theory Irwin McGraw-Hill, Sydney.
- Deegan, C. (2002). The legitimizing effect of social and environmental disclosures: Atheoretical foundation. *Accounting, Auditing and Accountability Journal*, 15(3), 282-311. <http://dx.doi.org/10.1108/09513570210435852>.
- 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.
- Dilling, P.F.A. (2010). Sustainability reporting in a global context: What are characteristics of corporations that provide high quality sustainability reports-An empirical analysis. *International Business & Economics Research Journal*, vol. 9(1), 19- 30.
- Dowling, J. & Pfeffer, J. (1975). Organisational legitimacy: social values and organisational
- Edwards, R.A. (2020). The sustainability revolution: Portrait of a paradigm shift, Canada: New Society Publishers
- Effiong, S. A., Oti, P. A. & Akpan, D. C. (2019). Triple bottom line reporting and shareholder's value in oil and gas marketing firms in Nigeria. *Academy of Accounting and Financial Studies Journal* 23(5), 1528-2635.
- Egolum, P.U., Amahalu, N.N., & Obi, J.C. (2019). Effect of firm characteristics on environmental performance of quoted industrial goods firms in Nigeria. *International Journal of Research in Business, Economics and Management* 3(6), 1-13.
- 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. *Journal of Management and Sustainability*, 3(2), 79-91.
- Elkington, J. (2004). Cannibals with forks: The triple bottom line of the 21st century business. Oxford: Capstone.
- Elkington, J. (2004). Enter the triple bottom line. The triple bottom line: Does it all add up, 1-16.
- Elom, J., Nworie, G. O., Ugwu, J., Nwogo, J., & Nwele, A. (2025). Carbon management disclosure and firm value in the Nigerian energy market. *Journal of Current Social Issues Studies*, 2(7), 8-23. <https://doi.org/10.71113/JCSIS.v2i7.333>
- Emenyi, E.O. and Okpokpo, A.S. (2023). Environmental Disclosure and the Quality of Financial Reports of Listed Nigerian Manufacturing Firms. *British Journal of Marketing Studies*, 11 (4), 18-53.
- Environmental Reporting of Companies in Malaysia: Finding Possibilities of Double Thumbs Up. *Jurnal Pengurusan*, 32, 55-71.

- Ernest, M. & Young, O. (2009). Non-financial reporting. Retrieved Sept. 15, 2016 from [http://www.ey.com/publication/vwLUAsset/Non-financial-reporting/\\$FILE/Climate%20Change_Non%20financial%20reporting.pdf](http://www.ey.com/publication/vwLUAsset/Non-financial-reporting/$FILE/Climate%20Change_Non%20financial%20reporting.pdf).
- Ernst & Young (2013). Six growing trends in corporate sustainability. Retrieved from http://www.ey.com/Publication/vwLUAssets/Six_growing_trends_in_corporate.
- European Commission (2002). Corporate social responsibility: A business contribution to sustainable development. *European monitoring center on change*.
- Evangelinos, K; Fotiadis, S; Skouloudis, A; Khan N; Konstantakopoulou, F; Nikolaou, I. & Lundy, S. (2020). Occupational health and safety disclosures in sustainability reports: An overview of trends among corporate leaders. University of Reading. <https://doi.org/10.1002/csr.1512>
- Ezeokafor, F. C. & Amahalu, N. (2019). Effect of Sustainability Reporting on Corporate Performance of Quoted Oil and Gas Firms in Nigeria. *Journal of Global Accounting*, 6 (2), 217-228.
- Ezeokafor, F.C., & Amahalu, N.N. (2019). Effect of sustainability reporting on corporate performance of quoted oil and gas firms in Nigeria. *Journal of Global Accounting*, 6(2), 217-228.
- Fontraine, C., Harman, A., & Schmid, S. (2006). The stakeholder theory, Retrieved From <http://www.edalys.fr/documents/stakeholders%20theory.pdf> on 22 September, 2011.
- Francisco, S. & Zahir, D. (2014). Transparency, a new strategy to communication sustainability performance . <http://www.imd.org>.
- Freeman, J. M. (2009). Optimal policies for playing variable wager HILO. *Journal of Operational Research Society*, 60 (1), 79-83, DOI: 10.1057/plgrave.j.ors 2602520.
- Freeman, R. (1984). Strategic management: A stakeholder approach. London: Pitman.
- Friedman, A.L. (2002). Developing stakeholder theory. *Journal of Management Studies*. 39(1) 1-8.
- Freeman, R. (1984). Strategic management: A stakeholder approach. London: Pitman.
- Freeman, R. E., Wicks, A. C. & Parmar, B. (2004). Stakeholder theory and the corporate objective revisited. *Organization science*, 15(3), 364-369. <http://dx.doi.org/10.1287/orsc.1040.0066>.
- Friedman, A.L. (2002). Developing stakeholder theory. *Journal of Management Studies*. 39(1) 1-8.
- Garg, P. (2015). Impact of sustainability reporting on firm performance of companies in India. *International Journal of Marketing and Business Communication*, 4(3), 38-45.

- Global Reporting Initiative (2019). What is sustainability reporting
<https://www.gri.Org>selected quoted brewery firms in Nigeria. *Int. J. Business & Law Research* 6(3):1-10, 2018
- Goel, P., & Misra, R. (2017). Sustainability reporting in India: Exploring sectoral differences and linkages with financial performance. *Vision*, 21(2), 214-224.
- Gonçalves, T. C., Louro, D. & Barros, V. (2023) Can Corporate Sustainability Drive Economic Value Added? Evidence from Larger European Firms. *Journal of Risk and Financial Management*,16 (215), 1-20. <https://doi.org/10.3390/jrfm16040215>.
- Gould, S. (2011). Accounting for Sustainability. *Accountancy Plus*, 1, 19-20.
- Gray, R., Kouhy, R. & Lavers, S. (1996). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing and Accountability Journal*, 8(2), 47-77.<http://dx.doi.org/10.1108/09513579510146996>
- GRI (2011) G3.1 Sustainability reporting guidelines, global reporting initiatives. <http://www.globalreporting.org/resourcelibrary/G3.1-guidelinesinc-technical-protocol.pdf>
- GRI (2011). *Sustainability reporting guidelines, version 3.1*. Integrated Reporting and Assurance Services (2012). Review of sustainability reporting in South Africa as per the Global Reporting Initiative (GRI) Guidelines. Retrieved from http://www.iras.co.za/Documents/Research/King_III_and_GRI_13_Research_Report.pdf
- Gujarati, D.N., & Porter, D.C. (2009). *Basic Econometrics*. 5th Edn., New York: McGraw Hill Irwin. ISBN No 978-0071276252.
- Hashim, F., Ries, E. A., & Huai, N. T. (2019). Corporate Social Responsibility and Financial Performance: The Case of ASEAN Telecommunications Companies. FGIC 2nd Conference on Governance and Integrity 892–913.
- Henri, J.F & Journeault, M. (2010). Eco-control the influence of management control systems on environmental and economic performance. *Accounting Organisation and Society*, 35(1), 63-80.
- Herdberg, C. I. & Mamborg, V. F. (2003). The global reporting initiative and corporate sustainability reporting in Swedish companies. *Social responsibility and environmental management*, 10, 153-164. <http://dx.doi.org/10.1002/csr.38>.
- Herrera , M.J., Larrán, J.M., Martínez, C.I., & Martínez-Martínez, D. (2015). Relationship between corporate social responsibility and competitive performance in Spanish SMEs: Empirical evidence from a stakeholders' perspective. *BRQ Business Research Quarterly*, 19(1), 55-72.

- Hill, J. (2020). Environmental, social, and governance (ESG) investing: A balanced analysis of the theory and practice of a sustainable portfolio. Cambridge: Academic Press.
- Holme, R. & Watts, P. (2000). Corporate social responsibility: Making good business sense. Conches-Geneva, Switzerland: World Business Council for Sustainable Development.
- Hong, Y. C., Fabio, G. & Thiago, G. T. (2014). Scoring sustainability reports using GRI indicators: A study based on USE and FTSE4 good price indexes. *Journal of management research*, 6(3), doi:10.5296/ jmr.v6i3.5333.
- Hongming, X; Ahmed, B & Hussan, A (2020). Sustainability reporting and firm performance: The demonstration of Pakistani firms. *Sage journals*, doi.org/10.1177/2158244020953180.
- Hussain, N. (2015). Impact of sustainability performance on financial performance: an empirical study of global fortune 100 firms. *Working paper 1*(1), 1-49.
- Ighosewe, Enaibre Felix and Asaba, Asaba, (2021) Corporate Sustainability Disclosure and the Nigerian Industrial /Consumer Goods Sector's Performance, *International Journal of Research and Innovation in Social Science (IJRISS)* |Volume V, Issue III, March 2021|ISSN 2454-6186. Page 622
- Ihederu, N. C. & Okoro, C. U. (2019). Sustainable Reporting and Profitability of Quoted Firms in Nigeria: A Multi-Dimensional Panel Data Study. *Australian Finance & Banking Review*, 3(1), 1-10.
- Ijeoma N. B. (2015). The role of environmental cost accounting in environmental sustainability in Nigeria. *American Journal of Business, Economics and Management*. 3(6), 395-407.
- Ikwuo, A. K., Nwite, I. M., & Nworie, G. O. (2025). Reflecting staff reward in employee output: A validation of Henri Fayol's 7th principle of management using the Nigerian manufacturing sector. *Golden Ratio of Human Resources Management*, 5(2), 488–500. <https://goldenratio.id/index.php/grhrm/article/view/957/1030>
- Integrated Reporting and Assurance Services (2012). Review of sustainability reporting in South Africa as per the Global Reporting Initiative (GRI) Guidelines. Retrieved from http://www.iras.co.za/Documents/Research/King_III_and_GRI_13_Research_Report.pdf
- Isa, A. M. (2014). Sustainability reporting among Nigeria food and beverage firms. *International Journal of Agriculture and Economic Development*, 2(1), 1-9.
- Ismail Alhassan, K. M. Anwarul Islam, Md. Shariful Haque (2021) Sustainability Reporting And Financial Performance Of Listed Industrial Goods Sector in Nigeria. *International Journal of Accounting & Finance Review* Vol. 9, No. 1; 2021.

- Jasch, C., & Stasiskiene, Z. (2005). From environmental management accounting to sustainability management accounting, *Environmental Research, Engineering and Management*, 4(34), 77-8.
- Jegers, M. (2010). The effect of board-manager agency conflicts on non-profit organisations' earnings and cost allocation manipulations. *Accounting and Business research*, 40(5):407-419.
- Jones, A. & Jonas, G. A. (2011). Corporate social responsibility reporting: The growing need for input from the accounting profession. *CPA Journal*, 81(2), 65-71.
- KPMG (2008). KPMG international survey of corporate responsibility reporting retrieved from www.kpmg.com/global/ensured and insights/articles/publications/pages/sustainabilityreporting-2008.aspx.
- KPMG (2008). Sustainability reporting: A guide. Retrieved from www.kpmg.com on 22 October, 2011.
- KPMG (2011). Corporate sustainability: A progress report. <http://www.kpmg.com/global/en/issues> and insights/articles publications/documents/corporate sustainability-v2.pdf.
- KPMG (2011). Global sustainability service and sustainability ltd: Count me in: The Readers take on sustainability Reporting, Amstelveen.
- Krkac, K. (2007) Introduction to Business Ethics and Corporate Social Responsibility, Mate, Zagreb.2. Lindblom, C.K.(1994). "The Implications of Organizational Legitimacy for Corporate social performance and disclosure", The Critical Perspectives on Accounting Conference, New York, NY, 6-9 July.
- Lawrence, L., Thomas, T., & Wang, Y. (2017). Sustainability reporting and firm value: Evidence from Singapore-listed companies. *Sustainability* 9(2112), 1-12.
- Lee, D; Lee, C. & Cho, N. (2019). Voluntary disclosures and market valuation of sustainability reports in Korea. *Sustainability* 1, 3577-3594.
- Lim, S.M., Wilmschurst, T. & Shimeld, S. (2010) Blowing in The Wind Legitimacy Theory. *An Environmental Incident and Disclosure*. (p. APIRA 2010)
- Lo, S. & Sheu, H. (2007). Is corporate sustainability a value-increasing strategy for business? *Corporate Governance*, 15(2), 345-358.
- Lopez, M. V., Garcia, A. & Rodriguez, L. (2007). Sustainable development and corporate performance: A study based on Dow Jones sustainability index. *Journal of Business Ethics*, 75, 285- 300. <http://dx.doi.org/10.1007/s10551-006-8253-8>

- Makori, D. M & Jagongo, A. (2013). Environmental accounting and firm profitability: An empirical analysis of selected firms listed in Bombay stock exchange, India. *International Journal of Humanities and Social Science*, 3(18), 248-256.
- Mmadubuobi, L. C., Nworie, G. O. & Aziekwe, O. P. (2024). Industry 4.0 and Corporate Technological Responsibility of Manufacturing Firms in Nigeria. *Central Asian Journal of Innovations on Tourism Management and Finance*, 5(4), 67-80. Available at: <https://cajitm.centralasianstudies.org/index.php/CAJITMF/article/view/711>
- Ngatia, C.N. (2015). Exploring Sustainability Reporting for Financial Performance of Selected Companies Listed at the Nairobi Securities Exchange in Kenya. *International Academic Journal of Economics and Finance*, 1(4), 32-48.
- Nwaiwu, N.J. & Oluku, N.O. (2018), Environmental Cost Disclosure and Financial Performance of Oil and Gas in Nigeria. *International Journal of Advanced Academic Research*. Vol. 4 (2), 1-23.
- Nworie, G. O. & Aniefuna, T. J. (2024). Transcending the Traditional Profit-Centric Approach to Socially Responsible Paradigm - Effect on Firm Profit of Listed Consumer Goods Firms in Nigeria. *International Journal of Social Sciences and Management Research*, 10(1), 112-129. <https://doi.org/10.56201/ijssmr.v10.no1.2024.pg112.129>
- Nworie, G. O., & Orji-Okafor, T. G. (2024). Quadruple bottom line disclosure among listed manufacturing firms in Nigeria: A paradigm for cost savings. *International Journal of Management, Accounting and Economics*, 11(10), 1416-1437. <https://doi.org/10.5281/zenodo.13910231>
- Nze, D.O., Okoh., J. and Ojeogwu, I.C. (2016). Effect of corporate social responsibility on earnings of quoted firms in Nigeria. *ESUT Journal of Accountancy*, 1: 260-267.
- O'Donovan, G. (2002). Environmental disclosures in the annual report: Extending the applicability and predictive power of legitimacy theory. *Accounting, Auditing and Accountability Journal*, 15(3), 344-371. <http://dx.doi.org/10.1108/09513570210435870>
- Ofoegbu, G. & Asogwa, C. (2020). The Effect of Sustainability Reporting on Profitability of Quoted Consumer Goods Manufacturing Firms in Nigeria. *International Journal of Innovative Research and Development*, 9(4), 271-282.
- Okafor, O. O., Nworie, G. O., & Onyebuchi, M. H. (2024). Assessing Financial Returns Through Environmental Responsibility Disclosure Among Listed Oil and Gas Firms in Nigeria. *International Journal of Research Publication and Reviews*, 5(4), 545-557. <https://doi.org/10.55248/gengpi.2023.42001>

- Okegbe, T.O., Eneh, O.M., & Amahalu, N.N. (2019). Effect of firm characteristics on capital structure of deposit money banks listed on Nigeria stock. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(2), 198–210.
- Okudo, A.G., & Ndubuisi, A.N. (2021). Corporate governance and carbon disclosure practices of quoted manufacturing firms in Nigeria. *International Journal of Contemporary Research and Review*, 12 (07), 20409.
- Okudo, A.G., Omojolaibi, J., & Oladele, M. (2021). Impact of waste recycling on environmental quality and revenue generation: Case Study of University Of Lagos, Nigeria *International Journal of Contemporary Research and Review* 12(8), 20211-20227.
- Omes, I. & Berembo, A. P. (2020). Social accounting and financial performance of oil and gas companies in Nigeria (2012-2017). *European Journal of Business, Economics and Accountancy*, 8(1), 29-41.
- Omojolaibi, J.A., Okudo, A.G., & Shojobi, D.A.. (2019). Are women financially excluded from formal financial services? Analysis of some selected local government areas in Lagos State, Nigeria. *Journal of Economic and Social Thought*, 6(1), 16-47.
- Ordu, P. A & Amah, C. O (2021).Sustainability accounting and financial performance of oil and gas companies in Nigeria. *International Journal of Innovative Finance and Economics Research* 9(1),182-197.
- Popa, A., Blidisel, R., and Bodgan, V. (2009). Transparency and disclosure between theory and practice: A case study of Romania.
- Rahardjo, H., Idrus, M. A., Djumilah, H., & Siti, A. (2013).Factors that determine the success of corporate sustainability management. *Journal of Management Research*, 5(2).<http://dx.doi.org/10.5296/jmr.v5i2.2993>
- Saridewi, P.N, & Koesrindartoto, D.P (2014). The Link between Social, Environmental to Financial Performances of Companies in Indonesia .p. *International Conference on Trends in Economics, Humanities and Management (ICTEHM'1)* Pattaya (Thailand).
- Silva, P. D. (2019). Sustainability Reporting and Its Impact on Financial Performance: A Study of the Sri Lankan Financial Sector. *Vidyodaya Journal of Management*, 5(1), 01-27.
- Sridhar, K. (2012). The relationship between the adoption of triple bottom line and enhanced corporate reputation and legitimacy. *Corporate Reputation Review*, 15, 69-87. <http://dx.doi.org/10.1057/crr.2012.4>

- Sumaryati, A., & Rohman, A. (2019). The Influence of Sustainability Reporting on Environmental and Financial Performance. *Quality-Access to Success*, 20(171), 131-134.
- Ukoh, U. M., Nduokafor, C. O. & Nworie, G. O. (2024). Sustainability Reporting among Oil and Gas Firms: a Strategic Tool for Enhanced Firm Value. *International Journal of Economics and Financial Management*, 9(2), 144-166.
<https://doi.org/10.56201/ijefm.v9.no2.2024.pg144.166>
- Umobong, A.A & Agburuga, U.T (2018). Financial performance and corporate social responsibility of quoted firms in Nigeria. *International Journal of Innovative Social Sciences and Humanities Research*.6(1), 14-30.
- Umoren, A. O. & Ukpogon, E. G. (2022). Corporate attributes and sustainability reporting: A study of Nigerian listed companies. *IDORS Journal of Humanities and Social Sciences* 7(1), 8-22.
- Unerman, J., Bebbington, J., & O'Dwyer, B. (2007), (Eds.), Sustainability accounting and accountability (104-126), London: Routledge.
- Uwuigbe, U. (2011). An Empirical Investigation of The Association Between Firms' Characteristics and Corporate Social Disclosures in The Nigerian Financial Sector. *Journal of Sustainable Development in Africa*, 13(1).
- Uwuigbe, U. (2011). Corporate environmental reporting practices: A comparative study of Nigerian and South African firms (Doctoral dissertation). Covenant University, Nigeria.
- Uwuigbe, U., Obarakpo, T., Olubukola, R.U., Ozordi, E., Osariemen, A., Gbenedio, A.E. & Oluwagbemi, S.T. (2018), Sustainability Reporting and Firm Performance: A Bi-Directional Approach. *Academy of Strategic Management Journal* Vol. 17, (3), 1-16.
- Victor, L., Samuel, A. and Eric, B.K. (2013). The relationship between liquidity and profitability of listed banks in Ghana. *International Journal of Business and Social Sciences*, 3(2): 48-56.
- Wasara, T.M & Ganda, F. (2019). The Relationship between Corporate Sustainability Disclosure and Firm Financial Performance in Johannesburg Stock Exchange (JSE) Listed Mining Companies. 11(16), 1-23.
- Whetman, L. (2018). The Impact of Sustainability Reporting on Firms Profitability, *Undergraduate Economic Review*, 14(1), 1 – 21.