

FIRM ATTRIBUTES AND ENVIRONMENTAL DISCLOSURE

BY

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**BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
ACCOUNTING, FACULTY OF MANAGEMENT SCIENCE, UNIVERSITY OF
BENIN, BENIN CITY IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc.) DEGREE IN
ACCOUNTING.**

SEPTEMBER, 2023.

DECLARATION

I hereby declare that;

1. This project is based on the study undertaken by me in the department of Accounting, University of Benin, under the supervision of Professor O. O. Omokhudu.
2. This work has not been previously submitted for the award of a degree elsewhere.
3. All idea and views are product of my personal research and where the views of others have been expressed, they have been dully referenced and acknowledge.
4. All liabilities from the study are entirely mine and not those of my supervisor.

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CERTIFICATION

This is to certify that this project research was carried out by **Ginikachukwu Goodness EZEIGWE**, Matriculation number: **MGS1804418** in the department of Accounting, Faculty of Management Science, University of Benin, Benin city, Edo state, Nigeria.

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DEDICATION

This report is dedicated to God Almighty for giving me the strength, showing me his blessings, favor and protection before, during and after the project.

Would also love to dedicate this report to my family for their support all through this report.

ACKNOWLEDGEMENT

I wish to express my profound gratitude to **God** Almighty for his divine favor and grace throughout this project and also for his steadfast love for I and my family.

I also want to sincerely appreciate my project Supervisor, **Professor O O. Omokhodu**, for his dedicated support and amiable personality. His excellent supervision, which has been beneficial to the successful completion of this study.

I want to appreciate my supportive parents, **Mr. LAMBERT EZEIGWE** and **Mrs. ROSEMARY EZEIGWE**, for their financial and moral support throughout my stay in the University of Benin.

I sincerely want to appreciate the wonderful friends whom God has used to aid my journey through Uniben, **Ossai Amaka, Oteri Ufuoma, Mubarak Nabila, Ekanem Precious** amongst others, I love you all.

The completion of this work would have been impossible without these great personalities. My appreciation goes to the lecturers in the department of Accounting and the entire faculty of Management science, University of Benin, who have guided me through my path in this journey.

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ABSTRACT

This study investigates the effect of firm attributes on environmental disclosure. The study is motivated by the increasing concern about the environment and the role

corporate organizations play in ensuring sustainable development, the study employs a sample of 720 firm years over a period of 10 years, 2013- 2022, the study employs using a pooled regression to determine the firm attributes that influence environmental disclosures.

The study finds that firm attributes are significant in explaining the degree of environmental disclosure. The study finds that firm size and profitability are significant determinants of environmental disclosure. The study recommends that regulatory authorities should be vigilant in curtailing the focus on profit at the expense of the environment and also recommends that stiff penalties be imposed to dissuade firms from mindless pursuit of profit.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The activities of companies, both industrial and non-industrial alike, have immense impact on our environment. This impact is found in several forms, ranging from air and water f pollutions to loss of habitat for wild life and other aquatic species, and by extension, loss of sources of subsistence for the human race. The need to measure the impact of companies' activities on the environment has birthed the concept of environmental accounting and reporting.

Environmental accounting is a branch of accounting whose main purpose is to take up the challenge of a contemporary issue: measurement of environmental impact of business and its activities. And the accounting professionals appear to be focusing on the role of environmental accounting, under the consideration that environmental issues are fundamental to human survival (Yakhou & Dorweiler, 2004).

There is a general agreement that environmental awareness is growing among organizations' stakeholders who are calling on organizations to be more environmentally responsible and accountable. This environmental consciousness is providing the dynamics for businesses to report their environmental performances to their numerous stakeholders.

Currently, there is the call, particularly in the developed economy, for companies to incorporate environmental policies in their overall business policies; and to ensure that

their environmental performances are assessed, reviewed and monitored closely in line with legal requirements and best practices. And that this assessed environmental performances of companies is expected to be reported to the companies' stakeholders through the medium of environmental reporting.

According to Yakhou and Dorweiler (2004), environmental reporting is the effective vehicle for demonstrating environmental accountability to outside interests who may require openness and transparency regarding the environment and the sustainable use of its resources. However, environmental reporting or disclosure means different things to different stakeholders and different companies in different countries. And the reason for this differences is partly due to the non-mandatory nature of environmental accounting disclosure, at least, in the developing countries of the world. Besides, there is currently no generally acceptable reporting standard for environmental performance disclosure by companies in developing countries to the best of the researcher's knowledge.

As long as environmental performance disclosure by companies remains voluntary, within and across countries, there would be obvious differences in the quality and quantity of environmental impact disclosures. Therefore, there must be concerted efforts by regulatory agencies, accounting bodies and even governments to institutes standards of environmental reporting, particularly in the less developing countries of the world.

In the context of developed economies, efforts are already being made to standardize environmental performance disclosures by companies. The Coalitions for Environmentally Responsible Economies (CERES) lunched the Global Reporting Initiative in 1997 to bring environmental reporting at par with financial reporting.

Various studies have been carried out in the developing countries' context to ascertain the level of environmental accounting disclosure. For example, Beredugo and Mefor (2012) in their study of the impact of environmental accounting and reporting on sustainable development in Nigeria opined that there are positive indicators of environmental accounting practices in companies and business organizations in developing countries. They however, concluded that the practice of environmental accounting is not serious enough as there are no specialized activities in companies or factories to apply it, and that the practice is carried out in an improvised and random manner.

To buttress the view opined by Beredugo and Me for (2012), Alawode and Adegbie (2020) attempted to find out whether the current level of awareness about environmental accounting is translating into appropriate reporting of environmental performance by Nigerian companies. They came to the conclusion that environmental accounting and reporting is still at infancy and that there is need to go further into the research of obstacles or potential hindrances delaying the adoption of world's best practices by companies in Nigeria.

Like Alawode and Adegbe (2020), Worimegbe, and Oyewole (2021) carried out a study to find out whether a statistically significant difference exists in the level of environmental disclosure practice of some selected quoted manufacturing companies from 2007 to 2017 but came to the conclusion that there is no statistically significant difference in the level of environmental disclosure practice of the selected quoted manufacturing companies for the period they reviewed. According to them, the non-significant disclosure practice is due to the voluntary nature of environmental disclosure by the companies in Nigeria.

According to Jerry, Teru and Musa (2015), the current position of environmental accounting reporting and disclosures in Nigeria might best be described as confusing and full of ambiguity because in Nigeria, disclosure of environmental accounting information in annual report of companies is voluntary as there are no accounting standards or regulatory and statutory guidelines that mandate such disclosures.

In the context of the developed society, Baalouch, Ayadi and Hussainey (2019) carried out a study of the determinant of environmental disclosure quality in French listed companies. They looked at factors related to the strategy and vision of the firms in view of strategic part of the fact that environmental disclosure is legislatively mandatory for French companies, and it is expected that companies in France should make environmental accounting and reporting a strategic part of their overall business plan. Their study however, revealed that quality of disclosure remains relatively low.

It is therefore necessary to carry out a study to determine the current state of environmental accounting and reporting practices of firms in Nigeria following the increased environmental awareness of organizations' stakeholders as depicted by the level of social unrest and violent protest in many communities where these companies are sited resulting from the negative impact of business activities on the environment.

The goal of this study is, therefore, to identify the significant elements affecting Nigerian companies' environmental disclosure from the lens of the stakeholder and contingency theories to ascertain the current level of environmental disclosure as propelled by the increasing environmental awareness of companies' stakeholders; and if the level of disclosure is contingent on the following internal attributes or characteristic of the companies: size, age, profitability, industry environmental sensitivity and gender spread (female board membership) with board size as a mediating variable.

1.2 Statement of the Research Problem

Environmental policy and environmental performance are expected by companies' stakeholders to be above legal regulation. Companies' environmental performances need to be measured to determine the impact of companies' activities on the environment in which they operate. Environmental policies need to be integrated with business policies to enable businesses to become expressly environmentally conscious and responsible. This responsibility and accountability towards the environment is expected to leave the environment better and sustainable for future generations. Also, this responsibility calls for appropriate and adequate disclosure and evaluation of companies'

environmental performance in line with national environmental laws and regulations, international standards and best practices, and stakeholders' expectations.

But as Epstein (2003) observed, irrespective of the surge and proliferation of academic and managerial publication on the issue of social and environmental accounting and reporting, the corporate world is yet to fully integrate environmental policies into corporate decision making. And from the review of extant and related literature, there is a general agreement that status of environmental awareness on the part of the stakeholders is increasing but the question is: is this awareness translating into appropriate disclosure on the part of the corporations? Earlier studies (Beredugo & Mefor, 201; Jerry, Teru & Musa, 2015) carried out on environmental accounting and reporting quality and the determinant of the disclosure quality revealed that the state of environmental accounting and reporting, especially in Nigeria, is very poor; and this poor state of environment accounting and reporting was attributed to the voluntary nature of environmental disclosure despite the regulations introduced by government by way of environmental laws.

With the current worsening and degrading state of the Nigerian natural environment which is characterized by deforestation, drought and desertification, soil and coastal erosion, water pollution, oil pollution, water hyacinth invasion, loss of biodiversity, flooding, urban decay, and industrial pollution, one cannot help but wonder what the Nigerian corporate world is doing to remediate this situation to make our

environment sustainable for future generations. Companies are expected to be eco-sensitive, and they are expected to be environmental responsible and accountable. As succinctly put by Suryani and Rofida (2020), environmental accounting and reporting practice becomes easy for companies once they come to the realization that environmental management and care is an inseparable part of companies' operations that should not be compelled by stakeholders' pressure.

From the foregoing, it is pertinent to evaluate the current state of environmental accounting and reporting in Nigeria to determine if there is an improvement in environmental disclosure following the increase environmental awareness and agitations by organizations' stakeholders for better and transparent environmental performance disclosure.

This study is therefore premise/on the need to determine the current state environmental disclosure of companies in Nigeria. Also, an attempt will be made to determine the factors or attributes that drive disclosure level. At the end of the exercise, a blue print for the initiation of good environmental policies which should be integrated in the business strategy of the companies would be suggested. This would encourage companies to have dedicated environmental managers who will focus on environmental management in the companies. This will ensure that environmental performances of the companies are assessed, reviewed and monitored in line with legal requirements. This will not only promote better environmental awareness and care; it will also help in

improving the companies comparative advantage as entities that are proactive and expressly environmental in their operations.

1.3 Research Questions

As a rider to the statement of research problem above, the following research questions will guide this study.

1. To what extent does company's size affect environmental disclosure of non-financial companies in Nigeria?
2. How does company's age affect environmental disclosure of non-financial companies in Nigeria?
3. To what extent does industry environmental sensitivity affect environmental disclosure of non- financial companies in Nigeria?
4. What is the relationship between company's profitability and environmental disclosure of non-financial companies in Nigeria?
5. Does female board membership affect environmental disclosure of non-financial companies in Nigeria?

1.4 Objectives of the Study

The broad objective of the study is to determine the current state of environmental disclosure by companies in Nigeria. The specific objectives, however, are to:

1. determine the nexus between company's size and environmental disclosure of

non-financial companies in Nigeria.

2. examine how company's age affects environmental disclosure of non-financial companies in Nigeria.
3. determine the linkage between industry environmental sensitivity and environmental disclosure of non-financial companies in Nigeria.
4. investigate how company's profitability affects environmental disclosure of non-financial companies in Nigeria.
5. examine the impact of female board membership on environmental disclosure of non-financial companies in Nigeria.

1.5 Research Hypotheses

The following hypotheses stated in the null form serve as a basis upon which the assumed conditions are to be tested and validated.

1. There is no statistical relationship between company's size and environmental disclosure.
2. There is no statistical relationship between company's age and environmental disclosure.
3. No statistical relationship exists between industry environmental sensitivity and environmental disclosure.
4. There is no statistical relationship between company's profitability and

environmental disclosure.

5. There is no statistical relationship between female board membership and environmental disclosure.

1.6 Scope of the Study

This study is geographically delimited to Nigeria with focus on the non-financial companies listed on the Nigerian Stock exchange as at March 1st, 2021. The time of observation is 2019. The reason for the choice of 2019 is because it is the last normal financial year before the 2020 CO VID 19 pandemic lockdown with available statement of financial reports and accounts. By the way, the study is not a longitudinal study that will require more than one year. The study is to confirm the current state of environmental disclosure by the selected companies.

The Population of study comprises of the 109 non-financial companies listed on the Nigerian Stock Exchange as at the above stated date. Of this population, a sample of 86 companies from all strata was randomly selected using stratified random sampling method. This is to allow for proportionate representation of all strata of the population. The distribution of the population and the sample size as a percentage of the population is as shown in table 1 in the methodology section of this paper.

1.7 Significance of the Study

This study to the best of the researcher's knowledge will contribute to existing body of knowledge as it will give an insight to the current state of environmental

disclosure of firms operating in Nigeria since it will be using updated information to assess the level of environmental disclosures by Nigerian firms. Also, the study will give some pointers to some of the factors that are responsible for the disclosure level of environmental performances by the selected firms.

In addition, this study will contribute to the existing literature because it is examining the issue of environmental disclosure from a cross-sector standpoint as against a single sector position adopted by most researches in the area of environmental accounting and reporting of firms in Nigeria. For example, Ezeagba, John-Akamelu, and Umeoduagu (2017) carried out a study on Environmental Accounting Disclosures and Financial Performance in Nigeria and centered the study on the Beverage Companies in Nigeria. Also, Oraka and Egbunike (2016) looked at the issue of environmental accounting information purely from the point of view of consumer goods manufacturing companies in Nigeria. In the same vein, Sani, Aminu and Ahmed (2020) in their study: the determinants of corporate social and environmental disclosure in the Nigerian oil and gas industry: an empirical investigation, examined the issue from a single sector (oil and gas industry).

Finally, the researcher hopes that the findings of this study will not only provide valuable insights for companies, but it will also provide useful insight for policy-regulators or best practices creators who deal with the development of disclosure regulations or guidelines.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is a review of extant and available literature on the subject of environmental accounting and reporting practices to determine the state of knowledge in this area of research and to give a theoretical justification of this study.

2.1 Conceptual Review

2.1.1 Sustainable Development

Sustainable development has become indispensable for every organization to survive in the modern era (Chen, Weerathunga, Nurunnabi, Kulathunga & Samarathunga, 2020). The concept of sustainable development was described by the 1987 Brundtland Commission Report as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (UNESCO, n.d.). According to UNESCO, Sustainability is a paradigm for thinking about the future in which environmental, societal and economic considerations are balanced in the pursuit of an improved quality of life.

Scholars have forwarded various concepts to promote sustainable development, among which environmental (green) accounting is one such concept that aims to incorporate the cost of the ecological impact of companies’ operations into conventional accounting systems (Chen, Weerathunga, Nurunnabi, Kulathunga & Samarathunga, 2020).

2.1.2 Environmental Accounting and Reporting

Environmental Accounting, as a subset of accounting proper, is a field of accounting that identifies resource use, measures and communicates costs of a company's or national impact on the environment (Krishna, 2020). Also Known as Green Accounting, Environmental accounting attempts to factor environmental costs into the financial results of companies' operations (Lakshmi & Devi, 2018). To Islam, Miah and Fakir (2015), Environmental accounting is the identification, collection, estimation and analysis of environmental cost information for superior decision-making within the firm. Yakhou and Dorweiler (2004) say environmental accounting is on an expansion path. It fills an expectation role of measuring performance following the increasing social focus on the environment. To Yakhou and Dorweiler, environmental accounting is an exclusive field of accounting that provides reports for both internal and external use. It generates environmental information to help make management decisions on pricing, controlling overhead and capital budgeting. It also helps to disclose environmental information of interest to the public and the financial community.

According to the European Environmental Agency (EEA), environmental reports are "the principal vehicle for company's communication on the environment and a fair and credible reflection of the company's environmental activities" (EEA, 1998 cited in Krivacic & Jankovic, 2017).

To Khanna (2019), environmental accounting is about aggregation of data that links the environment to the financials of the company, which will obviously have a long-run impact on both economic and environmental policy of the organization. Environmental report on the other hand, is the vehicle for expressing environmental responsiveness and performance. It can also be considered as a business practice that demonstrates companies' commitment to addressing environmental issues. It is a means by which financial and non- financial information is communicated to management and other stakeholders to enable them make informed decision to optimize corporate, environmental and economic performance towards achieving the objective of sustainability.

Environmental reporting enables managers to be aware of environmental costs and impact occasioned by their business activities, production processes and product choices. It therefore motivates them to identify ways of reducing and avoiding economic costs related to the environment and by extension, reducing companies' impact on the environment. For example, through environmental reporting, management of bottling companies may be aware of the environmental impact of using non-biodegradable materials in their production.

In recent times, it has been advocated that companies provide what is now known as sustainability accounting which usually entails measuring and communicating the impact of the corporate policies and practices on an organization's performance at the

economical (financial), ecological (environment) and social (socio-cultural) levels (Tackie, Agyenim- Boateng & Arthur, 2017). Shakkour, Alaodat, Alqisi and Alghazawi (2018) citing Zhan and Zhang (2013) asserted that the system of environmental accounting includes two types of accounting, the first one is environmentally differentiated conventional accounting and the second one is ecological accounting. In environmentally differentiated accounting, we measure the impacts of the natural environment on a company in financial terms while ecological accounting measures the company's impact on the environment but according to physical measurements.

The environmental accounting practice, therefore, is seen as an essential component of the environmental decision-making process within the corporate sector and its primary goal remains the implementation of policies and practices for environmental protection (Chen, Weerathunga, Nurunnabi, Kulathunga & Samarathunga, 2020).

The main reason for corporate environmental reporting or the dissemination of corporate environmental information, is that companies see it as a sense of duty to the environment, and that it serves as public relations and gives the companies competitive advantage. Moreover, it helps the companies to prepare for future legal requirements (Aburaya, 2012).

2.1.3 Scope of Environmental Accounting

According to Khanna (2019) environmental accounting involves estimation of environmental expenditures/cost, capitalization of those environmental expenditures,

identification of environmental liabilities and measurement of environmental liabilities.

2.1.3.1 Environmental Expenditures/Costs

These are expenses or costs related to environmental measures including production- related costs and product research and development expenditures which are incurred primarily for ensuring protection of environment. Total environmental expenditures can be classified into six categories such as capital investment, operating costs, research and development cost, environment administration and planning, expenditures for remedial measures and recovery measures.

2.1.3.2 Capitalization of Environmental Expenditures

Capitalization of environmental expenditure is justifiable if the cost extends the life, increase the capacity or improve the efficiency or safety of the property owned by the company, the costs mitigate or prevent environmental contamination, the costs improve the property/resource in comparison to its condition at the time of acquisition, the costs are incurred in connection with preparing the property for sale.

2.1.3.3 Environmental liabilities

Obligation to pay future expenditure to remedy environmental damage that has occurred due to past events, activities or transactions or to compensate a third party that has suffered from damage. It may even include a contingent environmental liability that depends on occurrence or nonoccurrence of one or more future uncertain events or to compensate a third party that has suffered from such damage.

2.1.4 Measuring of Environmental Disclosure

The disclosure index has been used to measure the quality of environmental reporting in annual reports of firms. Lots of studies that have used this method (Bakhtiar, 2005; Cormier & Gordon, 2001; Cormier & Magnan, 1999; Cormier & Magnan, 2003; Cormier, Magnan, & Velthoven, 2005; Fekrat, Inclan, & Petroni, 1996; Ten, 2009; Wiseman, 1982) have asserted that this method is superior to the mere counting of sentences. The disclosure index (DI) was primarily developed to objectively measure information's contained in environmental disclosure and enable a systematic numerical basis for comparing companies' ER disclosures across different firms. Hence, the disclosure index can better represent the quality of environmental information disclosed by companies in annual reports.

Earlier studies have longed developed indices to measure environmental disclosure index (EDI). For example, Wiseman's (1982) EDI constituted of 18 items grouped into four (4) categories (accounting, financial/economic factors, litigation, pollution abatement, and other environmentally related accounting measurements) and a scoring system was developed where the value '3' was given if any particular item is disclosed in monetary or quantitative terms, two (2) is assigned to disclosed items with specific information but in non-quantitative terms, one (1) is given for the items mentioned in general terms only and zero (0) is given, if the item was not disclosed.

In recent literature, content analysis methodology is used to construct an EDI. To

do this, an index is constructed which takes into cognizance the weightings given according to how the information is disclosed (Dyduch and Krasodomska, 2017). Studies like that conducted by Dyduch and Krasodomska (2017) have used the content analysis methodology to create an EDI. Dumitru et al. (2017) developed a scoring system while using the content analysis. A score of '0' is given when there is no presentation, '1' when the presentation is only narrative, '2' when the presentation uses KPIS or other numerical data or '3' when there is both narrative and numerical presentation in the disclosure

2.1.5 Environmental Management System

Krivacic and Jankovic (2017) citing Gray et al., (2014) asserts that a pre-requisite for good environmental reporting is the establishment of an environmental management system which is also the foundation for any substantive environmental accounting. It helps to determine the true environmental costs in a company, helping management to make capital investment decisions, costing determinations, process / product design decisions, performance evaluations and other business decisions. It is a set of accounting tools that combines data from financial accounting, cost accounting and material flow balances to increase material efficiency, reduce environmental impacts / risks and costs of environmental protection (Mokhtar, Jusoh & Zulkifli, 2016).

Daferighe and Money (2015) in reference to Daferighe and Aje (2005) stated that it is necessary for corporate bodies to put in place Environmental Management Accounting System with a set of principles and procedures based on internationally

accepted financial accounting methods towards enhancing corporate responsibilities. An Environmental Management System (EMS) can be seen a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency.

Therefore, environmental management system can assist management of organizations to assess the impact of their businesses on the environment to determine how environmentally friendly or destructive their practices are. It also helps businesses to generate, analyze and use financial and related non-financial information, to support management within a company or business.

2.1.6 Environmental Performance

Organizations as major players in Society and the environment at large, are expected to be environmentally sensitive. As succinctly stated by Chen, Weerathunga, Nurunnabi, Kulathunga and Samarathunga (2020), corporations, as a major source of environmental degradation are now under immense pressure to undergo necessary reforms that ensure environmental preservation while achieving their financial goals. This calls for serious environmental responsibility and environmental performance.

According to Krivacic and Jankovic (2017), Environmental responsibility is an important element of business sustainability. It is operationalized through environmental accounting and reporting, which have become inevitable management tools in modern business. Environmental performance is therefore, a product of environmental

responsibility. This responsibility however, depends on managerial attitude and stakeholders' expectation. If management of companies do not see the need to be environmentally responsible it is difficult to demonstrate environmental performance except it is forced by stakeholders' pressure to demand for performance. Therefore, the goal of establishing environmental accounting is to improve corporate environmental performance and long-term environmental sustainability.

Stakeholders expect companies to report information on their environmental objectives, activities and impacts in separate statements from financial statements. As Krivacic and Jankovic put it, "From the 1990s to today, the role of environmental accounting has been viewed as measuring environmental performance, which exceeds regulatory standards in the area of environmental protection".

In the African context, sustainability accounting is still years in the making and will require a sustained commitment to sustainable development and sustainability reporting by governments, practitioners as well as by corporations (Tackie, Agyenim-Boateng & Arthur, 2017). Environmental performance efficiency through environmental accounting can influence the economic efficiency of an organization. Therefore, environmental accounting is an accounting tool which is suitable for businesses in the context of global sustainable development, especially for environmentally sensitive businesses (Nguyen, 2020).

According to Beredugo and Mefor (2012), environmentally conscious manager

can increase his disclosures on environmental information by decreasing environmental impact while increasing the value added by the enterprise. Such enterprise uses fewer resources and causes less damage to soil, water and air while producing the same output as its competitors.

2.1.7 Environmental Committee

This is a committee established within the Board of directors of a company to handle issues regarding the environment and the organization's stakeholders. The members of such committee are expected to have the experience, skills and knowledge concerning environmental issues. The major function of this committee is to monitor and promote management activities while seeking ways to increase the firm's alignment with stakeholders' interests within the environment. Prior research on CSR reporting has shown that the existence of an environmental committee within the board shows a company's commitment towards sustainability and its willingness to manage the conflicts between different stakeholder groups (Baalouch, Ayadi & Hussainey, 2019). According to Baalouch, Ayadi and Hussainey, the presence of an environmental committee within the board may be seen as a monitoring device for improving environmental disclosure and demonstrating accountability towards powerful stakeholders.

2.1.8 Environmental Audit

Environmental Audit is a third party verification of disclosed environmental information in order to ensure credibility (Baalouch, Ayadi & Hussainey, 2019).

Engaging Auditing firms with capacity in environmental accounting to review the environment performance reports produced by companies will give credibility to such reports. Besides, environmental audit is implemented to monitor compliance with environmental laws and regulations as it relates to non-financial disclosures. This external assurance of environmental information will serve as a normative pressure on the companies to report accurate and transparent information of the environmental impact of their operations. GRI (2013) as cited by Baalouch, Ayadi and Hussainey (2019), highlights the importance of sustainability reporting's assurance and its role in increasing recognition, trust and credibility for stakeholders.

2.1.9 Environmental Awareness

The status of environmental awareness provides a dynamic for business reporting its environmental performance (Yakhou & Dorweiler, 2004). It is obvious that it will be difficult for an entity who is not aware of its responsibility towards the environment to report its performance towards that responsibility. Besides, environment awareness provides a »

corporation's management and other stakeholders with a holistic picture of the overall financial position and the cost implication involved in utilizing natural resources in the generation of revenue by the corporation. Therefore, it is evident that the status of the environmental awareness of Nigerian companies should be determined to access their level of environmental performance.

2.1.10 Industry Environmental Sensitivity

It is natural to assume that the environmental sensitivity of the sector or industry to which a company belongs may have an influence on the environmental consciousness of that company. However, it may not be absolutely correct without empirical proof to generalize that all companies operating within an environmentally sensitive industry will expressly react to the call to be environmentally accountable. Although Mokhtar, Jusoh and Zulkifli (2016) referring to Frost and Seamer (2002), argued that companies in environmentally sensitive industries are more likely to develop internal environmental management practices to “educate and inform” their stakeholders about the company's environmental performance.

Environmental sensitivity of industry can be classified into sensitive and less sensitive. Environmentally sensitive industries are those whose business activities are capable of easily affecting the environment directly or indirectly. On the other hand, environmentally less sensitive industries are those whose business activities have less impact on the environment directly or indirectly. Prior studies consider the chemical, construction, plantation, transportation, mining and resources, petroleum (oil/gas), property and industrial product sectors as environmentally sensitive industries (Mokhtar, Jusoh & Zulkifli, 2016). This study intends to verify the theory that industry environmental sensitivity plays a major role in the environmental disclosure of

companies in those industries.

2.1.11 Firm's Size

Dyduch and Krasodomska (2017), referring to Branco and Rodrigues (2008), asserts that large companies disclose more than small ones as they are more prone to scrutiny from stakeholder groups, since they are highly visible and more vulnerable to adverse reactions. Besides, large companies are more diversified across geographical and product markets, and they have more diverse stakeholder groups to which they are accountable. Therefore, it is believed that large companies would disclose more environmental information than small and medium enterprises.

This assertion was however, disproved by Dyduch and Krasodomska when they reported that “the results of the research allow us to state that in contrast to the majority of studies conducted up to date—the company’s size cannot be perceived unequivocally as a determinant of CSR disclosure” (p.24). Meanwhile, Ohidoa, Omokhudu, and Oserogho (2016) were among the various studies that found a positive relation between firm’s size and environmental disclosure by companies in Nigeria. This study is therefore set to clear these mix findings.

2.1.12 Firm's Age

The researcher’s review of literature indicates that the use of firm’s age, as determined by the companies’ year of incorporation, as an explanatory variable to explain the level of environmental disclosure has not been extensively explored. However, Silver

(2020) in their study asserts that company's age had no statistically significant association with environmental disclosure. This study intends to confirm or refute his assertion.

2.1.13 Profitability

There are different measures of firm's profitability as explanatory variable for environmental disclosure quantity and quality adopted in the literature. Some studies used return on asset, net profit, return on equity and return on sales which is also adopted in this study. In the literature, there are mix findings regarding the effect of profitability on environmental disclosure. For example, Dyduch and Krasodomska (2017) did not find a causal relationship between corporate profitability and environmental disclosure of companies listed on the Warsaw Stock Exchange. This position was also supported by Sani, Aminu and Ahmed (2020). However, Silver (2020) found a positive relationship between profitability and environmental disclosure by listed companies in Sri Lanka. This mixed positions needs to be investigated further.

2.1.14 Board Female Membership

As Dyduch and Krasodomska (2017) referencing Giannarkis (2014) states, “on the basis of conducted literature review, gender composition of the board has been traditionally associated with financial performance, and there is no satisfactory evidence linking board composition to CSR disclosure” (p.8). However, it is generally believed that women are more prone to caring more for the environment, also, they tend to me more concern about public opinion, therefore, their presence in the board may likely have

a positive effect on the level of environmental disclosure of their companies. This position was refuted by Shamil, Shaikh, Ho and Krishnan (2014) when they found out that boards with female directors are negatively associated with sustainability reporting. However, Dyduch and Krasodomska (2017) did not find any significant relationship between the extent and quality of disclosed social information by the companies examined. This study intends to verify the findings of the 2014 and the 2017 studies.

2.1.15 Environmental Policy

Development and implementation of new business strategies for meeting environmental challenges will be a central issue for companies in the years ahead (Yakhou & Dorweiler, 2004). Environmental policies or strategies are conscious statements by top management on how to deal with environmental issues. However, implementation of environmental policies and strategies within corporate sectors depends upon several factors, ranging from countries' political, economic, and legal environments to corporate managers' cognitive and psychological factors (Chen, Weerathunga, Nurunnabi, Kulathunga & Samarathunga, 2020). According to Chen, Weerathunga, Nurunnabi, Kulathunga and Samarathunga, a thorough investigation of these factors is inevitably needed, since the identification of key factors is the first step towards developing and implementing the necessary policies.

2.1.16 Environmental Orientation

Chen, Weerathunga, Nurunnabi, Kulathunga and Samarathunga in their 2020

study defined environmental orientation as the degree of a firm's recognition of its responsibility towards the natural environment and how it is reflected in its mission statement and policies. According to them, having an environmentally favorable mission, policies, and procedures may facilitate the implementation of best environmental practices within the organization, including environmental accounting. However, apart from the awareness of corporate managers about environmental issues and the need to be environmentally conscious, there are certain factors that may influence positive environmental orientation. Factors such as resources and time availability, skills, knowledge, and experience possessed by organizations' practitioners, continuous training and improvement, and effective communication can affect the environmental orientation of corporate managers towards their responsibilities to the environment.

2.1.17 Environmental Laws in Nigeria

The Federal Government of Nigeria has promulgated various laws and Regulations to safeguard the Nigerian environment. The enforcement of these laws and regulations is expected to protect the Nigerian environment from damage. However, laws are only effective to the extent that they are enforced.

In the absence of regulatory pressures, socially responsible business practice will often come second to the economically profitable practices (Chen, Weerathunga, Nurunnabi, Kulathunga & Samarathunga, 2020).

The Constitution of Federal Republic of Nigeria (1999)

The basis of environmental policy in Nigeria is contained in the 1999 Constitution of the Federal Republic of Nigeria. Pursuant to section 20 of the Constitution, the State is empowered to protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria.

The Environmental Impact Assessment Act (1992)

Section 2 of the Environmental Impact Assessment Act of 1992 (EIA Act) provides that the public or private sector of the economy shall not undertake or embark on or authorize projects or activities without prior consideration of the effect on the environment.

Main Environmental Laws in Nigeria

Apart from the provisions of the 1999 Constitution of the Federal Republic of Nigeria and those of the EIA Act, according to Daferighe and Money (2015), below are the main environmental laws in Nigeria:

1. The National Effluent Limitation Regulation S. 1.8 of 1991, which makes it mandatory for industrial facilities to install anti-pollution equipment.
2. The Pollution Abatement in Industries and Facilities Generating Wastes-Regulations S. 1.9, of 1999, which among other things impose restriction on the release of toxic substances and stipulates requirements for monitoring of pollution; to ensure that permissible limits are not exceeded as well as spelling

out generator's liability.

3. The Solid and Hazardous Waste Management Regulation S.1.15 of 1991, which regulates the collection, treatment and disposal of solid and hazardous waste from municipal and industrial sources. The regulation also provides a list of over 1000 hazardous chemicals to be controlled by FEPA by toxicity category.
4. The Harmful Wastes (Criminal Provisions) Act 42 of 1988, which sentences individuals who trade, dispose, or transport toxic waste in Nigeria or its Exclusive Economic Zone to life imprisonment. Koko toxic dump in Delta State in 1988 gave rise to this Act.\
5. The Sea Fisheries and Inland Fisheries Act, 1992, which control access to fisheries resources. The Act includes wide provisions for the regulation of catch species, sizes and fishing zones. The regulation sets minimum net size for both finfish and shrimp.
6. Federal Environmental Protection Agency (FEPA) Act, No. 58 of 1988. The Act specifies establishment, membership, functions and powers of the Federal Environmental Protection Agency and National Environmental Standards. In 2007, the National Environmental Standards and Regulations Enforcement Agency (NESREA) Act repealed the FEPA Act. NESREA has amongst other functions the power to enforce compliance with laws, guidelines, policies and standards on environmental matters.

2.1.18 Global Reporting Initiative Guidelines

To Daferighe and Money (2015), global reporting initiative is designed to provide investors with complete, transparent and consistent reporting from companies on a broad range of social and environmental issues. The core principles of global initiative reporting frameworks are transparency, inclusiveness, auditability, completeness and relevance. Others are context, accuracy, neutrality, comparability, clarity and timeliness. The important role that the guidelines play in driving transparency, balance, continuous improvement and accountability across sustainability reporting cannot be overemphasized.

2.2 Empirical Review

2.2.1 Empirical Review on Environmental Disclosure Level

Environmental accounting disclosure has been a burning issue in the academic and research arena for significant number of years now. This has given rise to various studies in the area of environmental accounting and disclosure since the 1970s. A considerable body of literature from a wide range of theoretical backgrounds concluded that environmental disclosure is an important phenomenon employed by corporations (Aburaya, 2012 citing Gray et al., 2001).

In the Indian context, Khanna (2019) carried out a study to identify the key parameters on which environmental reporting is done by Indian corporates; to find out the extent to which Indian Corporates practice voluntary environmental reporting; and to

identify the major factors considered by Indian corporates for environmental reporting. The study found out that variables such as environmental policy, health, safety and environment, energy conservation, corporate sustainability/environmental initiatives sustainability reporting, waste management, water management, wind/renewable energy sources, environmental information system, environmental disclosure practices, environmental targets, environmental reporting indicators, environmental cost and benefits, environmental liabilities and environmental assets are the basic parameters on which environmental reporting is done by Indian corporates.

Krishna in his 2015 study on environmental accounting and reporting, evaluated the environmental performance of Oil and Natural Gas Company (ONGC) in the India and found out that ONGC is totally concerned about the environment and the need to provide full environmental report to its stakeholders, but that cannot be said of the entire industry.

Also, in the Nigerian context, various studies have been carried out on the subject matter: environment accounting and reporting. For example, Beredugo and Mefor (2012) in their study, evaluated the relationship between environmental accounting and reporting and sustainable development in Nigeria using a survey research design. The study concluded that environmental accounting is positively related to sustainable development. The study's conclusion is based on information elicited from respondents drawn from just Rivers state and Lagos state which may not be absolutely representative of the entire

population of Nigeria to warrant such generalization or conclusion.

Daferighe and Money in their 2015 study attempted to compare the environmental accounting and reporting practices of firms in the various sector of the Nigerian economy. They also attempted to assess how government legislations promote or impede improved environmental accounting practice. They found out that environmental accounting practice is significant in benchmarking standard for corporate reporting. It was also revealed that the compliance with Nigerian environmental protection laws has not had significant influence on environmental accounting and reporting practice in Nigeria.

Ezeagba, John-Akamelu, and Umeoduagu (2017) like Beredugo and Mefor, carried out a study titled environmental accounting disclosures and financial performance: a study of selected food and beverage companies in Nigeria (2006-2015). According to them, although environmental regulation, pressure group activity, and consumer awareness is weak in developing countries, some corporations in these countries are becoming conscious of their international market and are making appreciable effort as regards environmental practices. The result of sampled industries in Nigeria shows that few companies are becoming environmental friendly. However, a large number of firms are still apathetic about their environmental and social responsibility.

2.2.2. Empirical Review on Firm's Attributes and Environmental Disclosure

Silver (2020) examined the relationship between a number of corporate characteristics (Company Size, Profitability, and Age) and environmental disclosure by

selected listed companies in Sri Lanka. The study was based on an unidentified sample selected from target population of 297 listed companies from various sectors listed in Colombo Stock Exchange as at 31st December 2018. Multiple regression was utilized to analysis the relationships between the variables. The findings indicate that the firm size and profitability have a significant positive relationship while company's age had no statistically significant association with environmental disclosure.

Sani, Aminu and Ahmed (2020) carried out an empirical study to investigate whether corporate size, profitability, leverage, management efficiency, liquidity and tax can explain the level and quality of social and environmental disclosure (SED) in the Nigerian oil and gas industry. They obtained time series cross-section (TSCS) data for a sample of eight listed Nigerian oil and gas companies for the period 2004-2013. To measure the quantity and quality of SED respectively, word count and compliance oriented content analysis were used. For the analysis of the relationships between SED quantity and quality, on the one hand, and the six repressors on the other hand, pooled ordinary least squares (OLS) with panel corrected standard errors were used by the researchers. Their analysis revealed the following: that listed companies in the Nigerian oil and gas industry make low disclosures on few Global Reporting Initiative (GRI) items which exhibit low quality; while the low nature of the disclosure quantity is explained by size and to some extent management efficiency, the poor disclosure quality is jointly and individually explained by corporate size, management efficiency and liquidity.

Thi Le Hang Nguyen, Thi Thu Hien Nguyen, Thi Thanh Huyen Nguyen, Thi Hong Anh Le and Van Cong Nguyen (2019) empirically studied the factors affecting the environmental information disclosure practice of companies listed on the Vietnam stock market. The independent variables investigated are: firm size, corporate manager perceptions, profitability, financial leverage, community pressure, pressures from stakeholders and government pressure. Analytical data were collected through the survey of 120 listed companies on the Ho Chi Minh City Stock Exchange (HOSE). The Cronbach's Alpha test, exploratory factor analysis (EFA) and logistic regression analysis conducted revealed the following: the level of environmental information disclosure of listed companies on the stock market in Vietnam depends heavily on government regulations, followed by the pressure from stakeholders, community pressure, views of business managers, companies size, business sector but profitability and financial leverage had negative relationship with environmental information disclosure. Their findings of the negative effect of profitability on environmental disclosure of Vietnam companies is in disagreement with Silver (2020)'s position of the positive effect of profitability in the case of companies listed in the Colombo Stock Exchange. They however, agreed on the effect of size.

Odoemelam and Okafor (2018) carried out a study to investigate the influence of corporate governance on environmental disclosure of non-financial firms listed in Nigeria Stock Exchange. They found out that the level of environmental disclosure of non-financial companies in Nigeria is quite insufficient at an average of 10.5 percent.

According to them, environmental sensitivity, auditors type, audit committee independence and board size had no significant influence on the level of environmental disclosure by non-financial firms listed in the Nigerian Stock Exchange. However, board independence, board meeting, and the environmental committee were statistically significant. Also, among the three company attributes used to mitigate spurious result only firm size significantly influence the quantity of overall environmental disclosure of the sample companies. Following the findings of their study, they recommended that there should be improvement in environmental law and implementation and that there should be harmonization of environmental reporting infrastructure and standard to aid comparison.

Ofoegbu, Odoemelam and Okafor (2018) in their work: Corporate board characteristics and environmental disclosure quantity: Evidence from South Africa (integrated reporting) and Nigeria (traditional reporting), empirically examined the influence of corporate board characteristics on environmental disclosure quantity of listed firms in two leading emerging economies: South Africa and Nigeria which practice integrated reporting framework and traditional reporting framework, respectively. They achieve the objectives of their study, they obtained data from annual reports of 303 environmentally sensitive companies selected from South Africa and from 90 listed companies in Nigeria. They adopted descriptive, multivariate and regression model in their investigation. The study's major findings revealed a significant positive association between board independence and environmental disclosure in Nigeria. In South Africa,

45% of environmentally sensitive industries significantly influence environmental disclosure, while 51% of environmentally polluting industries in Nigeria show insignificant association with environmental disclosure. This research findings of the insignificant association between polluting industries in Nigeria and environmental disclosure is a confirmation of the fact that without proper empirical review, one cannot categorically say that industry environmental sensitivity will automatically led to more environmental disclosure on the part of players in that industry. However, this finding needs to be verified. On the issue of legal framework, their work reveled that South African legal and regulatory framework is strong and may be responsible for high level of South Africa environmental disclosure while the independent executive directors on board of listed firms in Nigeria substituted for the poor regulatory environment.

By the way, their studies found strong relationship between Board independence and environmental disclosure in Nigeria only. The effect of Board size was positive for both countries, while environmental committee and industry membership positively influenced environmental disclosure in South Africa but not in Nigeria.

Dyduch and Krasodomska (2017) used a sample of 60 non-financial companies listed on the Warsaw Stock Exchange with employees of over 500 to address the issue of CRS disclosure and the determinant of the disclosure level in Poland. Content analysis of the annual reports of the companies indicated that the average level of CSR disclosure among the sample companies is low. Tobit regression analysis was used in determining

the causal relation between CRS disclosure and the various independent variables chosen for their study. In considering total CSR disclosure level, the study found four variables to be statistically significant: turnover, industry environmental sensitivity, inclusion in the Respect Index portfolio, and duration of the stock exchange listing.

Mokhtar, Jusoh and Zulkifli (2016) carried out a study of corporate characteristics and environmental management accounting (EMA) implementation: evidence from Malaysian public listed companies to ascertain the environmental disclosure levels of Malaysian public listed companies. The study adopted the contingency theory as the major theoretical underpinning for the study. The study considers the effect of five firm's characteristics (namely, environmental sensitivity of industry, company size, ownership status, Environmental Management System (EMS) adoption and the proportion of non-executive directors) on the extent of Environmental Management Accounting (EMA) implementation by Malaysian public listed companies adopting a survey design through questionnaire administration. The results, derived from postal questionnaires, indicate that the extent of EMA implementation was moderate and that more emphasis was placed on environmental cost effectiveness activities. The results also imply that complying with environmental regulations is more important than incorporating EMA information into performance measurement, control and reporting. Except for ownership status, the extent of EMA implementation, however, did not vary among corporate characteristics, and thus, provides limited support to contingency theory in explaining the extent of EMA implementation among Malaysian companies.

Ohidoa, Omokhudu, and Oserogho (2016) empirically examined the determinants of environmental disclosure in Nigeria with a sample of 50 companies extract from the manufacturing and non-manufacturing sectors registered in the Nigerian Stock Exchange. The dependent variables for their study are: Industry type, Leverage and Firm size. To analyze the effects of the dependent variable on the independent variable (environmental disclosure), they used binary logistic panel data regression. They found out that industry type, firm size has positive relationship, while leverage has no significant effect on environmental disclosure. Their findings of the positive relationship between industry type and environmental disclosure was negated in the works of Ofoegbu, Odoemelum and Okafor (2018) who revealed that 51% of environmentally polluting industries in Nigeria show insignificant association with environmental disclosure. This variance in findings calls for a reconfirmation of the effect of industry type on environmental disclosure.

Shamil, Shaikh, Ho and Krishnan (2014) in their study - The influence of board characteristics on sustainability reporting: empirical evidence from Sri Lankan firms - empirically examined the effects of board size, board independence, dual leadership, board diversity, female board membership, and board ethnicity on Sustainability reporting by firms in Sri Lankan. Their study documents that board size and dual leadership are positively associated with sustainability reporting and boards with female directors are negatively associated with sustainability reporting. Their study also found that sustainability reporting is likely to be influenced by firm size and firm growth.

Additionally, the study also reveals that younger firms are likely to adopt sustainability reporting than older firms.

2.2.3 Empirical Review on Environmental Awareness

Various studies have been carried out to assess the awareness and the behavioral intentions of top corporate managers towards environmental reporting. For example, Krivacic and Jankovic (2017) carried out a study on managerial attitude on environmental reporting as evident in Croatia. A survey was used to collect data. The analysis of the distribution of managers' responses shows that most respondents believe environmental information is part of corporate social responsibility. And from the standpoint of the companies, the managers believed it is ethical to collect and report environmental information.

To ascertain the level of awareness of the need to collect and report environmental information by companies in Bangladesh, Islam, Miah and Fakir (2015) conduct a research on the environmental accounting and reporting practices of Bangladeshi corporate sector. The study revealed that Bangladeshi companies are well aware of the facts that environmental issues will affect the business and industry in the near future, and they are fully convinced of the need for environmental information. Despite this awareness, however, there is an absence of external environmental accounting. The companies in Bangladesh do not have a proper environmental accounting system to determine the environment related costs, benefits, assets and

liabilities. Bangladeshi companies fail to provide adequate disclosure on the environment. The researchers concluded that without strict accounting pronouncements from the major accounting body in the country and disclosure norms by the regulatory authorities, the companies will generally provide only statutorily required, qualitative, and positive information on environment. They therefore opined that there is a low level of Environmental accounting and reporting among companies in Bangladesh.

In another study to shed more light on the issue of environmental accounting practices from the view point of the developing world, Chen, Weerathunga, Nurunnabi, Kulathunga, and Samarathunga (2020) examined the key drivers of managerial intention to engage in environmental accounting practices in Sri Lanka. Their study revealed that there is a positive and significant relationship between the perceived benefits of environmental accounting and attitudes towards environmental accounting practices by listed companies in Sri Lanka.

Before the Islam, Miah and Fakir (2015) study, Afzal (2012) conducted a study on environmental accounting and reporting practices using Bangladeshi companies as case study. The study concluded that even though the efforts put in by the Bangladeshi companies to disclosing their environmental performances are worthy of note, it was observed that in most cases the quantity and quality of the disclosures were less than satisfactory and very poor. This poor state of reporting was attributed to the lack of regulatory guidelines on environmental accounting and reporting.

To analyze the current perceptions and attitudes of managers towards the environmental accounting practice for corporate sustainability in the context of developing countries, Chen, Weerathunga, Nurunnabi, Kulathunga and Samarathunga (2020) studied the influences of behavioral intention of managers to engage in environmental accounting practices for corporate sustainability using a theory triangulation approach. Their study found that managerial attitudes, subjective norms, and perceived behavioral control are significant predecessors to managerial intention to engage in environmental accounting practices.

For the purpose of this study, however, only the reviews of literature relating to studies on the impact of corporate characteristics on environmental disclosure quantity will be summarized in tabular form. This is done not to flood the summary with information not relevant to disclosure determinants.

2.3 Theoretical Framework

A number of theories have been put forward to support the need for the practice of environmental accounting and reporting by companies operating in both developed and developing societies alike. In this section, some of those theories will be presented.

Fernando and Lawrence (2014) constructed an integrated theoretical framework for explaining Corporate Social Responsibility (CSR) practices by organizations. According to them, three mainstream theories, namely legitimacy theory, stakeholder theory and institutional theory have all been employed in CSR literature and by extension,

in Social, Environmental Accounting and reporting researches.

Chen, Weerathunga, Nurunnabi, Kulathunga, and Samarathunga, (2020) in their study of the Influences of behavioral intention to engage in environmental accounting practices from the perspectives developing countries, employed the theory of reasoned action and the theory of planned behavior to conceptualize the antecedents of managers' intention to engage in environmental accounting practices. According to them, an increasing number of studies suggest that neo-institutional theory offers the most useful framework for investigating the motivations and drivers that spur companies to adopt sustainability practices, including environmental accounting.

Mokhtar, Jusoh and Zulkifli (2016) on the other hand, in the study of the implementation of Environmental Management Accounting in Malaysia adopted the contingency theory as the major theoretical underpinning on which their study was based.

2.3.1 Legitimacy Theory

Fernando and Lawrence (2014) referring to Deegan (2009), stated that legitimacy theory emphasizes that organizations continually attempt to ensure that they are perceived as functioning within the bond and norms of the society in which they operate. Organizations exist in societies which have roles, bonds, norms and believes which they expect organizations to respect and operate by. This expectation gives rise to a social contract between society and the organization. The maintenance of the terms of this social contract by the organization ensures the legitimization of the organization's

operations and existence.

According to Gustavo (2015), depending on the purpose of legitimation, there are primarily two levels of legitimacy - institutional legitimacy and organizational (or strategic) legitimacy. The institutional legitimacy allows companies to seek legitimation by conformity to existing institutional practices while adopting specific environmental practices or strategies that are unique to them that give them comparative advantage over other companies within the institution. Environmental accounting and reporting practices of organizations can be viewed through the lens of the legitimacy theory because society have its expectation of the environmental responsiveness expected from organizations operating within societal space, and tend to legitimize the operations and existence of companies that function within that expectation.

Therefore, companies wishing to obtain societal legitimization, would function within society's environmental bonds and norms to remain relevant in the eyes of society by refraining from disclosing negative or bad news related to them or providing explanations about unhealthy mass media news about them while disclosing positive information about their operations.

2.3.2 Stakeholders Theory

This theory is concerned with the relationship between organization and its stakeholders. The term stakeholder as defined by Freeman (1984) as cited by Fernando and Lawrence (2014), refers to any group or individual who can affect or is affected by

the achievement of the firm's objectives. Unlike the legitimacy theory which treats the environment as a whole, the stakeholder theory focuses on the relationships between organizations and its various stakeholders who constitute the environment.

Organizations' stakeholders comprise of employees, shareholders, the media, environmental activists, customers and trade industry associations, suppliers, regulators, local communities and science and education (Aburaya, 2012 citing Hodgkinson, 1993 and UNEP/Sustainability, 1996). These stakeholders have diverse and sometimes conflicting expectations which they want the organization to meet. The influences of these different stakeholders on the organization is dissimilar. Thus, how to receive support/approval from different influential stakeholders, rests upon the ability of organizations to balance these conflicting expectations (Gustavo, 2015).

In other words, managements of organizations are expected to undertake activities that are deemed important by their stakeholders and report same to their respective stakeholders (Fernando & Lawrence, 2014). Fernando and Lawrence (2014) referring to Gray et al. (1996), categorized stakeholder theory into two perspectives: ethical perspective of stakeholder theory; and managerial perspective of stakeholder theory. According to them, under the ethical perspective, management exercise accountability towards all stakeholders irrespective of their influence. While under the managerial perspective, managers of organizations attempt to meet the expectations of stakeholders who control the critical resources required by the organization.

In the managerial perspective, an organization is expected to be accountable to its economically powerful stakeholders, rather than all stakeholders as in the ethical perspective.

2.3.3 Institutional Theory

Institutional theory examines organizational forms and explains the reasons for having homogeneous characteristics or forms in organizations which are within a same "organizational field" (Fernando & Lawrence, 2014). DiMaggio and Powell (1983) as cited in Fernando and Lawrence (2014) defined an organizational field as those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products.

According to DiMaggio and Powell, once an organizational field is structured, various powerful forces emerge within society, which cause organizations within the field to become more similar to one another. According to them, the process of homogenization is called isomorphism. They break isomorphism into three components: coercive isomorphism, mimetic isomorphism, and normative isomorphism.

The first of these processes, coercive isomorphism, relates to external factors, such as shareholder' influence, employee' influence, and government policy which forces organizations into line with the expectations of these powerful and critical stakeholders. The second process, mimetic isomorphism, involves organizations trying to emulate or

copy other organizations' practices, mainly to obtain competitive advantage in terms of legitimacy. The third and final isomorphic process is normative isomorphism. It relates to the pressures emerging from common values to adopt particular institutional practices.

Through these isomorphic processes, organizations adopt practices that are common to the institutions in which that function or operate. For example, organizations operating within the oil and gas sector of the economy may choose to disclose environmental accounting information not because they want to, but because it is the norm in that institutional or organizational field.

2.3.4 Theory of Reasoned Action

The theory of reasoned action is used to explain and predict behavior based on attitudes, norms and intentions. It concerns the attitude and subjective norms that affect the behavioral intentions of a person. Chen, Weerathunga, Nurunnabi, Kulathunga and Samarathunga (2020) referring to Oze and Yilmaz (2011) explained that the cost and benefits attached to a decision shape the attitudes of managers toward the decision and, in turn, affect their behavioral intention for that decision. According to them, attitudes can be shaped by internal factors like experience or external factors like regulations or norms. Therefore, understanding the internal and external factors that govern the attitude and subjective norms would give an understanding of the behavioral intention (Southey, 2011 as cited by Chen, Weerathunga, Nurunnabi, Kulathunga & Samarathunga, 2020).

2.3.5 Contingency Theory

Contingency theory is an organizational theory that claims that there is no best way to organize a corporation, to lead a company, or to make decisions. Instead, the optimal course of action is contingent (dependent) upon the internal and external situation of the organization. This theory was developed in the 1960s and it has remained a central theory in management accounting research. The basic premise of the theory is that the implementation of management accounting systems may vary according to each company's circumstances (Mokhtar, Jusoh & Zulkifli, 2016 citing Otley, 1980, 1999).

This study will attempt to test the application of the contingency theory in determining if the environmental disclosure practices of companies in Nigeria are contingent upon the firms' specific attributes. Also, the stakeholders' theory and the theory of reasoned action will form part of the theoretical framework for this study. The choice of this theoretical foundation is necessitated by the fact that organizations exist to satisfy their stakeholders who constitute the environment in which they operate. Besides, the decision to be environmentally sensitive and responsible is dictated by behavioral intentions of the managements of organizations which are shaped by experience, knowledge, attitude and subjective norms like managements' assessment of the cost and benefits attributable to environmental responsiveness. Just as Daferighe and Money (2015) put it, "Compliance with laws on environmental issues could be a function of attitude of various operators and management of the various corporate firms to their environment (p.211)". According to them, environmental policies of corporate firms or

fundamental value attached to environmental issues are based on the perception of the operators/managers, and of the moral basis of environmental responsibility.

2.4 Table Summary of Empirical Review

Author (s) & Date	Variables Dependent Variable independent Variable Control Variable			Time of observation, Sample Size & Sample Type	Analysis & General Result
Silver (2020)	The level of Environmental Disclosures	Company Profitability, Age	Size, and -----	<u>Time of Observation</u> 2013 -2017 <u>Sample Size</u> Unidentified number listed companies. <u>Sample Type</u> Firms with highest market capitalization.	Analysis Pooled regression analysis Finding The findings indicate that the firm size and profitability have a significant positive relationship while company's age had no statistically significant association with environmental disclosure.
Sani, Aminu and Ahmed	Corporate Social and	Corporate size, Profitability,	-----	<u>Time of Observation</u>	Analysis pooled ordinary least

(2020).	Environmental Disclosure	Leverage, Management efficiency, Liquidity and Tax.	--	2004-2013 <u>Sample Size</u> 8 <u>Sample Type</u> Oil and Gas companies listed in the Nigeria Stock Exchange	squares Findings Low disclosure quantity influences by size and management efficiency, while the poor disclosure quality is jointly and individually explained by corporate size, management efficiency and liquidity.
Thi Le Hang Nguyen, Thi Thu Hien Nguyen, Thi ThanhHuyen Nguyen, Thi Hong Anh Le and Van Cong Nguyen (2019)	Environmental Information Disclosure.	Firm size, Corporate manager perceptions, Profitability, Financial leverage, Community pressure, Pressures from stakeholders and Government pressure	----- ---	<u>Time of Observation</u> 2004-2013 <u>Sample Size</u> 120 <u>Sample Type</u> Listed companies on the Ho Chi Minh City Stock	Analysis logistic regression analysis Findings Low disclosure quantity influences by size and management efficiency, while the poor disclosure

				Exchange	quality is jointly and individually explained by corporate size, management efficiency and liquidity.
Odoemelam and Okafor (2018)	Environmental disclosure	Board Size, Board Independence, Board Meeting, Audit Committee Independence and Environmental Committee.	Company Size, Industry Membership and Auditor Type.	<u>Time of Observation</u> 2015 <u>Sample Size</u> 86 companies listed on NSE. <u>Sample Type</u> Non-financial companies.	Analysis OLS regression techniques Findings Board independence, board meeting, and the environmental committee were statistically significant while audit committee independence and board size were insignificant. Also, only firm size influenced disclosure level of the sampled companies of

					the three attributes.
Ofoegbu, Odoemelam and Okafor (2018)	Environmental disclosure quantity.	Board independence (BIND), Board size, Board meetings, Audit Committee independence, and environmental committee	Company size, Industry membership, and Auditor type	<u>Time of Observation</u> 2015 <u>Sample Size</u> 213 South African listed companies and 90 Nigerian Listed Companies. <u>Sample Type</u> large and industrially diverse companies.	Analysis Ordinary least square and panel data technique Findings Board size have positive effect for both countries, while board independence influence disclosure in Nigeria but not in South Africa, while environmental committee and industry membership play significant role in South Africa but not in Nigeria.
Dyduch and Krasodomska (2017).	CSR disclosure	Company's size, Profitability, Financial leverage, Industry	----- --	<u>Time of Observation</u> 2014	Analysis Tobit regression analysis.

		environmental sensitivity, Board size, Women on the board, Internationalization, and Reputation.		<p><u>Sample Size</u> 60 listed companies.</p> <p><u>Sample Type</u> non-financial companies listed on the Warsaw Stock Exchange with employees of over 500.</p>	<p><u>Findings</u> The following were shown to have significant positive effect on CRS disclosure: turnover, industry environmental sensitivity, inclusion in the Respect Index portfolio, and duration of the stock exchange listing.</p>
Mokhtar, Jusoh and Zulkifli (2016)	environmental management accounting (EMA) implementation	Environmental sensitivity of industry, Company size, Ownership status, Environmental Management System (EMS) adoption and the Proportion of nonexecutive directors.	-----	Directors of Malaysian PLCs..	<p><u>Analysis</u> Tobit regression analysis.</p> <p><u>Findings</u> The extent of EMA implementation was moderate. Except for ownership status, the extent of EMA implementation,</p>

					however, did not vary among corporate characteristics
Ohidoa, Omokhudu, and Oserogho (2016)	Environmental Disclosures	Industry type, Leverage and Firm size.	-----	<u>Time of Observation</u> 2011-2013 <u>Sample Size</u> 50 <u>Sample Type</u> Manufacturing and Financial sectors listed in the Nigeria Stock Exchange	<u>Analysis</u> Binary logistic panel data regression <u>Findings</u> Industry type, firm size has positive relationship, while leverage has no significant effect on environmental disclosure.
Shamil, Shaikh, Ho and Krishnan (2014)	CSR disclosure	Board size, Board independence, Dual leadership, Board diversity, Female board membership, and Board ethnicity.	-----	<u>Time of Observation</u> 2012 <u>Sample Size</u> 148 listed companies. <u>Sample Type</u> Sample was selected using stratified	<u>Analysis</u> Hierarchical binary logistic regression. <u>Findings</u> Board size and dual leadership have positive effect on CRS disclosure. Female board

				random sampling method from companies listed on the Warsaw Stock Exchange.	membership has negative effect. This study also found that sustainability reporting is likely to be influenced by firm size and firm growth
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CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter discusses the procedure and used to gather and analyze the data required to achieve the objective and purpose of this study. It showed the research design, population of study, sample size and technique, method of collecting data, validity and reliability of measuring instrument, data analysis techniques and model specification.

3.1 Research Design

This study would employ a cross sectional research design. This design is appropriate for this study as it involves repeated observations of the same variables (i.e. firms) over the same period. This design is fitting for this study as it examines the cross sections in the same time period. This is important as this study intends to examine the state of environmental quality disclosure among firms given the same time period.

3.2 Population of the Study

The population of the study is comprised of the 109 non-financial service companies listed on the Nigerian Stock Exchange as at March 1st, 2021. The reason for this choice is to allow for good representation of all sectors, except the financial service sector, of the economy as the study is intended to determine the current state or level of environmental disclosure of non-financial firms in Nigeria.

3.3 Sample Size and Sampling Technique

The sample size is determined using sampling technique of Taro Yamani formula $n = N / (1 + N (0.05)^2)$. A selected sample size of 86 (79%) of 109 non-financial service

companies listed on the Nigerian Stock Exchange as at March 1st, 2021 (Table 1) will be used for this study. The sample will be randomly drawn from the population using stratified random sampling. The reason for using the stratified random sampling is because the researcher wants ensure that each of the sectors of the population is proportionately represented in the sample of the study.

Table 3.1 shows the distribution of population and sample size of the companies. The sample is drawn from all strata of the economy, excluding the financial service stratum, represented in the Nigerian Stock Exchange for possible generalization of the findings.

Table 1 Distribution of Population	Sample Size of the Companies		
Stratum	Population Size	Sample Size	Sample as Percent of Population
Agriculture	5	4	79
Conglomerates	5	4	79
Construction / Real Estate	7	6	79
Consumer Goods	19	15	79
Healthcare	10	8	79
ICT	10	8	79
Industrial Goods	13	10	79
Natural Resources	4	3	79
Oil and Gas	11	9	79
Services	25	20	79
Total	109	86	79
<i>Source: The Nigerian Stock Exchange (2021)</i>			

3.4 Source of Data

The study will rely primarily on the annual reports and accounts of the companies selected as sample for this study for its data to answer the research questions and to meet with the study's objectives. Precisely, the annual reports and accounts for the 2019

financial year of these companies will be subjected to content analysis to measure the extent of environmental disclosure as well as compute other firm attributes variables.

3.5 Model Specification

This study intends to capture the relationship between firms attributes and environmental disclosure quality. To do this, this study adapts the model of Odoemelam and Okafor (2018) which x-rayed on the relationship between corporate governance mechanisms and the extent of environmental disclosure. The model of Odoemelam and Okafor (2018) is given below;

$$ED = f(BSIZ, BIND, BOMET, COINDE, ENVICOM, FS, IN DM, ADT) \quad (1)$$

Where:

BSIZE is Board size of the company,

BIND (board independence),

BOMET (board meeting),

ACOINDE (audit committee independence),

ENVICOM (environmental committee),

FS (firm size),

INDM (Industry membership), and

ADT (Auditor type).

Adapting equation (1) to fit our study, we therefore specify environmental disclosure quality as a function of firms attributes, hence we develop the following functional form for our study;

$$EDI = f(FSIZE, FAGE, IES, PROF, FMB) \quad (2)$$

Where;

EDI = Environmental Disclosure Index

FSIZE = Firm size

FAGE = Firm age

IES = Industry Environmental Sensitivity

PROF = Profitability

FMB = female board membership

Equation 2 cannot be empirically examined, hence equation 3 is developed econometric analysis;

$$EDI_{it} = a_0 + \beta_1 SIZ_{it} + \beta_2 FAGE_{it} + \beta_3 IES_{it} + \beta_4 PROF_{it} + \beta_5 FMB_{it} + \epsilon_{it}$$

Where;

a_0 = Regression Intercept

$\beta_1 - \beta_5$ = Beta coefficient to be estimated

\mathcal{E}_{it} = Idiosyncratic shock

it = cross sections, 2019

The *apriori* expectation is given as;

$\beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0, \beta_5 > 0$

3.6 Method of Data Analysis

3.6.1 Content Analysis

To measure the dependent variable (EDI), the content analysis will be used to peruse the annual reports of sampled firms so as so accurately construct an environmental disclosure index. This study adapts the scoring system of Dumitru et al. (2017) where a score of ‘0’ is given when there is no presentation, ‘1’ when the presentation is only narrative, ‘2’ when the presentation uses KPIS or other numerical data or ‘3’ when there is both narrative and numerical presentation in the disclosure. However, this study will only use two of the scoring system and a value of ‘0’ given when there is no presentation and ‘1’ when there is presentation. The Environmental Disclosure Check list to be used for this study is adopted from the study of Aburaya (2012) and it is presented in the appendix.

Six indexes representing the weightings per category of environmental disclosures (in relation to the maximum number of points) would be determined as follows;

Table 3.2 Content Analysis

Environmental Disclosure Category	Weigh	Computatio	Inde
Environmental Policy	12	$P_1/12 * 100$	I_1
Product and Process-related environmental	8	$P_2/8 * 100$	I_2
Compliance and Environmental law and	4	$P_3/4 * 100$	I_3
Environmental Accounting	1	$P_4/1 * 100$	I_4
Sustainability	2	$P_5/2 * 100$	I_5
Other environmental related information	7	$P_6/7 * 100$	I_6
Overall Environmental Disclosure Index	$I_1 + I_2 + I_3 + I_4 + I_5 + I_6/6$		

Source: Authors Computation (2021)

3.6.2 Descriptive Statistics

The empirical work would begin by subjecting the variables to descriptive statistics in order to determine the normality of the distribution table. The mean, standard Deviation, and Jaque Berra would be given proper attention as they give a quick overview of the normality of variables. If the data are observed to be normally distributed, the data would then be subjected to various preliminary tests to determine the time series characteristics.

Most macroeconomic time series are trended & in most cases non stationary, thus using a non-stationary time series results in spurious regression leading to incorrect conclusions. Therefore, to determine the stationarity of the series the data would be subjected to a unit root test to determine the presence or absence of unit root. The series is said to have a unit root when it exhibits white noise, thus one would need to difference the series to make it a stationary one (free from unit root). The Augmented Dickey Fuller

(ADF) test for unit root would be employed in this study.

3.6.4 The Ordinary Least Square

This study would employ the simple ordinary least square (OLS) estimation technique. The ordinary least square method is chosen as a result of its simplicity and applicability in estimating linear models. The OLS is also accredited with its ability to fit a function with the data by minimizing the sum of squares errors from the data. The OLS has also been found to be the best linear unbiased estimator since it provides minimum variance mean estimation when the errors have finite variance.

Variable	Operational Definition
Dependent Variable	
Environmental disclosure level	Measured by the combined index: $I = (I_1 + I_2 + I_3 + I_4 + I_5 + I_6)/6$
Company's size	Log of Market Capitalization
Company's Age	Date of Incorporation
Industry Environmental Sensitivity	Dummy variable: value 1 if a company is from an industry with a negative impact on environment, otherwise value 0
Company's Profitability	Return on sales (EBIT/Sales*100)
Female Board Membership	Total Number of Female/Total Board Members multiply by 100.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

4.1 Introduction

In this chapter the focus is on the analysis and presentation of data obtained for the empirical evaluation of the data in order to meet the objective set for the study. It presents the empirical analysis of the nexus of environmental disclosure and firm attributes. The study employed secondary data sourced from the audited Financial Statements of sample firms. The descriptive statistics is presented and the correlation matrix. Following this the test for multicollinearity, serial correlation, heteroscedasticity and the pooled regression results.

Table 4.1 : Descriptive Statistics

	FAGE	FSIZE	RETOA	FBOARD	IESNT	ED
Mean	27.25	6.87	3.26	0.70	0.54	0.64
Median	30.00	6.88	4.05	1.00	1.00	0.67
Maximum	55.00	8.98	232.62	5.00	1.00	0.91
Minimum	1.00	4.84	-188.95	0.00	0.00	0.00
Std. Dev.	10.41	0.81	19.22	0.81	0.50	0.18
Jarque-Bera	22.02	7.73	76021.46	280.09	119.69	59.19
Probability	0.00	0.02	0.00	0.00	0.00	0.00
Observations	720.00	720.00	720.00	720.00	718.00	710.00

The result of the descriptive statistics shows that the dependent variable environmental disclosure (ED) has a mean and median of 0.64 and 0.67 respectively with an associated standard deviation of 0.18 revealing a clustering of observation around the mean with

minimal dispersion. The Industry Environmentally Sensitive variable (IESNT) shows a mean and median of 0.54 and 1.00 respectively with a standard deviation of 0.5 indicating that just about half of the sample fall in the environmentally sensitive sectors. Firm age has mean and median of 27.24 and 30 respectively showing that the average age of the sample firms is slightly less than the median observation, along with the standard deviation of 10.41 we observe that there minimal occurrence of outliers in the data. Firm Size (FSIZE) has a mean of 6.86 and median of 6.86 with standard deviation of 0.8. These values are the logarithm of the Total assets, a process undertaken to eliminate the effect of outliers from large absolute total asset values of sample. Profitability is proxied by the Return on Total ASset (RETOA) with a mean of 3.26 and median value of 4.05 and a standard deviation of 19.21, indicating a wide dispersion of values from the mean and the likely presence of outliers. Female on the board (FBOARD) has a mean value of 0.69 and a standard deviation of 0.81 indicating that less than 1 female on the average is on the board.

Table 4.2 :Pearson Correlation Matrix

	FAGE	FSIZE	RETOA	FBOARD	IESNT	ED
FAGE	1.00					
FSIZE	0.10	1.00				
	0.01					
RETOA	0.05	0.22	1.00			
	0.20	0.00				
FBOARD	0.07	0.15	0.11	1.00		
	0.07	0.00	0.01			
IESNT	0.17	0.04	-0.05	-0.01	1.00	
	0.00	0.33	0.20	0.69		
ED	0.06	0.16	0.06	0.01	0.04	1.00
	0.10	0.00	0.14	0.78	0.28	

From table 4.2 the dependent variable ED is positively correlated with all the explanatory variable with the correlation coefficient all less than 0.7 and non passing the test of significance at 5 per cent except for the correlation with firm size (FSIZE). A cursory examination of the correlation coefficient reveals that non of the correlation coefficient is up to the bench mark of 0.7 consequently the sample data is likely to be free from the problem of multicollinearity.

Table 4.3 Multicollinearity Test

Variance Inflation Factors			
	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
C	0.003632	80.10227	NA
FAGE	4.35E-07	8.136502	1.043188
FSIZE	7.51E-05	79.39006	1.076776
RETOA	1.30E-07	1.090174	1.060035
FBOAD	7.08E-05	1.799799	1.031255
IESNT	0.000188	2.21704	1.033366

Table 4.3 shows the result of the variance inflation factor to determine the presence of multicollinearity. The results shows that the VIF values are all less than the bench mark of 10 indicating the sample data is free from the problem of multicollinearity.

4.2 Regression Analysis

The regression analysis is conducted to determine the effect of firm attributes on the degree of Environmental Disclosure.

Table 4.4 Regression Result

Dependent Variable: ED			
Method: Least Squares			
Variable	Coefficient	t-Statistic	Prob.
C	0.388454	6.44538	0
FAGE	0.00071	1.076076	0.2823
FSIZE	0.032869	3.792955	0.0002
RETOA	0.000237	0.657187	0.5113
FBOAD	-0.003497	-0.415687	0.6778
IESNT	0.010719	0.781172	0.435
R-squared	0.027656		
Adjusted R-squared	0.02073		
F-statistic	3.993342		
Prob(F-statistic)	0.001404		
Durbin-Watson	0.214643		

Table 4.4 shows the result of the initial regression. The adjusted R-square is 0.021 meaning that about 2 per cent of the changes in environmental disclosure can be explained by the regressors. The goodness of fit indicated by the F-stat is 3.99 with p-value of 0.001 meaning that the joint significance of the variables passes the test of significance at a stringent 1 per cent, thus the model is strong in explaining changes in the dependent variable. A cursory examination of the t-values of the coefficient of the independent variables shows that they are positively determine changes in the

Environmental disclosure except for FBOAD. However they all fail the test of significance at 5 per cent. The coefficient estimates are however not best unbiased linear estimates as the Durbin Watson stat is 0.214, suggesting that the model suffers from the problem of serial correlation.

In order to establish the problem of serial correlation the Breusch-Godfrey Serial Correlation LM test was conducted. The result are shown in table 4.5

Table 4.5 Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1367.944	Prob. F(2,700)	0
Obs*R-squared	563.7578	Prob. Chi-Square(2)	0

From the table 4.5 we observe the F-statistic of the LM test is 1367.94 with a p-value of 0 suggesting that the null hypothesis of no serial correlation be rejected and the alternate hypothesis of serial correlation be accepted.

In order to mitigate the problem of serial correlation in the result stated in table 4.4, the regression was conducted at Autoregressive of the order 1 (AR(1)). The result are shown in table 4.6

Table 4.6: Dependent Variable ED

Dependent Variable: ED			
Variable	Coefficient	t-Statistic	Prob.
C	0.460843	7.768646	0
FAGE	0.000823	1.386782	0.166
FSIZE	0.022452	2.858135	0.0044
RETOA	-0.000397	-2.423746	0.0156
FBOAD	0.004708	0.9101	0.3631
IESNT	-0.008557	-0.566168	0.5715
AR(1)	0.899512	53.56858	0
R-squared	0.80824		
Adjusted R-squared	0.806592		
F-statistic	490.3276		
Prob(F-statistic)	0		
Durbin-Watson	1.913		

The result in table 4.6 shows that the adjusted R-square is 0.806 meaning that about 81 per cent of the changes in Environmental disclosure can be explained by the independent variables. The goodness of fit of the model is measured by the F-statistics with a value of 490.32 p-values of 0.00 suggesting that the model is significant in explaining changes in the dependent variable even at a stringent 1 per cent. A cursory examination of the coefficient of the explanatory variables shows that FAGE is positively related to ED with a coefficient of 0.000823 p-values of 0.168. Firm Size (FSIZE) has a coefficient of 0.022454 with a p-value of 0.0044 meaning that firm size significantly affects the level of environmental disclosure at 5 per cent. Profitability measured as Return on Total Asset

(RETOA) has negative coefficient of -0.000397 with a p-value of 0.0156 which pass the test of significance at 5 per cent level. Gender diversity measured as Female on the Board has coefficient of 0.004708 with a p-value of 0.3631 showing that this variable though positively related to Environmental disclosure does not pass the test of significance at 5 per cent. Industry Environmental sensitivity has a negative coefficient of 0.008557 with a p-value of 0.5713 meaning that this variable fails the test of significance at 5 per cent. The Durbin-Watson statistic is 1.91 indicating that the coefficient estimates are free from the problem of serial correlation are the the best linear unbiased estimates.

Discussion of Results and Hypothesis Testing

In order to achieve the objectives stated in this study, hypothesis were raised and stated in their null form in the earlier chapter. The result of the regression analysis in table 4.6 is used to confirm or disaffirm the hypothesis.

1. Hypothesis 1 states that there is no statistical relationship between company's size and environmental disclosure. The coefficient of the variable for firm Size (FSIZE) is 0.022452 with p-value of 0.0044, this values indicate that the coefficient is significant at even a stringent 1 per cent. We reject the hypothesis that there is no significant relationship between firm size and environmental disclosure and accept the alternate hypothesis that firm size is significant in determining the level of environmental disclosure. Our result is consistent with Silver (2020) who show that firm size, profitability have significant relationship with environmental disclosure.

2. Hypothesis 2 states that there is no significant relationship between firm age and the level of environmental disclosure. The coefficient of this variable in table 4.6 is 0.000823 with a p-value of 0.166. This shows that firm age though positively related to environmental disclosure does not pass the test of significance even at 5 per cent. We thus accept the hypothesis of no significant relationship between firm age and environmental disclosure. This finding is in consonance with that of Sani, Aminu and Ahmed (2020) who provide evidence that firm age is not statistical significantly related to environmental disclosure.
3. Hypothesis three states that No statistical relationship exists between industry environmental sensitivity and environmental disclosure. The coefficient of this variable from table 4.6 is -0.008557 with a p-value of 0.5715, meaning that industry sensitivity though negatively related to level of environmental disclosure is not significant. We thus accept the hypothesis of no significant relationship. Our findings contradict that of Ohidoa, Omokhudu and Oserogho (2016) who find that industry type has positive significant effect on environmental disclosure.
4. Hypothesis four states that there is no statistical relationship between company's profitability and environmental disclosure. Profitability measured as Return on Total Asset has a coefficient of -0.000397 with a p-value of 0.0156 shows that Profitability is negatively related to environmental disclosure and this is significant at 5 per cent

level. This finding is consistent with that of ThiLe Hang et al (2019) who find that management efficiency influence the level of disclosure.

5. Hypothesis five states that there is no statistical relationship between female board membership and environmental disclosure. The coefficient of Female Board membership is 0.004708 with p-value of 0.3631. This variable fails the test of significance at 5 per cent. Hence we accept this hypothesis of no significance at 5 per cent.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The primary thrust of this study was to investigate the influence of firm attributes on the degree of environmental disclosure. The study employed the firm attributes of firm age, Profitability, Firm size, Industry Environmental sensitivity and Female membership of the board. This chapter presents the summary of findings, conclusions and recommendations made on the back of the key findings.

5.2 Summary of Findings

The findings of the study are presented below:

Firm size measured as the logarithm of the total assets is positively related to the degree of environmental disclosure and this is significant at 1 per cent. This means that as firm size increases the level of environmental disclosure also increase.

Firm age has not significant relationship with the degree of environmental disclosure. Though the relationship is positive it fails the test of significance. This implies that irrespective of the age of the firm there is no influence on the level of environment disclosure.

Industry Environmental sensitivity has a negative relationship with the level of environmental disclosure. This implies as the Environmental sensitivity increases we ought to see an increase in the level of disclosure. However this is not significantly so at a 5 per cent level.

The profitability of the firm is shown to be negatively related to the level of environmental disclosure and this passes the test of significance at stringent 1 per cent. This means that as the firm profitability increases the firm environmental disclosure declines.

Female membership of the board is found to be positively related to the degree of environmental disclosure. This implies that as the proportion of female membership increases there is an increase in the level of environmental disclosure. This however was not significant at 5 per cent.

5.3 Conclusion

Environmental disclosure provides a basis for the provision of information relating to the environmental impact of a firm's activities. It shows the performance of the firm in relation to the environment. The critical dimension of the environment is seen in how changes in the environment such as climate change is affecting economies all over the world. Pollution and global warming are increasingly becoming cause for concern for stakeholders. In the light of the increasing sensitivity of firms have come under increased pressure from stakeholders to provide information relating to their environmental footprint of their operations. Environmental disclosure seeks to provide information as to the environmental implications of the firm activities. This study sought to ascertain the firm attributes that engender more or less environmental disclosure. Using a sample of 720 firm years for the period 2013 to 2022 the study provides evidence that firm size and profitability are key drivers of the degree of environmental disclosure by firms.

5.4 Recommendations

Following the key findings of this study that shows that firm size and firm profitability are key drivers of environmental disclosure. The study makes the following recommendations.

Regulatory authorities should be more vigilant with respect to the zeal with which firm pursue profit at the expense of the environment. Regulators should impose stiff penalties on firms whose activities undermine the environment so as to serve as deterrence to other firms and dissuade the mindless pursuit of profit.

The factor of size has been demonstrated to be significant influence on environment therefore small firms challenged with the burden of environmental responsibilities can navigate this by merging with other small firms to create bigger entities with the resources to be environmentally friendly.

Female membership of the board has been shown to be negatively related to the level of environmental disclosure, though this lacks significance. This is a potential variable that can tip the effort for more environmental discipline on the part of corporate firms.

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APPENDIX 1

Environmental Disclosure Index Checklist

Disclosure		Year (2019)
A. Environmental Policies		
1. Actual Statement of Environmental Policies		
2. Departments or Positions for environmental and/or safety Management		
3. Past, current or future estimates of capital and operating expenditure for environmental protection or remediation		
4. Environmental investment & investment appraisal		
5. Financing of pollution control equipment and facilities		
6. Research and development expenditure for pollution abatement		
7. Environmental impact studies		
8. Environmental contingent liabilities and provisions		
9. Conservation of natural resources		
10. Energy saving and conservation		
11. Health and safety policies		
12. Aesthetics policies and landscaping		
B. Product and Process-Related Environmental Issues		
1. Pollution emissions and effluent discharge		
2. Waste		
3. Packaging		
4. Recycling		
5. Products and product development		
6. Efficient use of materials		
7. Energy efficiency of products		
8. Product Safety		
C. Compliance with Environmental Laws and Standards		
1. Discussion of environmental regulations and requirements		
2. Compliance with pollution laws and regulations		
3. Compliance with health and safety standards and regulations		

4. Compliance status with environmental and/or health and safety such as ISO, EMS, BS OHSAS and PAS		
D. Environmental Auditing		
1. Internal and /or external verification, review, scoping, audit and assessment of environmental performance and /or environmental disclosure		
E. Sustainability		
1. Any Mention of Sustainability		
2. Any mention of sustainable development		
F. Other Environmentally Related Information		
1. Receiving awards for environmental protection or safety excellence		
2. Environmental Protection e.g. Pest control		
3. Wildlife conservation		
4. Supporting anti-liter campaigns		
5. Environmental education and training		
6. Environmental actions/lawsuits against the company		
7. Any environmental issues other than the above		

APPENDIX II

CED

TITLE: PANEL DATA OF SELECTED 72 NON-FINANCIAL LISTED COMPANIES IN NIGERIA

FYEAR	COMPANIES	FAGE	FSIZE	RETOA	FBOAD	IESNT	ED
2020	7Up Nigeria	21.00	7.23	6.83	0.00	1.00	0.608696
2021	7Up Nigeria	22.00	7.34	5.63	0.00	1.00	0.652174
2022	7Up Nigeria	23.00	7.38	6.71	0.00	1.00	0.652174
2016	7Up Nigeria	24.00	7.50	4.80	0.00	1.00	0.652174
2017	7Up Nigeria	25.00	7.52	5.66	0.00	1.00	0.652174
2018	7Up Nigeria	26.00	7.60	5.66	0.00	1.00	0.652174
2019	7Up Nigeria	27.00	7.65	4.67	0.00	1.00	0.4335
2020	7Up Nigeria	28.00	7.71	5.56	0.00	1.00	0.4335
2021	7Up Nigeria	29.00	7.75	11.52	0.00	1.00	0.4335
2022	7Up Nigeria	30.00	7.83	10.53	0.00	1.00	0.4335
2020	A.G.Leventis Nig	29.00	7.03	4.33	0.00	0.00	0.5643
2021	A.G.Leventis Nig	30.00	7.03	6.96	0.00	0.00	0.608696
2022	A.G.Leventis Nig	31.00	7.14	8.84	0.00	0.00	0.608696
2016	A.G.Leventis Nig	32.00	7.22	7.52	0.00	0.00	0.608696
2017	A.G.Leventis Nig	33.00	7.29	3.31	0.00	0.00	0.608696
2018	A.G.Leventis Nig	34.00	7.32	1.57	0.00	0.00	0.608696
2019	A.G.Leventis Nig	35.00	7.36	1.25	0.00	0.00	0.608696
2020	A.G.Leventis Nig	36.00	7.31	3.34	0.00	0.00	0.608696
2021	A.G.Leventis Nig	37.00	7.38	0.66	0.00	0.00	0.608696
2022	A.G.Leventis Nig	38.00	7.35	-0.79	0.00	0.00	0.608696
2020	Academy	12.00	5.98	5.06	0.00	0.00	0.73913
2021	Academy	13.00	5.99	6.37	0.00	0.00	0.73913
2022	Academy	14.00	6.12	4.16	1.00	0.00	0.73913
2016	Academy	15.00	6.17	6.32	1.00	0.00	0.608696
2017	Academy	16.00	6.31	6.66	1.00	0.00	0.608696
2018	Academy	17.00	6.37	3.74	1.00	0.00	0.608696
2019	Academy	18.00	6.45	3.27	1.00	0.00	0.73913
2020	Academy	19.00	6.55	1.55	1.00	0.00	0.73913
2021	Academy	20.00	6.58	2.38	1.00	0.00	0.73913

2022	Academy	21.0 0	6.57	-0.68	1.00	0.00	0.73913
2020	Aluminium Extrusion Indus	21.0 0	5.55	5.80	0.00	1.00	0.826087
2021	Aluminium Extrusion Indus	22.0 0	5.63	12.24	0.00	1.00	0.826087
2022	Aluminium Extrusion Indus	23.0 0	5.81	10.99	0.00	1.00	0.826087
2016	Aluminium Extrusion Indus	24.0 0	5.84	11.31	0.00	1.00	0.826087
2017	Aluminium Extrusion Indus	25.0 0	5.93	7.07	0.00	1.00	0.826087
2018	Aluminium Extrusion Indus	26.0 0	6.09	4.12	0.00	1.00	0.608696
2019	Aluminium Extrusion Indus	27.0 0	6.21	2.81	0.00	1.00	0.608696
2020	Aluminium Extrusion Indus	28.0 0	6.23	8.04	0.00	1.00	0.608696
2021	Aluminium Extrusion Indus	29.0 0	6.24	9.70	0.00	1.00	0.815733
2022	Aluminium Extrusion Indus	30.0 0	6.26	4.51	0.00	1.00	0.815733
2020	Ashaka Cement	17.0 0	7.27	18.28	1.00	1.00	0.652174
2021	Ashaka Cement	18.0 0	7.35	7.21	1.00	1.00	0.652174
2022	Ashaka Cement	19.0 0	7.40	8.28	1.00	1.00	0.652174
2016	Ashaka Cement	20.0 0	7.41	3.68	1.00	1.00	0.652174
2017	Ashaka Cement	21.0 0	7.45	10.68	1.00	1.00	0.652174
2018	Ashaka Cement	22.0 0	7.81	4.43	1.00	1.00	0.652174
2019	Ashaka Cement	23.0 0	7.83	4.64	1.00	1.00	0.652174
2020	Ashaka Cement	24.0 0	7.83	4.19	1.00	1.00	0.721079
2021	Ashaka Cement	25.0 0	7.85	6.38	2.00	1.00	0.721079
2022	Ashaka Cement	26.0 0	7.85	3.93	1.00	1.00	0.721079
2020	Associated Bus Company	4.00	6.47	5.71	1.00	0.00	0.73913
2021	Associated Bus Company	5.00	6.47	4.74	1.00	0.00	0.73913
2022	Associated Bus Company	6.00	6.55	2.39	1.00	0.00	0.73913
2016	Associated Bus Company	7.00	6.61	2.11	1.00	0.00	0.695652
2017	Associated Bus Company	8.00	6.57	1.53	1.00	0.00	0.695652
2018	Associated Bus Company	9.00	6.71	1.40	1.00	0.00	0.695652
2019	Associated Bus Company	10.0 0	6.70	6.52	1.00	0.00	0.695652
2020	Associated Bus Company	11.0 0	6.75	5.42	1.00	0.00	0.826093
2021	Associated Bus Company	12.0 0	6.81	-5.80	1.00	0.00	0.826093
2022	Associated Bus Company	13.0 0	6.78	2.20	1.00	0.00	0.826093
2020	Avon Crowncaps & Containers	13.0 0	6.59	4.06	0.00	1.00	0.260871
2021	Avon Crowncaps & Containers	14.0 0	6.62	4.18	0.00	1.00	0.260871

2022	Avon Crowncaps & Containers	15.0						
		0	6.74	4.56	0.00	1.00	0.260871	
2016	Avon Crowncaps & Containers	16.0						
		0	6.85	3.36	0.00	1.00	0.260871	
2017	Avon Crowncaps & Containers	17.0						
		0	6.94	0.96	0.00	1.00	0.260871	
2018	Avon Crowncaps & Containers	18.0						
		0	6.86	2.00	0.00	1.00	0.260871	
2019	Avon Crowncaps & Containers	19.0						
		0	7.05	0.76	0.00	1.00	0.3117645	
2020	Avon Crowncaps & Containers	20.0						
		0	7.00	-1.06	0.00	1.00	0.3117645	
2021	Avon Crowncaps & Containers	21.0						
		0	6.96	1.41	0.00	1.00	0.3117645	
2022	Avon Crowncaps & Containers	22.0						
		0	7.07	-0.36	0.00	1.00	0.3117645	
		28.0						
2020	B.O.C Gases Nig	0	6.18	8.46	0.00	1.00	0.652174	
		29.0						
2021	B.O.C Gases Nig	0	6.25	12.96	0.00	1.00	0.652174	
		30.0						
2022	B.O.C Gases Nig	0	6.28	11.54	0.00	1.00	0.652174	
		31.0						
2016	B.O.C Gases Nig	0	6.31	12.23	0.00	1.00	0.652174	
		32.0						
2017	B.O.C Gases Nig	0	6.33	16.36	0.00	1.00	0.652174	
		33.0						
2018	B.O.C Gases Nig	0	6.35	14.85	0.00	1.00	0.693844	
		34.0						
2019	B.O.C Gases Nig	0	6.42	11.50	0.00	1.00	0.693844	
		35.0						
2020	B.O.C Gases Nig	0	6.46	9.10	0.00	1.00	0.693844	
		36.0						
2021	B.O.C Gases Nig	0	6.53	6.60	0.00	1.00	0.693844	
		37.0						
2022	B.O.C Gases Nig	0	6.51	3.77	0.00	1.00	0.693844	
		33.0						
2020	Berger Paints Nig	0	6.30	4.09	0.00	1.00	0.391304	
		34.0						
2021	Berger Paints Nig	0	6.32	5.37	0.00	1.00	0.391304	
		35.0						
2022	Berger Paints Nig	0	6.31	7.27	0.00	1.00	0.391304	
		36.0						
2016	Berger Paints Nig	0	6.36	8.47	0.00	1.00	0.391304	
		37.0						
2017	Berger Paints Nig	0	6.42	16.98	0.00	1.00	0.391304	
		38.0						
2018	Berger Paints Nig	0	6.43	8.52	0.00	1.00	0.391304	
		39.0						
2019	Berger Paints Nig	0	6.46	6.61	0.00	1.00	0.418765	
		40.0						
2020	Berger Paints Nig	0	6.55	7.11	0.00	1.00	0.418765	
		41.0						
2021	Berger Paints Nig	0	6.56	4.09	0.00	1.00	0.418765	
		42.0						
2022	Berger Paints Nig	0	6.59	8.48	0.00	1.00	0.418765	
		21.0						
2020	Beta Glass Company	0	6.97	4.04	0.00	1.00	0.869565	
		22.0						
2021	Beta Glass Company	0	7.08	7.15	0.00	1.00	0.869565	
		23.0						
2022	Beta Glass Company	0	7.14	8.58	0.00	1.00	0.869565	
		24.0						
2016	Beta Glass Company	0	7.12	10.46	0.00	1.00	0.653174	
		25.0						
2017	Beta Glass Company	0	7.21	9.11	0.00	1.00	0.869565	

2018	Beta Glass Company	26.0						
		0	7.26	9.85	0.00	1.00	0.869565	
2019	Beta Glass Company	27.0						
		0	7.35	5.92	0.00	1.00	0.869565	
2020	Beta Glass Company	28.0						
		0	7.43	5.40	0.00	1.00	0.557146	
2021	Beta Glass Company	29.0						
		0	7.43	8.88	0.00	1.00	0.557146	
2022	Beta Glass Company	30.0						
		0	7.43	7.33	0.00	1.00	0.557146	
2020	Cadbury Nig	31.0						
		0	7.47	15.73	0.00	1.00	0.173913	
2021	Cadbury Nig	32.0						
		0	7.39	-2.99	1.00	1.00	0.173913	
2022	Cadbury Nig	33.0						
		0	7.38	10.76	1.00	1.00	0.173913	
2016	Cadbury Nig	34.0						
		0	7.40	-4.90	1.00	1.00	0.173913	
2017	Cadbury Nig	35.0						
		0	7.45	4.12	1.00	1.00	0.173913	
2018	Cadbury Nig	36.0						
		0	7.53	10.91	1.00	1.00	0.2748992	
2019	Cadbury Nig	37.0						
		0	7.60	8.60	2.00	1.00	0.2748992	
2020	Cadbury Nig	38.0						
		0	7.64	13.95	2.00	1.00	0.2748992	
2021	Cadbury Nig	39.0						
		0	7.46	5.25	2.00	1.00	0.2748992	
2022	Cadbury Nig	40.0						
		0	7.45	4.06	2.00	1.00	0.2748992	
2020	Cement Comy Of Northern Nig	14.0						
		0	6.91	-0.43	0.00	1.00	0.758454	
2021	Cement Comy Of Northern Nig	15.0						
		0	6.96	1.52	0.00	1.00	0.758454	
2022	Cement Comy Of Northern Nig	16.0						
		0	6.94	17.40	0.00	1.00	0.758454	
2016	Cement Comy Of Northern Nig	17.0						
		0	6.72	34.17	1.00	1.00	0.758454	
2017	Cement Comy Of Northern Nig	18.0						
		0	7.03	11.84	1.00	1.00	0.758454	
2018	Cement Comy Of Northern Nig	19.0						
		0	7.10	18.33	1.00	1.00	0.758454	
2019	Cement Comy Of Northern Nig	20.0						
		0	7.15	8.40	1.00	1.00	0.758454	
2020	Cement Comy Of Northern Nig	21.0						
		0	7.18	9.45	1.00	1.00	0.758454	
2021	Cement Comy Of Northern Nig	22.0						
		0	7.20	12.16	0.00	1.00	0.758454	
2022	Cement Comy Of Northern Nig	23.0						
		0	7.23	7.00	1.00	1.00	0.758454	
2020	Champion Breweries	24.0						
		0	6.58	11.08	0.00	1.00	0.467356	
2021	Champion Breweries	25.0						
		0	5.26	58.77	0.00	1.00	0.467356	
2022	Champion Breweries	26.0						
		0	5.66	51.09	0.00	1.00	0.467356	
2016	Champion Breweries	27.0						
		0	6.05	43.40	0.00	1.00	0.467356	
2017	Champion Breweries	28.0						
		0	6.45	44.16	0.00	1.00	0.467356	
2018	Champion Breweries	29.0						
		0	6.84	17.16	0.00	1.00	0.5179451	
2019	Champion Breweries	30.0						
		0	6.83	19.66	0.00	1.00	0.5179451	
2020	Champion Breweries	31.0						
		0	6.96	12.89	0.00	1.00	0.5179451	

2021	Champion Breweries	32.0 0	6.98	-7.87	0.00	1.00	0.5179451
2022	Champion Breweries	33.0 0	7.01	0.75	1.00	1.00	0.5179451
2020	Chellarams	30.0 0	6.69	1.49	0.00	0.00	0.878676
2021	Chellarams	31.0 0	6.77	4.74	0.00	0.00	0.878676
2022	Chellarams	32.0 0	6.87	3.49	0.00	0.00	0.878676
2016	Chellarams	33.0 0	6.95	-4.27	0.00	0.00	0.878676
2017	Chellarams	34.0 0	6.97	4.74	0.00	0.00	0.878676
2018	Chellarams	35.0 0	6.56	6.14	0.00	0.00	0.878676
2019	Chellarams	36.0 0	7.17	1.70	0.00	0.00	0.768565
2020	Chellarams	37.0 0	7.19	0.59	0.00	0.00	0.768565
2021	Chellarams	38.0 0	7.22	-0.44	0.00	0.00	0.768565
2022	Chellarams	39.0 0	7.26	17.18	0.00	0.00	0.768565
2020	Chemical & Allied Product	29.0 0	6.19	20.24	1.00	1.00	0.2608867
2021	Chemical & Allied Product	30.0 0	6.30	17.77	2.00	1.00	0.2608867
2022	Chemical & Allied Product	31.0 0	6.35	33.12	1.00	1.00	0.2608867
2016	Chemical & Allied Product	32.0 0	6.33	15.77	1.00	1.00	0.2608867
2017	Chemical & Allied Product	33.0 0	6.37	37.25	1.00	1.00	0.2608867
2018	Chemical & Allied Product	34.0 0	6.49	34.18	1.00	1.00	0.2608867
2019	Chemical & Allied Product	35.0 0	6.46	38.79	2.00	1.00	0.2608867
2020	Chemical & Allied Product	36.0 0	6.48	46.68	2.00	1.00	0.3177453
2021	Chemical & Allied Product	37.0 0	6.49	53.96	2.00	1.00	0.3177453
2022	Chemical & Allied Product	38.0 0	6.53	51.02	2.00	1.00	0.3177453
2020	Conoil	18.0 0	7.53	8.38	1.00	1.00	0.695652
2021	Conoil	19.0 0	7.60	6.57	1.00	1.00	0.695652
2022	Conoil	20.0 0	7.75	3.21	1.00	1.00	0.695652
2016	Conoil	21.0 0	7.60	5.81	0.00	1.00	0.695652
2017	Conoil	22.0 0	7.62	6.72	0.00	1.00	0.695652
2018	Conoil	23.0 0	7.79	4.83	0.00	1.00	0.695652
2019	Conoil	24.0 0	7.92	0.86	1.00	1.00	0.695652
2020	Conoil	25.0 0	7.92	3.73	1.00	1.00	0.718454
2021	Conoil	26.0 0	7.94	0.96	1.00	1.00	0.718454
2022	Conoil	27.0 0	7.96	0.41	1.00	1.00	0.718454
2020	Cutix	20.0 0	5.62	12.98	2.00	0.00	0.782609

2021	Cutix	21.0						
		0	5.80	19.08	1.00	0.00	0.782609	
2022	Cutix	22.0						
		0	5.88	15.08	1.00	0.00	0.782609	
2016	Cutix	23.0						
		0	5.89	9.99	1.00	0.00	0.782609	
2017	Cutix	24.0						
		0	6.03	13.01	1.00	0.00	0.782609	
2018	Cutix	25.0						
		0	5.97	9.01	1.00	0.00	0.782609	
2019	Cutix	26.0						
		0	5.97	8.39	2.00	0.00	0.782609	
2020	Cutix	27.0						
		0	6.03	14.10	2.00	0.00	0.782609	
2021	Cutix	28.0						
		0	6.24	11.87	2.00	0.00	0.782609	
2022	Cutix	29.0						
		0	6.29	7.58	1.00	0.00	0.782609	
2020	Dn Meyer	28.0						
		0	6.04	5.54	0.00	1.00	0.671508	
2021	Dn Meyer	29.0						
		0	6.28	3.32	0.00	1.00	0.671508	
2022	Dn Meyer	30.0						
		0	6.51	-9.21	0.00	1.00	0.671508	
2016	Dn Meyer	31.0						
		0	6.42	23.63	0.00	1.00	0.671508	
2017	Dn Meyer	32.0						
		0	6.43	-8.70	1.00	1.00	0.671508	
2018	Dn Meyer	33.0						
		0	6.44	-1.98	1.00	1.00	0.671508	
2019	Dn Meyer	34.0						
		0	6.41	-1.04	1.00	1.00	0.671508	
2020	Dn Meyer	35.0						
		0	6.42	1.79	1.00	1.00	0.671508	
2021	Dn Meyer	36.0						
		0	6.39	-1.49	2.00	1.00	0.671508	
2022	Dn Meyer	37.0						
		0	6.37	2.27	2.00	1.00	0.671508	
2020	Eternaoil	9.00	5.97	2.97	2.00	1.00	0.478621	
2021	Eternaoil	10.0						
		0	6.52	-4.13	0.00	1.00	0.478621	
2022	Eternaoil	11.0						
		0	6.98	-4.24	0.00	1.00	0.478621	
2016	Eternaoil	12.0						
		0	7.01	14.55	0.00	1.00	0.478621	
2017	Eternaoil	13.0						
		0	6.97	7.79	0.00	1.00	0.478621	
2018	Eternaoil	14.0						
		0	7.17	8.23	0.00	1.00	0.517532	
2019	Eternaoil	15.0						
		0	7.52	2.85	0.00	1.00	0.517532	
2020	Eternaoil	16.0						
		0	7.26	3.85	0.00	1.00	0.517532	
2021	Eternaoil	17.0						
		0	7.11	7.48	1.00	1.00	0.517532	
2022	Eternaoil	18.0						
		0	7.46	4.47	1.00	1.00	0.517532	
2020	Evans Medical	28.0						
		0	6.58	3.46	1.00	1.00	0.415459	
2021	Evans Medical	29.0						
		0	6.64	-7.29	1.00	1.00	0.415459	
2022	Evans Medical	30.0						
		0	6.67	10.86	1.00	1.00	0.415459	
2016	Evans Medical	31.0						
		0	6.60	22.42	1.00	1.00	0.415459	

2017	Evans Medical	32.0 0	6.61	0.21	1.00	1.00	0.415459
2018	Evans Medical	33.0 0	6.84	2.50	1.00	1.00	0.415459
2019	Evans Medical	34.0 0	6.86	3.89	2.00	1.00	0.415459
2020	Evans Medical	35.0 0	6.85	11.50	2.00	1.00	0.415459
2021	Evans Medical	36.0 0	6.82	14.63	2.00	1.00	0.415459
2022	Evans Medical	37.0 0	6.83	25.94	2.00	1.00	0.415459
2020	First Aluminium Nig	15.0 0	6.86	0.00	0.00	1.00	0.609696
2021	First Aluminium Nig	16.0 0	6.88	-6.53	0.00	1.00	0.609696
2022	First Aluminium Nig	17.0 0	6.94	-3.44	0.00	1.00	0.609696
2016	First Aluminium Nig	18.0 0	7.01	0.47	0.00	1.00	0.609696
2017	First Aluminium Nig	19.0 0	7.02	-3.18	0.00	1.00	0.609696
2018	First Aluminium Nig	20.0 0	7.00	-2.76	0.00	1.00	0.609696
2019	First Aluminium Nig	21.0 0	6.95	11.33	0.00	1.00	0.609696
2020	First Aluminium Nig	22.0 0	6.93	1.13	0.00	1.00	0.546533
2021	First Aluminium Nig	23.0 0	6.93	0.35	0.00	1.00	0.546533
2022	First Aluminium Nig	24.0 0	6.92	1.34	1.00	1.00	0.546533
2020	Flour Mills Of Nigeria	28.0 0	7.71	9.15	0.00	0.00	0.478261
2021	Flour Mills Of Nigeria	29.0 0	7.88	6.69	0.00	0.00	0.478261
2022	Flour Mills Of Nigeria	30.0 0	8.04	3.57	0.00	0.00	0.478261
2016	Flour Mills Of Nigeria	31.0 0	8.14	3.14	0.00	0.00	0.478261
2017	Flour Mills Of Nigeria	32.0 0	8.16	2.71	0.00	0.00	0.478261
2018	Flour Mills Of Nigeria	33.0 0	8.21	5.79	0.00	0.00	0.478261
2019	Flour Mills Of Nigeria	34.0 0	8.37	3.60	0.00	0.00	0.608696
2020	Flour Mills Of Nigeria	35.0 0	8.45	2.76	0.00	0.00	0.608696
2021	Flour Mills Of Nigeria	36.0 0	8.47	1.81	0.00	0.00	0.608696
2022	Flour Mills Of Nigeria	37.0 0	8.54	2.47	0.00	0.00	0.608696
2020	Forte Oil (Ap)	29.0 0	7.42	8.24	1.00	1.00	0.719787
2021	Forte Oil (Ap)	30.0 0	7.05	50.83	1.00	1.00	0.719787
2022	Forte Oil (Ap)	31.0 0	7.30	25.74	1.00	1.00	0.719787
2016	Forte Oil (Ap)	32.0 0	7.94	10.43	1.00	1.00	0.719787
2017	Forte Oil (Ap)	33.0 0	7.84	-3.98	1.00	1.00	0.719787
2018	Forte Oil (Ap)	34.0 0	7.66	43.20	1.00	1.00	0.719787
2019	Forte Oil (Ap)	35.0 0	7.63	2.37	1.00	1.00	0.719787

2020	Forte Oil (Ap)	36.0 0	8.02	4.78	1.00	1.00	0.678654
2021	Forte Oil (Ap)	37.0 0	8.14	3.20	1.00	1.00	0.678654
2022	Forte Oil (Ap)	38.0 0	8.09	4.76	1.00	1.00	0.678654
2020	Glaxosmithkline Nig	28.0 0	6.93	12.84	2.00	0.00	0.671508
2021	Glaxosmithkline Nig	29.0 0	6.94	9.60	1.00	0.00	0.671508
2022	Glaxosmithkline Nig	30.0 0	6.98	13.29	1.00	0.00	0.671508
2016	Glaxosmithkline Nig	31.0 0	7.08	19.26	1.00	0.00	0.671508
2017	Glaxosmithkline Nig	32.0 0	7.17	13.42	1.00	0.00	0.671508
2018	Glaxosmithkline Nig	33.0 0	7.25	12.83	1.00	0.00	0.671508
2019	Glaxosmithkline Nig	34.0 0	7.34	12.96	1.00	0.00	0.671508
2020	Glaxosmithkline Nig	35.0 0	7.42	11.14	1.00	0.00	0.645708
2021	Glaxosmithkline Nig	36.0 0	7.45	6.60	2.00	0.00	0.645708
2022	Glaxosmithkline Nig	37.0 0	7.50	3.08	1.00	0.00	0.645708
2020	Greif Nig	21.0 0	5.94	3.47	0.00	0.00	0.305348
2021	Greif Nig	22.0 0	5.87	-2.11	0.00	0.00	0.305348
2022	Greif Nig	23.0 0	5.84	0.37	0.00	0.00	0.305348
2016	Greif Nig	24.0 0	5.86	-2.36	0.00	0.00	0.305348
2017	Greif Nig	25.0 0	5.83	6.46	0.00	0.00	0.305348
2018	Greif Nig	26.0 0	5.79	6.17	0.00	0.00	0.616459
2019	Greif Nig	27.0 0	5.28	5.87	0.00	0.00	0.616459
2020	Greif Nig	28.0 0	5.83	4.49	0.00	0.00	0.616459
2021	Greif Nig	29.0 0	5.82	6.54	0.00	0.00	0.616459
2022	Greif Nig	30.0 0	5.85	3.44	0.00	0.00	0.616459
2020	Guinness Nig	42.0 0	7.78	12.43	0.00	0.00	0.632849
2021	Guinness Nig	43.0 0	7.86	14.89	0.00	0.00	0.632849
2022	Guinness Nig	44.0 0	7.86	16.21	0.00	0.00	0.632849
2016	Guinness Nig	45.0 0	7.87	18.33	0.00	0.00	0.632849
2017	Guinness Nig	46.0 0	7.89	17.52	1.00	0.00	0.632849
2018	Guinness Nig	47.0 0	7.96	19.44	0.00	0.00	0.632849
2019	Guinness Nig	48.0 0	8.03	13.41	3.00	0.00	0.632849
2020	Guinness Nig	49.0 0	8.08	9.80	3.00	0.00	0.632849
2021	Guinness Nig	50.0 0	8.12	7.23	2.00	0.00	0.673954
2022	Guinness Nig	51.0 0	8.09	6.38	2.00	0.00	0.673954

	Interlinked Technologies	14.0						
2020	Interlinked Technologies	0	5.50	8.80	2.00	0.00	0.584641	
	Interlinked Technologies	15.0						
2021	Interlinked Technologies	0	5.53	-2.36	2.00	0.00	0.584641	
	Interlinked Technologies	16.0						
2022	Interlinked Technologies	0	5.57	-1.98	2.00	0.00	0.584641	
	Interlinked Technologies	17.0						
2016	Interlinked Technologies	0	5.52	0.34	2.00	0.00	0.584641	
	Interlinked Technologies	18.0						
2017	Interlinked Technologies	0	5.73	-3.49	2.00	0.00	0.584641	
	Interlinked Technologies	19.0						
2018	Interlinked Technologies	0	5.68	0.67	0.00	0.00	0.584641	
	Interlinked Technologies	20.0						
2019	Interlinked Technologies	0	5.64	-3.45	0.00	0.00	0.584641	
	Interlinked Technologies	21.0						
2020	Interlinked Technologies	0	5.65	0.82	0.00	0.00	0.673531	
	Interlinked Technologies	22.0						
2021	Interlinked Technologies	0	5.68	1.24	0.00	0.00	0.673531	
	Interlinked Technologies	23.0						
2022	Interlinked Technologies	0	5.63	1.44	0.00	0.00	0.673531	
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	International Breweries	12.0						
2020	International Breweries	0	5.97	39.01	0.00		0.565217	
	International Breweries	13.0						
2021	International Breweries	0	5.80	18.60	0.00		0.565217	
	International Breweries	14.0						
2022	International Breweries	0	5.57	17.26	1.00	1.00	0.565217	
	International Breweries	15.0						
2016	International Breweries	0	5.51	88.99	1.00	1.00	0.565217	
	International Breweries	16.0						
2017	International Breweries	0	7.00	2.01	1.00	1.00	0.565217	
	International Breweries	17.0						
2018	International Breweries	0	7.16	1.02	1.00	1.00	0.565217	
	International Breweries	18.0						
2019	International Breweries	0	7.29	13.09	1.00	1.00	0.565217	
	International Breweries	19.0						
2020	International Breweries	0	7.36	10.88	1.00	1.00	0.565217	
	International Breweries	20.0						
2021	International Breweries	0	7.39	8.64	1.00	1.00	0.586328	
	International Breweries	21.0						
2022	International Breweries	0	7.48	6.45	3.00	1.00	0.586328	
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	Ipwa	46.0						
2020	Ipwa	0	5.71	-9.81	2.00	1.00	0.73913	
	Ipwa	47.0						
2021	Ipwa	0	5.82	10.44	2.00	1.00	0.73913	
	Ipwa	48.0						
2022	Ipwa	0	5.81	3.33	2.00	1.00	0.73913	
	Ipwa	49.0						
2016	Ipwa	0	5.84	-0.64	2.00	1.00	0.73913	
	Ipwa	50.0						
2017	Ipwa	0	5.80	-9.52	1.00	1.00	0.73913	
	Ipwa	51.0						
2018	Ipwa	0	6.22	10.72	1.00	1.00	0.73913	
	Ipwa	52.0						
2019	Ipwa	0	6.19	-7.21	3.00	1.00	0.73913	
	Ipwa	53.0						
2020	Ipwa	0	6.17	-6.24	3.00	1.00	0.73913	
	Ipwa	54.0						
2021	Ipwa	0	6.37	-5.08	3.00	1.00	0.76824	
	Ipwa	55.0						
2022	Ipwa	0	6.47	-3.75	3.00	1.00	0.76824	
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2020	Japaul Oil & Maritime Serv	2.00	6.34	8.77	0.00	1.00	0.652174	
2021	Japaul Oil & Maritime Serv	3.00	6.69	7.75	0.00	1.00	0.652174	
2022	Japaul Oil & Maritime Serv	4.00	7.32	3.25	0.00	1.00	0.652174	

2016	Japaul Oil & Maritime Serv	5.00	7.33	3.43	0.00	1.00	0.652174
2017	Japaul Oil & Maritime Serv	6.00	7.40	3.17	0.00	1.00	0.652174
2018	Japaul Oil & Maritime Serv	7.00	7.44	3.59	0.00	1.00	0.652174
2019	Japaul Oil & Maritime Serv	8.00	7.51	20.86	0.00	1.00	0.652174
2020	Japaul Oil & Maritime Serv	9.00	7.59	0.62	0.00	1.00	0.652174
2021	Japaul Oil & Maritime Serv	10.00	7.59	-6.82	0.00	1.00	0.652174
2022	Japaul Oil & Maritime Serv	11.00	7.53	-	0.00	1.00	0.652174
		0	7.53	23.72	0.00	1.00	0.652174
		33.0					
2020	John Holt	0	6.91	-5.92	1.00	0.00	0.763385
2021	John Holt	34.0	7.04	0.35	1.00	0.00	0.763385
2022	John Holt	35.0	7.13	2.89	1.00	0.00	0.763385
2016	John Holt	36.0	7.17	14.33	1.00	0.00	0.763385
2017	John Holt	37.0	7.16	-0.07	0.00	0.00	0.763385
2018	John Holt	38.0	7.03	14.48	0.00	0.00	0.763385
2019	John Holt	39.0	7.04	3.83	0.00	0.00	0.763385
2020	John Holt	40.0	6.91	1.54	0.00	0.00	0.763385
2021	John Holt	41.0	7.01	5.74	0.00	0.00	0.763385
2022	John Holt	42.0	7.05	-2.25	0.00	0.00	0.763385
		0	7.05	-2.25	0.00	0.00	0.763385
		16.0					
2020	Julius Berger	0	7.95	1.26	1.00	0.00	0.74924
2021	Julius Berger	17.0	7.95	2.00	1.00	0.00	0.74924
2022	Julius Berger	18.0	8.14	1.81	1.00	0.00	0.74924
2016	Julius Berger	19.0	8.19	2.13	1.00	0.00	0.74924
2017	Julius Berger	20.0	8.18	1.86	1.00	0.00	0.74924
2018	Julius Berger	21.0	8.24	2.56	1.00	0.00	0.74924
2019	Julius Berger	22.0	8.25	4.48	0.00	0.00	0.63813
2020	Julius Berger	23.0	8.36	3.46	0.00	0.00	0.63813
2021	Julius Berger	24.0	8.41	3.22	0.00	0.00	0.63813
2022	Julius Berger	25.0	8.39	1.00	0.00	0.00	0.63813
		0	8.39	1.00	0.00	0.00	0.63813
		28.0					
2020	Lafarge Cement Wapco Nig	0	7.69	22.45	0.00	1.00	0.84926
2021	Lafarge Cement Wapco Nig	29.0	7.70	21.12	0.00	1.00	0.84926
2022	Lafarge Cement Wapco Nig	30.0	7.69	22.93	1.00	1.00	0.84926
2016	Lafarge Cement Wapco Nig	31.0	7.90	6.37	1.00	1.00	0.84926
2017	Lafarge Cement Wapco Nig	32.0	8.07	4.12	1.00	1.00	0.84926
2018	Lafarge Cement Wapco Nig	33.0	8.18	5.66	1.00	1.00	0.84926
		0	8.18	5.66	1.00	1.00	0.84926

2019	Lafarge Cement	34.0						
	Wapco Nig	0	8.18	9.68	2.00	1.00	0.84926	
	Lafarge Cement	35.0						
2020	Wapco Nig	0	8.21	17.55	2.00	1.00	0.78815	
	Lafarge Cement	36.0						
2021	Wapco Nig	0	8.49	11.33	2.00	1.00	0.78815	
	Lafarge Cement	37.0						
2022	Wapco Nig	0	8.66	5.96	5.00	1.00	0.78815	
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	Learn Africa	11.0						
2020	(Longman)	0	6.08	16.94	2.00	0.00	0.347826	
	Learn Africa	12.0						
2021	(Longman)	0	6.26	15.26	3.00	0.00	0.347826	
	Learn Africa	13.0						
2022	(Longman)	0	6.70	1.32	1.00	0.00	0.347826	
	Learn Africa	14.0						
2016	(Longman)	0	6.73	13.25	1.00	0.00	0.347826	
	Learn Africa	15.0						
2017	(Longman)	0	6.72	4.30	1.00	0.00	0.347826	
	Learn Africa	16.0						
2018	(Longman)	0	6.70	4.41	1.00	0.00	0.347826	
	Learn Africa	17.0						
2019	(Longman)	0	6.66	3.80	1.00	0.00	0.347826	
	Learn Africa	18.0						
2020	(Longman)	0	6.67	2.16	2.00	0.00	0.347826	
	Learn Africa	19.0						
2021	(Longman)	0	6.61	1.45	3.00	0.00	0.347826	
	Learn Africa	20.0		-				
2022	(Longman)	0	6.55	17.94	3.00	0.00	0.347826	
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		29.0		232.6				
2020	Livestock Feeds	0	5.51	2	1.00	1.00	0	
		30.0						
2021	Livestock Feeds	0	5.59	2.15	1.00	1.00	0	
		31.0						
2022	Livestock Feeds	0	5.94	5.24	1.00	1.00	0	
		32.0						
2016	Livestock Feeds	0	5.94	3.43	1.00	1.00	0.695652	
		33.0						
2017	Livestock Feeds	0	6.03	2.63	1.00	1.00	0.695652	
		34.0						
2018	Livestock Feeds	0	6.19	6.30	1.00	1.00	0.695652	
		35.0						
2019	Livestock Feeds	0	6.32	6.95	2.00	1.00	0.695652	
		36.0						
2020	Livestock Feeds	0	6.56	5.74	2.00	1.00	0.695652	
		37.0						
2021	Livestock Feeds	0	6.76	4.42	2.00	1.00	0.695652	
		38.0						
2022	Livestock Feeds	0	6.66	4.11	2.00	1.00	0.695652	
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		13.0						
2020	May & Baker Nig	0	6.60	5.33	0.00	0.00	0.913043	
		14.0						
2021	May & Baker Nig	0	6.65	4.68	0.00	0.00	0.913043	
		15.0						
2022	May & Baker Nig	0	6.76	7.30	0.00	0.00	0.913043	
		16.0						
2016	May & Baker Nig	0	6.79	3.77	0.00	0.00	0.913043	
		17.0						
2017	May & Baker Nig	0	6.83	2.83	0.00	0.00	0.913043	
		18.0						
2018	May & Baker Nig	0	6.85	3.63	0.00	0.00	0.913043	
		19.0						
2019	May & Baker Nig	0	6.91	0.94	2.00	0.00	0.88416	
		20.0						
2020	May & Baker Nig	0	6.91	-1.26	1.00	0.00	0.88416	
		21.0						
2021	May & Baker Nig	0	6.91	0.78	1.00	0.00	0.88416	

2022	May & Baker Nig	22.0 0	6.92	0.83	3.00	0.00	0.88416
2020	Mobil Nig	36.0 0	7.24	9.85	0.00	1.00	0.77518
2021	Mobil Nig	37.0 0	7.27	6.09	0.00	1.00	0.77518
2022	Mobil Nig	38.0 0	7.30	8.63	0.00	1.00	0.77518
2016	Mobil Nig	39.0 0	7.34	12.88	1.00	1.00	0.77518
2017	Mobil Nig	40.0 0	7.34	17.34	1.00	1.00	0.77518
2018	Mobil Nig	41.0 0	7.43	15.13	1.00	1.00	0.77518
2019	Mobil Nig	42.0 0	7.53	8.58	1.00	1.00	0.77518
2020	Mobil Nig	43.0 0	7.61	8.55	1.00	1.00	0.77518
2021	Mobil Nig	44.0 0	7.69	12.99	1.00	1.00	0.77518
2022	Mobil Nig	45.0 0	7.73	9.01	1.00	1.00	0.77518
2020	Morison Industries	29.0 0	5.35	-2.74	1.00	1.00	0.685354
2021	Morison Industries	30.0 0	5.36	2.41	1.00	1.00	0.685354
2022	Morison Industries	31.0 0	5.76	3.53	1.00	1.00	0.685354
2016	Morison Industries	32.0 0	5.76	-3.52	1.00	1.00	0.685354
2017	Morison Industries	33.0 0	5.74	-6.10	1.00	1.00	0.685354
2018	Morison Industries	34.0 0	5.76	-4.92	1.00	1.00	0.685354
2019	Morison Industries	35.0 0	5.77	0.34	0.00	1.00	0.79465
2020	Morison Industries	36.0 0	5.72	-4.19	0.00	1.00	0.79465
2021	Morison Industries	37.0 0	5.65	18.33	0.00	1.00	0.79465
2022	Morison Industries	38.0 0	5.63	25.67	0.00	1.00	0.79465
2020	Mrs(Texaco Chevron)	29.0 0	7.23	7.64	1.00	1.00	0.826087
2021	Mrs(Texaco Chevron)	30.0 0	7.32	9.36	1.00	1.00	0.826087
2022	Mrs(Texaco Chevron)	31.0 0	7.05	-2.70	1.00	1.00	0.826087
2016	Mrs(Texaco Chevron)	32.0 0	7.14	12.52	1.00	1.00	0.826087
2017	Mrs(Texaco Chevron)	33.0 0	7.61	7.03	0.00	1.00	0.826087
2018	Mrs(Texaco Chevron)	34.0 0	7.86	1.94	0.00	1.00	0.826087
2019	Mrs(Texaco Chevron)	35.0 0	7.75	0.68	1.00	1.00	0.717076
2020	Mrs(Texaco Chevron)	36.0 0	7.82	0.97	1.00	1.00	0.717076
2021	Mrs(Texaco Chevron)	37.0 0	7.76	1.29	1.00	1.00	0.717076
2022	Mrs(Texaco Chevron)	38.0 0	7.83	1.40	1.00	1.00	0.717076
2020	National Aviation Handling	1.00	6.60	11.02	2.17	0.00	0.565217
2021	National Aviation Handling	2.00	6.69	11.97	1.67	0.00	0.565217

2022	National Aviation Handling	3.00	6.21	49.39	1.00	0.00	0.565217
2016	National Aviation Handling	4.00	6.29	63.54	1.00	0.00	0.565217
2017	National Aviation Handling	5.00	6.15	83.28	0.00	0.00	0.565217
2018	National Aviation Handling	6.00	7.00	7.66	0.00	0.00	0.565217
2019	National Aviation Handling	7.00	7.04	5.42	1.00	0.00	0.565217
2020	National Aviation Handling	8.00	7.13	5.59	1.00	0.00	0.51544
2021	National Aviation Handling	9.00	7.16	3.97	1.00	0.00	0.51544
2022	National Aviation Handling	10.00	7.17	3.60	1.00	0.00	0.51544
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2020	National Salt Company	15.00	5.39	-6.08	0.00	1.00	0.84829
2021	National Salt Company	16.00	6.78	20.69	0.00	1.00	0.84829
2022	National Salt Company	17.00	6.87	17.35	0.00	1.00	0.84829
2016	National Salt Company	18.00	6.91	22.59	0.00	1.00	0.84829
2017	National Salt Company	19.00	6.88	21.95	0.00	1.00	0.84829
2018	National Salt Company	20.00	7.00	21.93	0.00	1.00	0.84829
2019	National Salt Company	21.00	7.03	25.88	0.00	1.00	0.84829
2020	National Salt Company	22.00	7.06	23.62	0.00	1.00	0.84829
2021	National Salt Company	23.00	7.10	14.87	0.00	1.00	0.88738
2022	National Salt Company	24.00	7.21	12.92	4.00	1.00	0.88738
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2020	Ncr Nigeria	28.00	6.19	40.38	1.00	0.00	0.78763
2021	Ncr Nigeria	29.00	6.56	-0.88	0.00	0.00	0.78763
2022	Ncr Nigeria	30.00	6.42	3.07	0.00	0.00	0.78763
2016	Ncr Nigeria	31.00	6.42	35.87	0.00	0.00	0.78763
2017	Ncr Nigeria	32.00	6.36	31.77	0.00	0.00	0.78763
2018	Ncr Nigeria	33.00	6.58	6.03	0.00	0.00	0.78763
2019	Ncr Nigeria	34.00	6.73	19.88	0.00	0.00	0.782609
2020	Ncr Nigeria	35.00	6.74	-0.35	0.00	0.00	0.782609
2021	Ncr Nigeria	36.00	6.83	2.35	0.00	0.00	0.782609
2022	Ncr Nigeria	37.00	6.90	0.24	0.00	0.00	0.782609
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2020	Neimeth Int Pharm	28.00	6.65	1.84	0.00	0.00	0.714518
2021	Neimeth Int Pharm	29.00	6.44	4.26	0.00	0.00	0.714518
2022	Neimeth Int Pharm	30.00	6.52	3.00	0.00	0.00	0.714518
2016	Neimeth Int Pharm	31.00	6.46	15.76	0.00	0.00	0.714518
2017	Neimeth Int Pharm	32.00	6.61	-3.07	0.00	0.00	0.714518

2018	Neimeth Int Pharm	33.0 0	6.49	3.69	0.00	0.00	0.714518
2019	Neimeth Int Pharm	34.0 0	6.46	-2.40	0.00	0.00	0.714518
2020	Neimeth Int Pharm	35.0 0	6.46	4.52	0.00	0.00	0.656629
2021	Neimeth Int Pharm	36.0 0	6.44	8.21	0.00	0.00	0.656629
2022	Neimeth Int Pharm	37.0 0	6.34	15.26	1.00	0.00	0.656629
2020	Nestle Nig	28.0 0	7.42	21.57	0.00	0.00	0.55428
2021	Nestle Nig	29.0 0	7.33	25.61	0.00	0.00	0.55428
2022	Nestle Nig	30.0 0	7.46	28.57	0.00	0.00	0.55428
2016	Nestle Nig	31.0 0	7.65	22.11	0.00	0.00	0.55428
2017	Nestle Nig	32.0 0	7.78	20.88	0.00	0.00	0.55428
2018	Nestle Nig	33.0 0	7.89	21.22	0.00	0.00	0.55428
2019	Nestle Nig	34.0 0	7.95	23.76	2.00	0.00	0.66538
2020	Nestle Nig	35.0 0	8.03	20.57	2.00	0.00	0.66538
2021	Nestle Nig	36.0 0	8.03	20.96	2.00	0.00	0.66538
2022	Nestle Nig	37.0 0	8.08	19.91	2.00	0.00	0.66538
2020	Nigeria Breweries	34.0 0	7.88	14.41	1.00	1.00	0.896482
2021	Nigeria Breweries	35.0 0	7.96	20.92	1.00	1.00	0.896482
2022	Nigeria Breweries	36.0 0	8.02	24.61	2.00	1.00	0.896482
2016	Nigeria Breweries	37.0 0	8.03	26.09	0.00	1.00	0.896482
2017	Nigeria Breweries	38.0 0	8.06	26.52	0.00	1.00	0.896482
2018	Nigeria Breweries	39.0 0	8.37	16.14	0.00	1.00	0.896482
2019	Nigeria Breweries	40.0 0	8.40	15.00	1.00	1.00	0.896482
2020	Nigeria Breweries	41.0 0	8.40	17.04	1.00	1.00	0.896482
2021	Nigeria Breweries	42.0 0	8.54	12.18	2.00	1.00	0.785371
2022	Nigeria Breweries	43.0 0	8.55	10.68	2.00	1.00	0.785371
2020	Nigeria Ropes	29.0 0	5.83	3.37	1.00	0.00	0.663285
2021	Nigeria Ropes	30.0 0	5.80	3.97	1.00	0.00	0.663285
2022	Nigeria Ropes	31.0 0	5.89	3.80	0.00	0.00	0.663285
2016	Nigeria Ropes	32.0 0	5.83	19.16	0.00	0.00	0.764396
2017	Nigeria Ropes	33.0 0	5.80	-0.28	0.00	0.00	0.764396
2018	Nigeria Ropes	34.0 0	5.87	0.77	0.00	0.00	0.764396
2019	Nigeria Ropes	35.0 0	5.79	25.05	0.00	0.00	0.764396
2020	Nigeria Ropes	36.0 0	5.87	30.28	0.00	0.00	0.764396

2021	Nigeria Ropes	37.0	-					
		0	5.85	28.90	0.00	0.00	0.764396	
2022	Nigeria Ropes	38.0	-					
		0	5.89	22.68	0.00	0.00	0.764396	
2020	Nigerian Enamelware	28.0						
		0	5.92	2.47	0.00	1.00	0.748245	
2021	Nigerian Enamelware	29.0						
		0	6.08	2.05	0.00	1.00	0.748245	
2022	Nigerian Enamelware	30.0						
		0	6.16	1.35	0.00	1.00	0.748245	
2016	Nigerian Enamelware	31.0						
		0	6.11	4.92	0.00	1.00	0.748245	
2017	Nigerian Enamelware	32.0						
		0	6.09	6.13	0.00	1.00	0.748245	
2018	Nigerian Enamelware	33.0						
		0	6.01	8.65	0.00	1.00	0.748245	
2019	Nigerian Enamelware	34.0						
		0	6.34	2.95	0.00	1.00	0.748245	
2020	Nigerian Enamelware	35.0						
		0	6.34	3.36	0.00	1.00	0.748245	
2021	Nigerian Enamelware	36.0						
		0	6.49	2.79	0.00	1.00	0.748245	
2022	Nigerian Enamelware	37.0						
		0	6.70	1.48	0.00	1.00	0.748245	
2020	Nigerian Northern Flour Mill	29.0						
		0	6.21	3.37	0.00	1.00	0.869565	
2021	Nigerian Northern Flour Mill	30.0						
		0	6.29	-5.40	0.00	1.00	0.869565	
2022	Nigerian Northern Flour Mill	31.0						
		0	6.37	2.44	0.00	1.00	0.869565	
2016	Nigerian Northern Flour Mill	32.0						
		0	6.44	8.56	0.00	1.00	0.869565	
2017	Nigerian Northern Flour Mill	33.0						
		0	6.41	5.81	0.00	1.00	0.869565	
2018	Nigerian Northern Flour Mill	34.0						
		0	6.62	11.02	0.00	1.00	0.758454	
2019	Nigerian Northern Flour Mill	35.0						
		0	6.53	0.15	0.00	1.00	0.758454	
2020	Nigerian Northern Flour Mill	36.0						
		0	6.56	6.21	0.00	1.00	0.758454	
2021	Nigerian Northern Flour Mill	37.0						
		0	6.51	7.15	0.00	1.00	0.758454	
2022	Nigerian Northern Flour Mill	38.0						
		0	5.91	8.09	0.00	1.00	0.758454	
2020	Nigerian-German Ch	28.0						
		0	6.36	7.80	0.00	1.00	0.76285	
2021	Nigerian-German Ch	29.0						
		0	6.53	4.08	0.00	1.00	0.76285	
2022	Nigerian-German Ch	30.0						
		0	6.69	0.37	0.00	1.00	0.76285	
2016	Nigerian-German Ch	31.0						
		0	6.84	-6.22	0.00	1.00	0.76285	
2017	Nigerian-German Ch	32.0						
		0	6.87	-6.28	0.00	1.00	0.771143	
2018	Nigerian-German Ch	33.0						
		0	6.93	-1.90	0.00	1.00	0.771143	
2019	Nigerian-German Ch	34.0						
		0	6.95	-4.18	0.00	1.00	0.771143	
2020	Nigerian-German Ch	35.0						
		0	7.05	1.18	0.00	1.00	0.771143	
2021	Nigerian-German Ch	36.0						
		0	7.02	1.45	0.00	1.00	0.771143	
2022	Nigerian-German Ch	37.0						
		0	7.08	2.99	0.00	1.00	0.771143	
2020	Oando	15.0						
		0	7.86	4.26	0.00	1.00	0.63813	

2021	Oando	16.0						
		0	7.95	6.17	0.00	1.00	0.63813	
2022	Oando	17.0						
		0	8.46	2.90	1.00	1.00	0.63813	
2016	Oando	18.0						
		0	8.50	3.20	1.00	1.00	0.63813	
2017	Oando	19.0						
		0	8.51	4.41	1.00	1.00	0.63813	
2018	Oando	20.0						
		0	8.61	0.09	2.00	1.00	0.63813	
2019	Oando	21.0						
		0	8.71	2.09	2.00	1.00	0.63813	
2020	Oando	22.0						
		0	8.77	-0.79	2.00	1.00	0.63813	
2021	Oando	23.0						
		0	8.95	20.16	1.00	1.00	0.63813	
2022	Oando	24.0						
		0	8.98	-3.30	1.00	1.00	0.63813	
2020	Okomu Oil Palm	16.0						
		0	6.80	6.21	0.00	0.00	0.74924	
2021	Okomu Oil Palm	17.0						
		0	6.85	1.99	0.00	0.00	0.74924	
2022	Okomu Oil Palm	18.0						
		0	6.89	15.50	0.00	0.00	0.74924	
2016	Okomu Oil Palm	19.0						
		0	6.90	6.89	0.00	0.00	0.74924	
2017	Okomu Oil Palm	20.0						
		0	6.94	18.80	0.00	0.00	0.74924	
2018	Okomu Oil Palm	21.0						
		0	7.37	16.79	0.00	0.00	0.74924	
2019	Okomu Oil Palm	22.0						
		0	7.49	11.56	0.00	0.00	0.74924	
2020	Okomu Oil Palm	23.0						
		0	7.48	6.96	0.00	0.00	0.74924	
2021	Okomu Oil Palm	24.0						
		0	7.49	5.01	0.00	0.00	0.74924	
2022	Okomu Oil Palm	25.0						
		0	7.30	13.12	0.00	0.00	0.74924	
2020	Pharma-Deko	28.0						
		0	6.16	23.46	1.00	0.00	0.63813	
2021	Pharma-Deko	29.0						
		0	6.18	16.18	2.00	0.00	0.63813	
2022	Pharma-Deko	30.0						
		0	6.17	13.31	2.00	0.00	0.63813	
2016	Pharma-Deko	31.0						
		0	6.10	37.06	2.00	0.00	0.63813	
2017	Pharma-Deko	32.0						
		0	6.21	28.51	2.00	0.00	0.63813	
2018	Pharma-Deko	33.0						
		0	6.41	0.63	2.00	0.00	0.63813	
2019	Pharma-Deko	34.0						
		0	6.44	26.63	0.00	0.00	0.63813	
2020	Pharma-Deko	35.0						
		0	6.40	-4.85	0.00	0.00	0.63813	
2021	Pharma-Deko	36.0						
		0	6.45	3.56	0.00	0.00	0.63813	
2022	Pharma-Deko	37.0						
		0	6.41	25.65	0.00	0.00	0.63813	
2020	Premier Paints							
		8.00	5.20	10.45	0.00	1.00	0.58372	
2021	Premier Paints	13.0						
		0	5.00	6.11	0.00	1.00	0.58372	
2022	Premier Paints	14.0						
		0	4.94	2.81	0.00	1.00	0.58372	
2016	Premier Paints	15.0						
		0	5.07	15.32	0.00	1.00	0.58372	

2017	Premier Paints	16.0 0	5.09	- 70.34	1.00	1.00	0.58372
2018	Premier Paints	17.0 0	5.44	- 22.33	1.00	1.00	0.58372
2019	Premier Paints	18.0 0	5.34	- 13.67	1.00	1.00	0.58372
2020	Premier Paints	19.0 0	5.40	-8.39	1.00	1.00	0.58372
2021	Premier Paints	16.0 0	5.46	2.80	0.00	1.00	0.58372
2022	Premier Paints	17.0 0	5.53	-8.64	0.00	1.00	0.58372
2020	Presco	5.00	6.08	18.17	1.00	0.00	0.608696
2021	Presco	6.00	6.67	0.80	1.00	0.00	0.608696
2022	Presco	7.00	6.75	11.88	1.00	0.00	0.608696
2016	Presco	8.00	6.88	3.16	1.00	0.00	0.608696
2017	Presco	9.00	6.87	14.84	1.00	0.00	0.608696
2018	Presco	10.0 0	7.40	7.20	1.00	0.00	0.608696
2019	Presco	11.0 0	7.45	12.45	1.00	0.00	0.608696
2020	Presco	12.0 0	7.51	4.09	1.00	0.00	0.608696
2021	Presco	13.0 0	7.54	7.46	1.00	0.00	0.608696
2022	Presco	14.0 0	7.74	4.18	1.00	0.00	0.608696
2020	Pz Cussons	33.0 0	7.62	8.53	1.00	1.00	0.869464
2021	Pz Cussons	34.0 0	7.66	8.44	1.00	1.00	0.869464
2022	Pz Cussons	35.0 0	7.70	8.69	1.00	1.00	0.869464
2016	Pz Cussons	36.0 0	7.74	9.71	3.00	1.00	0.869464
2017	Pz Cussons	37.0 0	7.77	9.47	2.00	1.00	0.869464
2018	Pz Cussons	38.0 0	7.84	8.27	1.00	1.00	0.869464
2019	Pz Cussons	39.0 0	7.81	3.94	3.00	1.00	0.869464
2020	Pz Cussons	40.0 0	7.86	7.36	3.00	1.00	0.869464
2021	Pz Cussons	41.0 0	7.85	7.16	3.00	1.00	0.869464
2022	Pz Cussons	42.0 0	7.83	6.78	3.00	1.00	0.869464
2020	R.T Briscoe Nig	33.0 0	6.68	11.13	1.00	0.00	0.347826
2021	R.T Briscoe Nig	34.0 0	6.87	8.26	1.00	0.00	0.347826
2022	R.T Briscoe Nig	35.0 0	6.99	6.48	1.00	0.00	0.347826
2016	R.T Briscoe Nig	36.0 0	6.88	5.64	1.00	0.00	0.347826
2017	R.T Briscoe Nig	37.0 0	6.97	1.61	1.00	0.00	0.347826
2018	R.T Briscoe Nig	38.0 0	7.18	1.00	1.00	0.00	0.347826
2019	R.T Briscoe Nig	39.0 0	7.15	-1.99	1.00	0.00	0.347826
2020	R.T Briscoe Nig	40.0 0	7.19	-0.60	1.00	0.00	0.347826

2021	R.T Briscoe Nig	41.0 0	7.28	-9.62	1.00	0.00	0.347826
2022	R.T Briscoe Nig	42.0 0	7.37	-9.13	1.00	0.00	0.347826
2020	Roads Construction	28.0 0	6.15	1.53	1.00	0.00	0.458937
2021	Roads Construction	29.0 0	6.18	1.67	1.00	0.00	0.458937
2022	Roads Construction	30.0 0	6.37	1.75	1.00	0.00	0.458937
2016	Roads Construction	31.0 0	6.41	2.34	0.00	0.00	0.458937
2017	Roads Construction	32.0 0	6.51	2.47	0.00	0.00	0.458937
2018	Roads Construction	33.0 0	6.51	2.25	0.00	0.00	0.458937
2019	Roads Construction	34.0 0	6.53	2.81	0.00	0.00	0.458937
2020	Roads Construction	35.0 0	6.47	1.14	0.00	0.00	0.458937
2021	Roads Construction	36.0 0	6.56	3.82	0.00	0.00	0.458937
2022	Roads Construction	37.0 0	6.55	3.26	0.00	0.00	0.458937
2020	Scoa Nig	30.0 0	6.55	20.12	1.00	0.00	0.371988
2021	Scoa Nig	31.0 0	6.51	25.23	1.00	0.00	0.371988
2022	Scoa Nig	32.0 0	6.62	5.60	1.00	0.00	0.371988
2016	Scoa Nig	33.0 0	6.67	15.41	1.00	0.00	0.371988
2017	Scoa Nig	34.0 0	6.40	8.56	1.00	0.00	0.371988
2018	Scoa Nig	35.0 0	6.78	1.67	1.00	0.00	0.371988
2019	Scoa Nig	36.0 0	6.85	1.04	1.00	0.00	0.41877
2020	Scoa Nig	37.0 0	6.91	1.37	1.00	0.00	0.41877
2021	Scoa Nig	38.0 0	6.99	1.82	0.00	0.00	0.41877
2022	Scoa Nig	39.0 0	7.02	-	0.00	0.00	0.41877
2020	Studio Press Nig	28.0 0	6.47	-5.89	0.00	0.00	0.260872
2021	Studio Press Nig	29.0 0	6.66	0.78	0.00	0.00	0.260872
2022	Studio Press Nig	30.0 0	6.83	-3.14	0.00	0.00	0.260872
2016	Studio Press Nig	31.0 0	6.91	4.68	0.00	0.00	0.260872
2017	Studio Press Nig	32.0 0	6.90	0.31	0.00	0.00	0.260872
2018	Studio Press Nig	33.0 0	6.93	0.05	0.00	0.00	0.37193
2019	Studio Press Nig	34.0 0	6.87	0.03	0.00	0.00	0.37193
2020	Studio Press Nig	35.0 0	6.97	-0.51	0.00	0.00	0.37193
2021	Studio Press Nig	36.0 0	7.01	-3.45	0.00	0.00	0.37193
2022	Studio Press Nig	37.0 0	7.03	-0.88	0.00	0.00	0.37193
2020	Thomas Wyatt	29.0 0	5.67	0.40	0.00	0.00	0.652174

2021	Thomas Wyatt	30.0						
		0	5.64	-6.89	0.00	0.00	0.652174	
2022	Thomas Wyatt	31.0						
		0	5.78	0.33	0.00	0.00	0.652174	
2016	Thomas Wyatt	32.0						
		0	5.77	0.17	1.00	0.00	0.652174	
2017	Thomas Wyatt	33.0						
		0	5.80	-0.87	1.00	0.00	0.652174	
2018	Thomas Wyatt	34.0						
		0	5.81	-4.85	0.00	0.00	0.715198	
2019	Thomas Wyatt	35.0						
		0	5.83	-4.13	0.00	0.00	0.715198	
2020	Thomas Wyatt	36.0						
		0	5.81	-1.08	0.00	0.00	0.715198	
2021	Thomas Wyatt	37.0						
		0	5.78	0.42	0.00	0.00	0.715198	
2022	Thomas Wyatt	38.0						
		0	5.76	2.31	0.00	0.00	0.715198	
2020	Total Nigeria	28.0						
		0	7.42	9.57	1.00	1.00	0.913043	
2021	Total Nigeria	29.0						
		0	7.55	9.17	1.00	1.00	0.913043	
2022	Total Nigeria	30.0						
		0	7.62	10.52	1.00	1.00	0.913043	
2016	Total Nigeria	31.0						
		0	7.70	7.98	1.00	1.00	0.913043	
2017	Total Nigeria	32.0						
		0	7.74	7.27	1.00	1.00	0.913043	
2018	Total Nigeria	33.0						
		0	7.77	6.49	1.00	1.00	0.913043	
2019	Total Nigeria	34.0						
		0	7.88	6.14	1.00	1.00	0.802032	
2020	Total Nigeria	35.0						
		0	7.90	6.72	1.00	1.00	0.802032	
2021	Total Nigeria	36.0						
		0	7.98	4.63	2.00	1.00	0.802032	
2022	Total Nigeria	37.0						
		0	7.92	4.84	2.00	1.00	0.802032	
2020	Tourist Company Of Nigeria	3.00	6.88	-3.87	1.00	0.00	0.782609	
2021	Tourist Company Of Nigeria	4.00	6.90	15.75	1.00	0.00	0.782609	
2022	Tourist Company Of Nigeria	5.00	6.96	-7.41	1.00	0.00	0.782609	
2016	Tourist Company Of Nigeria	6.00	7.12	-5.14	1.00	0.00	0.782609	
2017	Tourist Company Of Nigeria	7.00	7.07	11.52	1.00	0.00	0.782609	
2018	Tourist Company Of Nigeria	8.00	7.06	12.03	1.00	0.00	0.782609	
2019	Tourist Company Of Nigeria	9.00	7.05	-4.68	1.00	0.00	0.71663	
2020	Tourist Company Of Nigeria	10.0	7.04	1.13	1.00	0.00	0.71663	
2021	Tourist Company Of Nigeria	11.0	7.03	-5.69	0.00	0.00	0.71663	
2022	Tourist Company Of Nigeria	12.0	7.02	-4.09	0.00	0.00	0.71663	
2020	Transcorp Nig	1.00	7.92	-8.24	1.00	0.00	0.84624	
2021	Transcorp Nig	2.00	8.00	-7.90	1.00	0.00	0.84624	
2022	Transcorp Nig	3.00	8.00	-5.07	1.00	0.00	0.84624	
2016	Transcorp Nig	4.00	7.54	3.53	1.00	0.00	0.84624	
2017	Transcorp Nig	5.00	7.63	12.54	1.00	0.00	0.84624	

2018	Transcorp Nig	6.00	7.79	9.54	1.00	0.00	0.73913
2019	Transcorp Nig	7.00	7.88	3.34	0.00	0.00	0.73913
2020	Transcorp Nig	8.00	8.17	4.66	0.00	0.00	0.73913
2021	Transcorp Nig	9.00	8.23	1.94	0.00	0.00	0.73913
2022	Transcorp Nig	10.00	8.31	1.00	0.00	0.00	0.73913
2020	Trans-Nationwide Express	14.00	5.27	15.25	1.00	0.00	0.565217
2021	Trans-Nationwide Express	15.00	5.36	19.93	1.00	0.00	0.565217
2022	Trans-Nationwide Express	16.00	5.43	17.59	1.00	0.00	0.565217
2016	Trans-Nationwide Express	17.00	5.71	10.91	1.00	0.00	0.565217
2017	Trans-Nationwide Express	18.00	5.71	9.69	1.00	0.00	0.565217
2018	Trans-Nationwide Express	19.00	5.76	8.40	1.00	0.00	0.714663
2019	Trans-Nationwide Express	20.00	5.78	-5.68	2.00	0.00	0.714663
2020	Trans-Nationwide Express	21.00	5.82	11.65	3.00	0.00	0.714663
2021	Trans-Nationwide Express	22.00	5.80	10.64	4.00	0.00	0.714663
2022	Trans-Nationwide Express	23.00	5.82	7.77	4.00	0.00	0.714663
2020	Tripple Gee & Company	16.00	6.18	8.60	1.00	0.00	0.478261
2021	Tripple Gee & Company	17.00	6.19	3.39	1.00	0.00	0.478261
2022	Tripple Gee & Company	18.00	6.17	6.85	1.00	0.00	0.478261
2016	Tripple Gee & Company	19.00	6.23	8.45	1.00	0.00	0.478261
2017	Tripple Gee & Company	20.00	6.15	-3.56	1.00	0.00	0.589372
2018	Tripple Gee & Company	21.00	6.16	-3.41	1.00	0.00	0.589372
2019	Tripple Gee & Company	22.00	6.23	-0.36	1.00	0.00	0.589372
2020	Tripple Gee & Company	23.00	6.22	1.13	1.00	0.00	0.589372
2021	Tripple Gee & Company	24.00	6.24	0.88	1.00	0.00	0.589372
2022	Tripple Gee & Company	25.00	6.26	2.26	1.00	0.00	0.589372
2020	Uac Of Nig	33.00	7.44	10.18	0.00	0.00	0.521739
2021	Uac Of Nig	34.00	7.90	5.76	0.00	0.00	0.521739
2022	Uac Of Nig	35.00	7.98	7.13	0.00	0.00	0.521739
2016	Uac Of Nig	36.00	7.97	6.57	1.00	0.00	0.521739
2017	Uac Of Nig	37.00	8.01	5.32	1.00	0.00	0.782685
2018	Uac Of Nig	38.00	8.08	2.80	1.00	0.00	0.782685
2019	Uac Of Nig	39.00	8.09	5.78	1.00	0.00	0.782685
2020	Uac Of Nig	40.00	8.09	8.05	1.00	0.00	0.782685
2021	Uac Of Nig	41.00	8.12	8.23	1.00	0.00	0.782685

2022	Uac Of Nig	42.0 0	8.11	4.00	1.00	0.00	0.782685
2020	Uac-Propety	9.00 10.0 0	7.60	2.41	2.00	0.00	0.521739
2021	Uac-Propety	11.0 0	7.69	2.18	2.00	0.00	0.521739
2022	Uac-Propety	12.0 0	7.81	5.75	2.00	0.00	0.521739
2016	Uac-Propety	13.0 0	7.79	3.83	2.00	0.00	0.521739
2017	Uac-Propety	14.0 0	7.84	3.28	2.00	0.00	0.521739
2018	Uac-Propety	15.0 0	7.84	2.42	2.00	0.00	0.521739
2019	Uac-Propety	16.0 0	7.85	3.06	2.00	0.00	0.521739
2020	Uac-Propety	17.0 0	7.82	4.81	2.00	0.00	0.521739
2021	Uac-Propety	18.0 0	7.83	5.27	2.00	0.00	0.521739
2022	Uac-Propety	18.0 0	7.86	0.53	2.00	0.00	0.521739
2020	Unilever Nig	34.0 0	7.27	-7.38	1.00	1.00	0.391304
2021	Unilever Nig	35.0 0	7.31	6.37	1.00	1.00	0.391304
2022	Unilever Nig	36.0 0	7.37	11.05	1.00	1.00	0.391304
2016	Unilever Nig	37.0 0	7.37	17.29	1.00	1.00	0.391304
2017	Unilever Nig	38.0 0	7.41	16.12	1.00	1.00	0.391304
2018	Unilever Nig	39.0 0	7.51	17.10	1.00	1.00	0.391304
2019	Unilever Nig	40.0 0	7.56	15.34	1.00	1.00	0.391304
2020	Unilever Nig	41.0 0	7.64	10.99	0.00	1.00	0.391304
2021	Unilever Nig	42.0 0	7.66	5.27	0.00	1.00	0.391304
2022	Unilever Nig	43.0 0	7.70	2.38	2.00	1.00	0.391304
2020	Union Dicon Salt	14.0 0	6.44	1.72	1.00	1.00	0.260887
2021	Union Dicon Salt	15.0 0	5.44	68.82	0.00	1.00	0.260887
2022	Union Dicon Salt	16.0 0	5.03	188.9 5	0.00	1.00	0.260887
2016	Union Dicon Salt	17.0 0	4.85	138.6 8	0.00	1.00	0.260887
2017	Union Dicon Salt	18.0 0	4.84	127.3 0	0.00	1.00	0.260887
2018	Union Dicon Salt	19.0 0	4.84	61.24	0.00	1.00	0.260887
2019	Union Dicon Salt	20.0 0	4.95	22.95	0.00	1.00	0.260887
2020	Union Dicon Salt	21.0 0	4.94	13.67	0.00	1.00	0.260887
2021	Union Dicon Salt	22.0 0	4.97	93.26	0.00	1.00	0.260887
2022	Union Dicon Salt	23.0 0	4.84	-3.84	0.00	1.00	0.260887
2020	University Press	29.0 0	5.81	10.80	0.00	1.00	0.66532

2021	University Press	30.0 0	5.74	20.08	0.00	1.00	0.66533
2022	University Press	31.0 0	6.15	11.56	0.00	1.00	0.66534
2016	University Press	32.0 0	6.24	13.80	0.00	1.00	0.66535
2017	University Press	33.0 0	6.31	13.69	0.00	1.00	0.66536
2018	University Press	34.0 0	6.38	8.78	0.00	1.00	0.66537
2019	University Press	35.0 0	6.43	8.48	1.00	1.00	0.66538
2020	University Press	36.0 0	6.45	9.35	1.00	1.00	0.66539
2021	University Press	37.0 0	6.47	7.87	1.00	1.00	0.66540
2022	University Press	38.0 0	6.45	4.79	1.00	1.00	0.66541
2020	Vitafoam Nig	29.0 0	6.38	11.39	1.00	1.00	0.8843771
2021	Vitafoam Nig	30.0 0	6.53	12.84	1.00	1.00	0.8843771
2022	Vitafoam Nig	31.0 0	6.66	15.26	1.00	1.00	0.8843771
2016	Vitafoam Nig	32.0 0	6.73	9.50	2.00	1.00	0.8843771
2017	Vitafoam Nig	33.0 0	6.77	8.64	1.00	1.00	0.8843771
2018	Vitafoam Nig	34.0 0	6.97	5.58	1.00	1.00	0.8843771
2019	Vitafoam Nig	35.0 0	7.02	4.82	2.00	1.00	0.8843771
2020	Vitafoam Nig	36.0 0	7.00	4.12	2.00	1.00	0.8843771
2021	Vitafoam Nig	37.0 0	7.08	3.64	2.00	1.00	0.8843771
2022	Vitafoam Nig	38.0 0	7.16	1.72	2.00	1.00	0.8843771
2020	Vono Products	33.0 0	5.89	0.02	0.00	1.00	0.913043
2021	Vono Products	34.0 0	6.05	49.24	0.00	1.00	0.913043
2022	Vono Products	35.0 0	5.97	12.79	0.00	1.00	0.913043
2016	Vono Products	36.0 0	6.31	12.49	0.00	1.00	0.913043
2017	Vono Products	37.0 0	6.33	18.45	0.00	1.00	0.913043
2018	Vono Products	38.0 0	6.29	-4.27	0.00	1.00	0.913043
2019	Vono Products	39.0 0	6.28	-5.40	0.00	1.00	0.913043
2020	Vono Products	40.0 0	6.27	-0.26	1.00	1.00	0.913043
2021	Vono Products	41.0 0	6.27	-0.28	1.00	1.00	0.913043
2022	Vono Products	42.0 0	6.32	-4.86	0.00	1.00	0.913043

Data Source: MachameRATIOS® and Annual Audited Reports