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Empirical Analysis of the Effects of Sustainability Reporting on Financial Performance of Quoted Healthcare Firms in Nigeria

Etim Osim Etim[1], Nsima Johnson Umoffong[2], Dorathy Christopher Akpan[3] and Augustine Brendan Inyang[4]

[1]Department of Accounting, Faculty of Business Administration, University of Uyo, Nigeria. E-mail: osimaccc@gmail.com; etimosimetim@uniuyo.edu.ng, ORCID ID: 0000-0003-0529-3212
[2]Department of Accounting, Faculty of Business Accounting, Faculty of Business Administration, University of Uyo, Nigeria
[3]Department of Accounting, Faculty of Management Sciences, Akwa Ibom State University, Nigeria. E-mail: dorathyakpan@aksu.edu.ng
[4]Faculty of Management and Social Science (MASS), TopFaith University, Mkpatak, Nigeria (Corresponding Author)

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Abstract: The main objective of this study is to examine the effect of sustainability reporting on financial performance of healthcare companies in Nigeria. The impacts of the activities of healthcare companies of often result in social and ecological problems. It is expected of companies to take care of these problems as well as contribute reasonably to improving the environment. *Ex-post facto* research design and content analysis were adopted. The population of the study was listed healthcare companies in Nigeria. A sample of 8 healthcare firms was purposively selected for a period of 7 years, resulting in 56 observations. The data were analyzed using descriptive statistics and regression analysis. The result of the analysis showed a beta coefficient of -0.047 for environmental reporting, which means that -4.7% of the variation in financial performance in the healthcare companies in influenced by environmental reporting. A beta coefficient of 0.279 was reported for economic reporting. This implies that 27.9% of the variation in financial performance in the healthcare companies is accounted for by economic reporting. Findings also showed a beta coefficient of -0.337 for

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social reporting, implying that -33.7% of the variation in financial performance in the healthcare companies is caused by social reporting. The result means that more social reporting will decrease the financial performance of the selected companies. In addition, the result showed an adjusted R-square of 0.424 for sustainability reporting in the annual reports by healthcare companies in Nigeria. It was recommended that the policy makers in government should enforce the inclusion of sustainability reports in the annual reports by healthcare companies.

Keywords: Sustainability Reporting, financial performance, Healthcare, Environmental Reporting

1. INTRODUCTION

In recent times, Stakeholders have become more concerned about sustainability has it has the potential to influence an organizational operational and financial performance. The concept of sustainability reporting focuses on business organization's strategies for profit maximization, diversification, product differentiation as well as global assessment of firm's performance on its environment.

The strategic thinking underscores the need to include activities that seek to integrate social and environmental issues into business decision making process, moreso, integrates their environment and people with entities viewed as socially responsible. Businesses activities have economic, social and environmental impacts that result in social problems, global warming, actual disaster and pollution.

Hence, most business organizations take much responsibility for social and environment issues as they do for economic issues. One reason for this is that business entities are reflecting growing social expectations and stakeholders concern. Responsibility is reflected in disclosure growing social expectations are stakeholders concern. Responsibility is reflected in disclosure made by companies in healthcare sector referred to as corporate social and environmental responsibility reporting. Henderson and Pierson (2004) explains that social and environmental reporting is an aspect of sustainable development reflecting concerns about environmental reporting is an aspect of sustainable development reflecting concerns about environmental protection, inter-generational equality, the earth and its resource, as they affect stakeholders which include the customers, workforce, lenders, suppliers, government and local communities and even the environment.

Scholars are trying to understand how sustainability reporting affects the financial performance of Firms. Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business to bring about resources. Sustainability reports are voluntarily disclosed by companies that want to offer additional value and information to their stakeholders concerning the effect their activities and operations have on the society and environment (Garg, 2015, Etim & Idorenyin, 2021).

This additional information will provide inarguable ante for the company as identified by Dembo, (2017), these benefits include “financial payoffs such as lower capital costs and stock market premiums, customer-related payoffs such as market share increases, improved reputation, operational payoffs such as process innovation and improved resources yields, organizational payoffs such as reduced risk and increased learning”. Sustainability reporting is a practice that enhances goal setting, performance measurement and change management by organizations towards a sustainable global economy and uses the context of sustainability reports.

The performance of firms can be calculated in terms of profitability (i.e. return on assets, return on equity, earnings per share). Prior studies have argued that size and the profitability of firms could also have an effect on how level of disclosure of information by firms. For example, Al-Gamrh and Al-Dharnari (2016) argued that larger firms are likely to disclose additional information in order to reduce agency cost, improve its reputation, win public support and attract investors. Nigeria as a member of United Nations impliedly adopted the UN global compact on Global Reporting Initiative (GRI) which provided sustainability reporting guideline in 2000 to design and build acceptance of a common framework for reporting on the linked aspects of sustainability.

From past studies reviewed, (Nwobu, 2017; Soyka, 2012; Eccles and Krzus, 2010), it is apparent that there is need to sustainability reporting based on four aspects which can contribute to its measurement. In order to achieve corporate sustainability, a business organization should show commitment in actualizing these four areas namely economic, environmental, social, and governance. Sustainability as an approach to business ensures that value is created for shareholders, and other business stakeholders, while managing risks that arise from economics, social and environmental issues. Corporate sustainability also implies that a business entity contributes to sustainable economic development by working with internal stakeholders and external societal context, in order to improve the larger society. The emphasis of sustainability on economic, social and environmental dimensions is synonymous to profit, people and planet (the 3Ps). These 3Ps are also referred to the triple bottom line. It is in the light of the above amidst growing demand by the society, over economic, social and environmental reporting company's performance that more research work on sustainability reporting becomes imperative. Most empirical studies about sustainability reporting have focused on the developed countries while others tilt toward the oil and gas firms in Nigeria, hence the need for this study in the healthcare sector.

1.2. Objectives of the Study

The main objective of this study was to examine the effect of sustainability reporting and its influences on financial of healthcare companies in Nigeria. The specifics is to:

> *Determine the composite effect of environmental, economic and social reporting on financial performance of healthcare companies in Nigeria.*

1.3. Research Questions

The following research question was developed to guide the study:

> *What is the composite effect of environment, economic, social reporting on financial performance of healthcare companies in Nigeria?*

1.4. Hypothesis of the Study

In pursuance of the above-stated research objective, the following hypothesis was developed:

> *Ho: There is no significant composite effect of environmental, economic and social reporting on financial performance of healthcare companies in Nigeria.*

1.5. Scope and Limitation of the Study

In this study, sustainability reporting and financial performance would be limited to the healthcare companies in Nigeria. Healthcare Sector was chosen based on the fact that allied companies do not dispose their waste properly, thereby discharging harmful substances to their communities. This study investigates the healthcare sector listed on the Nigerian Stock Exchange. Sustainability reporting variables considered in the study include economic, environmental and social while financial performance would be based on return as assets.

The data were limited to the period from 2013 to 2019. This period is adequate to enable the drawing of necessary inferences and arrived at useful conclusions. However, the sample size of 8 was used to identify and select healthcare sector firms with high disclosure of environmental related information. While acknowledging the limitations of the research, they do not in any way detract from the strength and the importance of its findings and conclusions.

1.6. Significance of the Study

The findings of this study would be of immense benefit to the management of healthcare companies, policy makers and academics. The management of the healthcare companies would be properly informed on the importance of sustainability reporting. They would understand the influence of the sustainability reporting on the financial performance of their companies. The recommendations of this study would provide guidance to policy makers on the appropriate sustainability reporting guidelines to develop for the healthcare industry. Of particular reference is the Financial Reporting Council of Nigeria in developing mandatory guideline on sustainability reporting. The findings of this study would also serve as a reference material to other researchers on the subject of sustainability reporting.

2. CONCEPTUAL REVIEW

The conceptual review focused on the definition of the various variables used in the study.

2.1. Sustainability Reporting

Sustainability Reporting is a broad term generally used to describe a company's reporting on its economic, environmental and social performance. It can be synonymous with triple bottom line reporting, corporate responsibility reporting and sustainable development reporting, but increasingly, these terms are becoming more specific in meaning and is therefore a subset ofsustainability reporting (KPMG, 2008). Schaltegger (2004) in Jasch and Stasiskiene (2005) defines sustainability reporting as a subset of accounting and reporting that deals with activities, methods and systems to record, analyze and report, firstly, environmentally and socially induced financial impacts and secondly, ecological and social impacts of a defined economic system (example, a company, production site, and nation). Thirdly, sustainability reporting deals with the measurement, analysis and communication of interactions and links between social, environmental and economic issues constituting the three dimensions of sustainability.

Sustainability Reporting is become more prevalent, driven by the growing recognition that sustainability related issues can materially affect a company's performance, demands from various stakeholder groups for increased levels of transparency and disclosure and the need for companies (and the business community more generally) to appropriately respond to issues of sustainability development (KPMG, 2008).

Some of the more useful definitions of Sustainability Reporting include that given by the Global Reporting Initiative (GRI). According to GRI (2013) Sustainability Reporting is the practice of measuring, disclosing and being accountable to internal and external stakeholders for organizational performance towards the goals sustainable development. Similarly Dow Jones sustainability index in KPMG (2008) looks at Sustainability Reporting as a business approach that create long term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments. Corporate sustainability leaders achieve long term shareholder value by gearing their strategies and management to harness to market's potential for sustainability products and services while at the same time successfully reducing and avoiding sustainability cost and risks.

The Nigerian Stock Exchange's Sustainability Disclosure Guidelines were approved by the Securities and Exchange Commission (SEC) in Dec 2018. The guidance includes four main sections, covering the value proposition of sustainability, integrating sustainability, principles and core elements of a sustainability report and reporting requirements. The Guidelines primarily provides the value proposition for sustainability report and reporting requirements. The Guidelines primarily provide the value proposition for sustainability into organizations, indicators that should be considered when providing annual disclosure to The Exchange, and timeliness for such disclosures. Whilst developing the Guideline, The Exchanges noted that issues may be at varying levels of understanding sustainability disclosure requirements and capacity to comply with the requirements. The Exchange encourages all issuers to adopt to the practice of sustainability reporting. The Guidelines became effective on January 1, 2019.

The guidelines set out recommendations for good practice in thirteen thematic areas under three core principles in ESG reporting. The guideline's focus area is; economic, social, and environment.

2.2. Environmental Reporting

Environmental reporting includes impacts through processes, products, or services. These may include air, water, land, natural resources, flora, fauna, and human health. Environmental variables should represent measurements of natural resources and reflect potential influences to its viability. It would incorporate air and water quality, energy consumption, natural resources, solid and toxic waste, and land use/land cover. Ideally having long-range trends available for each of the environmental variables would help organizations identify the impacts a project or policy would have on the area. Specific examples include: Sulfur dioxide concentration, Concentration of nitrogen oxides, selected priority pollutants. Excessive nutrients, Electricity consumption, Fossil fuel consumption, Solid waste management, Hazardous waste management, Change in land use/land cover (Garg, 2015).

Plant (natural capital) refers to sustainable environmental practices. A triple bottom line (TBL) endeavors to benefit the natural order as much as possible or at least do not harm and curtail environmental impact. A TBL endeavors to reduce its ecological footprint by, among other things, carefully managing its consumption of energy and non-renewable and reducing manufacturing waste as well as rendering waste lee toxic, before disposing of it in a safe and legal manner. "Cradle to grave" is uppermost in the thoughts of TBL manufacturing businesses which typically conducts life cycle assessment of products to determine what the true environmental cost is from the growth and harvesting of raw materials, to manufacture, to distribution, to eventual disposal, and to the end user (Jorgensen, 1993). A triple bottom line company does not produce harmful or destructive products such as weapons, toxic chemicals or batteries containing dangerous heavy metals for example. Currently, the cost of disposing of non-degradable or toxic products is borne financially by government and environmentally by the residents near the disposal site and elsewhere. In TBL thinking, the enterprise which produces and markets a product which will create a waste problem should not be given a free ride by society. It would be more equitable for the business which manufactures and sells a problematic product to bear part of the cost of the ultimate disposal.

2.3. Economic Reporting

Economic reporting includes financial performance, activities related to shaping demand for products and services, employee compensation, community contributions, and local procurement policies. Economic variable ought to be variable that deal with the bottom line and the flow of money. It could look at income and expenditure, taxes, business climate factors, employment, and business diversity factors. Specific examples include: Personal income, Cost of underemployment, establishment churn, Establishment sizes, job growth, Employment distribution by sector, Percentage of firms in each sector and Revenue by sector contributing to gross state product (Iheduru&Okoro, 2019).

Profit is the economic value created by the organization after deducting the cost of all inputs including the cost of capital tied up. It therefore differs from traditional accounting definition of profit. In the original concept, with a sustainability framework, the "profit" aspect needs to be seen as the real economic benefit enjoyed by the host society. It is the real economic impact the organization has on its economic environment. This is often confused to be limited to the internal profit made by a company or organization (which nevertheless remains an essential starting point for the computation). Therefore, an original TBL approach cannot be interpreted as simply traditional corporate accounting profit; it considers social and environmental impacts (Isa, 2014).

2.4. Social Reporting

Social reporting includes treatment of minorities' equality, involvement in shaping local, national and international public policy, employee issues and community concerns. Social variables refer to social dimensions of a community or region and could include measurements of education, equity and access to social resources, health and well-being, equality of life, and social capital. The examples listed below are a small snippet of potential variable: Unemployment rate, Female labor force participation rate, median household income, relative poverty, Percentage of population with a post-secondary degree or certificate, Average commute time, violent crimes per capita, and Health-adjusted life expectancy (Motwani and Pandya, 2016).

Data for many of these measures are collected at the state or national levels, but are also available at the local or community level. Many are appropriate for a community to use when constructing a TBL. However, as the geographic scope and the nature of the project narrow, the set of appropriate measures can change. For local or community-based projects, the TBL measures of success are best determined locally. There are several similar approaches to secure stakeholder participation and input in designing the TBL framework: developing a decision matrix to incorporate public preferences into project planning and decision-making, using a "narrative format" to solicit shareholder participation and comprehensive project evaluation, and having stakeholders rank and weigh components of a sustainability framework according to community priorities (Muhamad & Ebrahim, 2010).

The principles of United Nations Global Compact (UNGC) cut across human rights, labor, environment and anti-corruption issues. The UNGC principles are mainly concerned with social and environmental aspects of sustainability. The United Nations Environmental Programme (UNEP) is a body saddled with the responsibility to lead, encourage partnership with other institutions in caring for the environment to foster improvement in the quality of life both now and in the future. The International Standards Organization (ISO) develops and publishes an international standard that ensures that materials, products, processes and services are fit for their purpose. Also, the Carbon Disclosure Project (CDP) provides a platform for organizations to disclose and manage information pertaining to their environmental performance as it relates to sustainability issues. The Greenhouse Gas Protocol is also used by organizations measure and manage greenhouse gas emissions. These emissions play a crucial role in the corporate accountability pertaining to environmental aspects of its operations and relationship with stakeholders.

2.5. Financial Performance

Financial performance is an important issue in corporate financial reporting considering the recent levels of financial scandals and various degrees of firm's failures. The concept of financial performance in accounting literature refers to profit, return on assets and economic value (Hasan *et al*, 2010). Corporate profit is one of the most closely followed economic indicators. Profits are source of retained earnings, providing much of the funding for the investment in plant and equipment that raises productive capacity. Profits are also frequently used in measuring the rate of return on investment and the relationship between earnings and equity valuation. Profits may also be used to evaluate the effects of changes in policy on the corporations or profits or in economic conditions. Therefore, measurement of current or the past profitability and projecting future profitability very important. Profitability is the most important measure of the success of the business and a business that is not profitable cannot survive. Consequently, profitability of firm plays an important role in the structure and development of firm and enhances the reputation of the firm (Nousheen and Arshad, 2013). Profitability provides a summary measure of corporate success or failure and thus serves as an essential indicator of economic performance. Profitability of a firm is the ability to generate revenue in excess of cost in relation to the company's capital base (Victor, Samuel & Eric, 2013).

2.6. Return on assets

Today, manufacturers work constantly to increase assets utilization and reduce loss in the ongoing effort to achieve high performance. This is as a result of pressure from stakeholders which is greater now than ever and thus, the funds available for investment that would lead to improvements are often limited. To remain competitive, companies must get more from their assets while keeping costs down (Carlos and Rodrigo, 2010). Return on the Assets(ROA) is one example of the classical financial indicators or accounting ratios used by firms to measure performance. This concept has been perceived and applied differently. ROA is an indicator of how profitable a company is, relative to its total assets. It gives an idea as to how efficient management is using its assets to generate earnings. Bambang, Elen and Andi (2012) defined return on assets, as the measurement of performance. It tells the investor how well a company uses its assets to generate income. And that a higher ROA denotes higher level of management performance.

The concept return on assets has been used in several researches to reflect financial performance, although measured differently. Also, return on assets is not the best indicator in order to compare the performance of companies in different industries, since the scale factors and capital requirements may differ, however this ratio is good to compare the profitability between companies in the same sector. Umoren and Olokoyo (2007) measured ROA as gross earnings divided by total assets. For Adegbaju and Olokoyo (2008), it is net income after tax divided by total asset. Meanwhile, Victor *et al* (2013) measured ROA as profit after tax over total assets.

3. THEORETICAL REVIEW

Theoretical framework is structure into the following sub- headings. Voluntary disclosure and Stakeholder theories.

3.1. Voluntary Disclosure Theory

Voluntary disclosure theory has its roots from agency theory and was exposited by Brammer and Pavelin (2008). Voluntary disclosures are attempts to remove informational asymmetries between the firms, external agents and primary agents in the investment community. Voluntary disclosures theory is based on the agency theory perspective which explains the level of disclosure of information. The voluntary disclosure theory predicts that organizations which have a good environmental performance do not hide the environmental impacts of their operations and are willing to inform stakeholders about their environmental activities. Voluntary disclosure predicts that the information risk for current and potential investors will be lowered (Brammer&Pavelin, 2008). Voluntary disclosure can lead to a competitive advantage because it highlights the environment programme and the impact of activities on the national environment. Stakeholders receive bad news from the company along with good news. Investments in environmental management or programs are costly and for the short term, they will not result in higher returns. If disclosure is absent or low, stakeholders will assume that the current environmental strategy adopted by the firms is inferior (Clarkson, Li, Gordon &Vasvari, 2011). Superior environmental performers truly disclose issues regarding environmental affairs, the quality of their disclosures is superior to the quality of the weak environmental performers. The superior firms believe that their strengths will outweigh the weaknesses and do not fear the reaction of any stakeholder (Clarkson *et al.,* 2011).

This study is relevant to this work on the premise that sustainability reporting is a voluntary disclosure at present in Nigeria.

3.2. Stakeholder Theory

Freeman introduced the stakeholder theory and mentioned that the core value of this theory is environmental reporting. The basic proposition of the stakeholder theory is that the firm's success is dependent upon the successful management of all the relationships that a firm has with its stakeholders. When viewed as such, the conventional view that the success of the firm is dependent solely upon maximizing shareholders wealth is not sufficient because the entity is perceived to be a nexus of explicit and implicit contracts (Jensen and Meckling, 1976) between the firm and it various stakeholders. The stakeholders' theory asserts that corporation's confirmed existence requires the support of the stakeholders and their approval must be sought and the activities of the corporation adjusted to gain their approval (Chan, 1996). The more power the stakeholders, the more the company must adapt.

Environmental reporting is thus seen as part of the dialogue between the company and its stakeholders (Gray, Kouhy and Lavers, 1995). The definition of stakeholders has altered substantially over the past four decades. At one end of the spectrum, the shareholder was considered the sole or principal stakeholder. That is, it was borne out of a reaction to the traditional research approach which presumes that in valuing the behavior of firms, we need only to take into accounts the shareholders' interest. Kassinis and Vafeas (2006), however, expand the definition of stakeholder to include a broader selection of constituents including adversarial groups such as interest groups and regulators. Both the narrow (shareholder) and the expanded definition of stakeholders have been adopted in the development of voluntary environmental disclosure regulations for corporations. Stakeholders control or have the ability to affect (directly or indirectly) control of resources required by the corporation. Thus, stakeholder's power is determined bythe level of control they have over the resources. Therefore, stakeholder theory is generally concerned with the way an organization manages its stakeholders. It is a theory that is based on the notion that companies have several stakeholders defined as groups and individuals who benefits from or are harmed by, and whose rights are violated or respected by corporate actions (Freeman, 2004), with an interest in actions and decisions of companies. The approach by considering the voices of social groups other than shareholders has embraced a new paradigm about the role of the firm in the society. Within these contexts, different strands of stakeholder theory can discerned (Danastas, 2004; Branco and Rodrigues, 2007).

3.3. Empirical Review

The empirical review is summarized on the Table 2.1

Table 2.1: Summary of Studies Related to Sustainability Reporting and FinancialPerformance

Author(s) and year	*Sample*	*Independent Variable(s)*	*Dependent Variable*	*Methodology*	*Major Findings*
Appah (2011)	A sample	Corporate	Information	Descriptive	The findings reviewed
	Size of 384	Social	Disclosure in	research	that that inclusion of
		Accounting	The annual	Design was	social cost and the
		Disclosure	report of	Adopted	disclosure of information
			Nigeria		in the financial statement
			companies		will enhance disclosure of
					information disclosure
					the financial statement of
					the organization.
Setyorini and	398	Corporate	Earning	Descriptive	the findings review that
Ishak (2012)	companies	Social and	management	research	if the association is

	listed on	environment		Design was	driven more by political
	Indone-sian	al disclosure		adopted	cost considerations, it can
	stock				be expected that
	exchange				corporate social and
	from 2005-				environmental disclosure
	2009				is positively associated
					with earning
					Management.
Onye-kwelu and	N/A	Corporate	financial	the study	The findings shows that
Ekwe (2014)		Social	performance	adopted	the amount committed to
		Responsi-bility		historical	social responsibility vary
				research	from one bank to the
				design	other
Yahya and	N/V	corporate	financial	descriptive	the analysis produces
Ghodra-tollah		Social	Performance	research	inconsistent results
(2014)		Responsi-bility			among the variables
		Disclosure			
		(CSRD)			

Olanyinka and	A sample	Corporate	Market value	Descriptive	The findings review
Oluwa-mayowa	Size of fifty	Environment	Of Quoted	research	that the inclusion of
(2014)	firms	Al Disclosure	Companies	design	Environ-mental
			in Nigeria	was -	disclosure will enhance
				adopted	market value.
Juhmani (2014)	N/A	Corporate	Website	the study	the findings shows that
		Social and		made use	57.57% of the samples
		al Disclosure		historical	Provide social and
				research	environmen-tal

				design and	information in their
				secondary	annual reports and their
				data was	websites
				used	
Onyekwelu and	A sample	Corporate	Enhancement	survey	findings reviews the
Ugwuanyi	size of 108	Social	of	research	inclusion and separate
(2014)	was drawn	Accounting	Information	design was	presentation of social
	rrom a total		Disclosure	used	costs in-curred by
	population		among Firms		organiza-tions in the
	of 148 using		in Nigeria		financial statements
	taro				will enhance
	yamane				information disclosure
	formula.				in the state-ment.
Nze, Okoh and	two firms	Corporate	earnings of	Descriptive	the results shows that
Ojeogwu	studied were	Social	quoted firms	e research	CSR has a positive and
(2016)	chosen from	responsibility	in Nigeria	design	significant effect on
	the oil and			was	earnings of firms
	gas industry			adopted	studied
	in Nigeria				

Anyanwu (2015).	Sample of	Environmental	Quality of	Study	Majority of the
	10 Nigerian	management	financial	adopted a	companies
	listed	Accounting	reporting	descriptive	reporting on voluntary
	Companies	Techniques.		statistical	environmental
	were			research	statement under the
	reviewed.			Method.	heading of sustainability
					report.
Noodezh and	N/A.	Environmental	Environmental	Descriptive	the greater number of

Moghimi (2015).		Cost.	information	research	firms are not prepared to
			disclosure.	method	disclose the information
				study.	relating to environment
					cost in their financial
					reports because they
					consider that this would
					impose some
					commitment on them.
Deegan (1994).	A sample of	Environmental	Political costs.	N/A.	indicated that companies
	197 firms	disclosure.			which operate where it
					is professed as
					environmental harmful
					are significantly mare
					likely to reports on
					environmental within the
					financial report than
					other companies.
Esira, Ikechwukwu	N/A.	Meaning	Oil sector	exploratory	the results shows that the
and Ikechukwu		environmental	Profitability.	research.	extent of managing
(2014).		cost			environmental cost in oil
					region is at its
					rudimentary stage.

Source: Researchers' Compilation, (2022).

4. GAP IN THE LITERATURE

Sustainability reporting and financial reports have long attracted the attention of past researchers. Depending on the aim of each study, past scholars selected suitable areas of sustainability reporting and financial performance to study.

The following are some of the areas on sustainability reporting and financial performance that studies have been undertaken; corporate social accounting disclosure in the annual reports of Nigeria companies, corporate social and environmental disclosure and earning management, Corporate social responsibility and financial performance, Corporate environmental disclosure and market value of quoted companies in Nigeria, Corporate social and disclosure on website, corporate social responsibility and earning of quoted firms in Nigeria, they impact corporate performance in regards to environmental cost, and financial reporting quality in regards to environmental management accounting techniques, how environmental cost management affect profitability of oil sector in Nigeria, environmental cost accounting and the cost of environmental damages on stakeholder's well-being in Nigeria's south-south geo-political zone, as well as environmental cost- an environment management accounting component.

Review of empirical studies indicates that the results of most of these researches are either indecisive or conflicting with some reporting positive and others negative impacts of sustainability reporting on the financial performance in the study firms. For this reason, the researcher intends to cover this gap.

5. RESEARCH METHODOLOGY

5.1. Research Design

Ex post facto research design and content analysis was adapted in the study. The choice of this design is based on the fact that, it is not possible to directly manipulate or control any of the independent variables, inferences about the variable are made, without direct intervention from independent and dependent variables. The research design was adopted to all allow a complete assessment of the sustainability reporting on the financial performance of healthcare sectors in Nigeria.

5.2. Population of the Study

The population of this study consists of 10 healthcare sector companies that are listed on the Nigerian stock Exchange between 2013 and 2019.

5.3. Sample Size

From the population of 10 healthcare sector companies that are listed on the Nigerian stock Exchange between 2012 and 2019. Sample size was determined, using Taro Yamane (1967) formula as cited in *puszczak et al.* (2013) as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = the sample size

n = the population

e = error term (5% on the basis of 95% confidence interval)

Thus,

$$n = \frac{10}{1 + 10\,(0.05)^2}$$

n = 9.756

The sample size would have approximately been 10. But this was not case as two companies did not have data for the period, thus the sample size was 8 companies.

5.4. Sample Technique

Purposive sampling technique is used for the study. The sample size was 8 companies that had data for the period. The sample companies are: Ekocorp plc, Fidson Healthcare, Glaxo Smithkline, May and Baker Nigeria, Neimeth International pharma, Nigeria-German Chemicals, Pharma-Deko plc and Union Diagnostic. This selection is based on the nature in which companies pollute the environment, the nature production, types of raw materials used as well as their disposal of wastes and most importantly availability of the annual reports on the web over the period of the study.

5.5. Sources of Data Collection

Secondary data is the main source of data for the study. The data is obtained from financial reports and accounts of companies selected for the study.

5.6. Method of Data Collection

Data from financial reports was obtained through an in-depth examination with the aid of check-list (contents and analysis method)

5.7. Identification and Measurement of the Variable

Table 3.1: Measurement of Dependent and Independent Variables

S/N	*Variable*	*Definition*	*Types*	*Measurement*	*Apriori Expectation*
1.	FP	Financial performance	dependent	Return on asset related information	
2.	ENR	Environmental	Independent	Reports on environment	Positive
		Reporting		Related information	
3.	ECR	Economic Reporting	Independent	Reports on economic Related information	positive
4.	SOR	Social Reporting	Independent	Reports on social related information	Positive

Source: Researchers' Compilation, (2022).

5.8. Theoretical Specification of Model

The dependent variable in this study is financial performance. This is measure using profitability model. The profitability model is the approach which tends to overcome the limitation of other approaches. Therefore, the financial performance (FP), which is the dependent variable in this study, is measure using the Return on Assets. The model is stated as follows:

$$FP_{kt} = F(ROA_{kt} + {}_{et} \tag{1}$$

Where

QFR_{kt} = The financial performance of healthcare sector financial reports for firm k in year t

ROA_{kt} = Return on assets scores for healthcare sector firm k in year t

The independent variable in this study is sustainability reporting which is being measure using its components; Environmental Reporting (ENR), Economic Reporting (ECR, and Social Reporting (SOR). Thus, the other equation stated as follows:

$$\mathrm{ROA}_{kt} = \mathrm{f(ENR}_{kt} + \mathrm{ECR}_{kt} + \mathrm{SOR}_{kt} + \mathrm{e}_{t} \tag{2}$$

ROA_{kt} = Return on assets of healthcare sector; financial reports for firm k in year t

ENR_{kt} = Environment Reporting for healthcare sector of firm k in year t

ECR_{kt} Economic Reporting for healthcare sector of firm k in year t

SOR_{kt} = Social Reporting for healthcare sector of firm k in year t

e_{t} = Error term in year t.

5.9. Empirical Specification of Model

The linear model for multiple-regression is express as follows:

$$\mathrm{ROA}_{kt} = \beta_0 + \beta_1\,\mathrm{ENR}_{kt} + \beta_2\,\mathrm{FS} + \mathrm{e}_t \qquad \text{Equation I}$$

$$\mathrm{ROA}_{kt} = \beta_0 + \beta_1\,\mathrm{ECR}_{kt} + \beta_2\,\mathrm{FS} + \mathrm{e}_t \qquad \text{Equation II}$$

$$\mathrm{ROA}_{kt} = \beta_0 + \beta_1\,\mathrm{SOR}_{kt} + \beta_2\,\mathrm{FS} + \mathrm{e}_t \qquad \text{Equation III}$$

$$\mathrm{ROA}_{kt} = \beta_0 + \beta_1\,\mathrm{ENR}_{kt} + \beta_2\,\mathrm{ECR}_{kt} + \beta_3\,\mathrm{SOR}_{kt} + \beta_4\,\mathrm{FS} + \mathrm{e}_t \qquad \text{Equation IV}$$

Where:

β_1, β_2, β_3, = coefficient.

β_0 = Constant

ROA_{kt} = Return on Assets for healthcare sector firms k in year t

ENR_{kt} = Environmental Reporting for healthcare sector firms k in year t

ECR_{kt} = Economic Reporting for healthcare sector firms k in year t

SOR_{kt} = Social Reporting for healthcare sector firms k in year t

FS = firm size for healthcare sector firms k in year t (Control variable)

e_t = Error term in year t.

5.10. Method of Data Analysis

Descriptive and inferential statistical method was used to analyze the data in the study. The descriptive statistics such as one sample T-test, tabulation and percentage were used in summarizing the information as well as their perceptions on the status of sustainability reporting. Correlation and Multiple regressions technique were adopted as inferential statistics, to determine whether relationship exists between the sustainability reporting and financial performance in Nigeria. In order to determine the level of sustainability information disclosures engaged by the listed healthcare sector firms in Nigeria, a disclosure index (Checklist) of 30 items in line with Global Reporting Initiative (2013) using content analysis was developed. The data was captured using a disclosure checklist with the scale 0-1, where 0=none disclosure and 1=full disclosure.

5.11. Control Variables

When investigating the relationship between sustainability reporting and financial performance, it is important to take into account variable that may influence a corporation's performance. Failing to do so may lead to biased results. According to the findings of the meta-analysis performed by Margolis and Walsh (2007), the most common control variables within corporate sustainability literature are firm size, industry and financial risk. Firm size (i.e. total assets) and debt ratio are therefore included in the analysis together with fixed (industry and year) effects, to control for unobservable variables influence. For this research only firm size will be considered. Firm-size according to Waddock and Graves (1997), firm size should be considered because of its potential influence on both corporate sustainability and financial performance. For instance, previous research has found a positive relationship between firm size and the amount of corporate disclosure (Clarkson *et. al.,* 2008). In accordance with Weddock and Grave (1997), firm size is measured by the logarithm of total assets.

6. DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

6.1. Data Presentation

The study had three (3) independent variables, one dependent variable and one control variable. The independent variables were economic reporting, social reporting and environmental reporting. The dependent variable was financial performance which was proxy by return on asset. The Control variable was firm size measured by natural log of total assets. These data are presented in the Appendix 1 of the study. The summary of descriptive statistics of the data set is presented in Table 1 of the study.

6.2. Descriptive Statistics

The descriptive statistics include the mean, median, standard deviation of the data set.

Table 1: Descriptive Statistics

	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
ROA (%)	56	.0739	35.2087	8.437882	8.5580595
FIRM SIZE (N'000) (Log of Total Assets)	56	412,896.0	31,329,713.0	8,091,680.2	8,354,601.4106
ECONOMIC REPORTING INDEX (%)	56	20	60	42.50	10.996
ENVIRONMENTAL REPORTING INDEXT (%)	56	20	70	33.75	15.083
SOCIAL REPORTING INDEX (%)	56	10	30	25.00	8.739
Valid N (Listwise)	56				

Source: Researchers' Computation, (2022)

The financial performance (ROA) had a minimum value of 0.0739% and a maximum value of 35.20% with a mean value 8.437%. The mean value implies that for every one naira invested in the assets of the healthcare firms, a return of 8.43% is expected. The maximum value implies that the highest return on the assets of the companies was 35.2% The average social reporting index of the selected companies was 25% while the maximum value was 30%. The minimum value was 10%. There was a total of 10 social reporting indices that were expected from the healthcare companies.

The average environmental reporting index of the selected companies was 33.75% while the maximum value was 70%. The minimum value was 20%. There was a total of 10 environmental reporting indices that were expected from the healthcare companies.

The average economic reporting index of the selected companies was 42.5% while the maximum value was 60%. The minimum value was 20%. There was a total of 10 economic reporting indices that were expected from the healthcare companies.

6.3. Model Evaluation

The suitability of the data set and the data set was assessed as following:

6.3.1. Normality

It is assumed in regression analysis that each mean is distributed normally. The test the normality of the Data set, Kolmogorov-Smirnov and Shapiro Wilk statistics were carried out and the result presented in Table 2.

Table 2: Tests of Normality

	Kolmogorov Smirnor			*Shapiro-Wilk*		
	Statistic	*Df*	*Sig*	*Statistic*	*Df*	*Sig.*
ROA	.232	56	.000	.801	56	.000
Firm size	.143	56	.006	.939	56	.007
Economic Disclosure Index	.285	56	.000	.838	56	.000
Environmental Disclosure Index	.348	56	.000	.704	56	.000
Social Disclosure Index	.466	56	.000	.539	56	.000
a. Liliefors Significance Correction						

Source: Researchers' Computation (2022)

6.3.2. Autocorrelation

Autocorrelation is a correlation between a particular observation a particular observation and values that precede and succeed it. Autocorrelation is detected and measured by Durbin-watson (D) statistics. Durbin Watson value will approach zero, if the residuals are not correlated, the value of Durbin Watson will be close to 2, if there is negative autocorrelation. Durbin Watson can be greater than 2 and could even approach its maximum value of 4. Durbin Watson value less than 1 and more than 3 are definite cause for concern. Thus, Durbin-watson statistics of this study are not less than 1 or more than 3.

6.3.3. Multicollinearity

It was assumed that there is no multicollinearity among the independent variables included in the model. It means that there does not exist 'perfect" linear relationship among some or all independent variables of the regression model. VIF statistics is a commonly used procedure to conclude that multicollinearityexist in the sample data. In this study, none of the results show VIF of larger than 10.

6.3.4. Hypothesis

Table 3: Model Summary

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*	*Dubin-Watson*
1	.683	.466	.424	6.4933028	2.020

a. Predictors: (Constant), Firm Size, Environmental, Disclosure Index, Economic Disclosure Indext Social Disclosure Index

Source: Researchers' Computation (2022)

Table 4: ANOVA

		Sum of Square	*Df*	*Mean Square*	*F*	*Sig.*
1	Regression	1877.909	4	469.477	11.135	.000
	Residual	2150.312	51	42.163		
	Total	4028.221	55			

a. Dependent Variable: ROA

b. Predictors: (Constant), Firm Size, Environmental, Disclosure Index, Economic Disclosure Indext Social Disclosure Index

Source: Researchers' Computation (2022)

Table 5: Coefficients

		Unstandardized Coefficients		*Standardized Coefficients*	*T*	*Sig.*	*Colinearity Tolerance*	*Statistics VIF*
		B	*Std. Error*	*Beta*				
1	(Constant)	66.195	13.275		4.986	.000		
	Economic Disoclosure						.503	1.989
	Index	.279	.112	.358	2.483	.016		
	Environmental	-.047	.075	-.083	-.628	.533	.598	1.673
	Disclosure Index							
	Social Disclosure	-.337	.165	-.344	0.2.042	.046	.369	2.711
	Index							
	Firm Size	-.8.948	2.178	-.536	-4.109	.000	.616	1.624
A	Dependent Variable ROA							

Source: Researchers' Computation (2022)

The null hypothesis states that environmental, economic, social reporting has no significant effect on financial performance of healthcare sector in Nigeria. Based on the decision rule of the study, the null hypothesis is rejected and the alternate accepted because the p-value of 0.000 shown in Table 4 is less than 0.05. The null hypothesis is further rejected because the F-cal value of 11.135 is greater than the critical value of F which was 2.553.

7. DISCUSSION OF THE FINDINGS

The result of the analysis showed a beta coefficient of -0.047 for environmental reporting. This implies that -4.7% of the variation in financial performance in the healthcare companies is accounted for by environmental reporting. This result means that more disclosures on environmental activities will decrease the financial performance of the selected companies. The result also suggests that disclosures on environmental activity have negative impact on the financial performance of the selected healthcare firms. This finding opposes the findings of Setyorini and Ishak (2012) who examined Corporate Social and Environmental Disclosure. From a positive Accounting Theory View Point, they found out that corporate social and environmental disclosure is positively associated with earnings management.

The result of the analysis showed a beta coefficient of 0.279 for economic reporting. This implies that 27.9% of the variation in financial performance in the healthcare companies is accounted for by economic disclosures.This result means that more disclosures on economic activities will increased the financial performance of the selected companies. The result also suggests that economic reporting have positive impact on the financial performance of the selected healthcare firms. In essence, economic disclosures as critical component of sustainability reporting replete the financial performance of the selected healthcare firms. This findings is in line with the study of Buyz, and Andrikopoulos (2011) which states the companies which disclose sustainability reporting may experience better economic performance.

The result of the analysis showed a beta coefficient of -0.337 for social reporting. This implies that -33.7% of the variation in financial performance in the healthcare companies is accounted for by reporting disclosure. This result means that more social reporting will decrease the financial performance of the selected healthcare companies. The result also suggest that social reporting has a negative impact on the financial performance of the selected healthcare firms. This finding disagrees with the findings of Nze*et. al.,* (2016) examine the effect of corporate social responsibility on earnings of quoted firm in Nigeria, who found out the CSR has a positive and significant effect on earnings of firms studied.

The result of the analysis showed an adjusted R-square of 0.424 for sustainability reporting. This implies that 42.4% of the variation of financial performance in the healthcare companies is accounted for by sustainability. This implies that the combined influence of environmental, social and economic reporting on the financial performance of selected healthcare firms in Nigeria is 42.4%. This findings is in line with the study of Amacha and Dastane (2017) who found out that there was strong and significant relationship between sustainability practices and better financial performance.

8. SUMMARY CONCLUSION AND RECOMMENDATIONS

This section is focused on the summary of findings, conclusion, recommendations as well as the contribution to knowledge and the business implication of findings.

8.1. Summary of findings

(i) The result of the analysis showed a better coefficient of -0.047 for environmental reporting, which means that -4.7% of the variation in financial performance in the healthcare companies is accounted for by environmental reporting. There is a negative and insignificant relationship between environmental reporting and the performance of healthcare companies in Nigeria.

(ii) The result of the analysis showed a better coefficient of 0.279 for economic reporting. This implies that 27.9% of the variation in financial performance in the healthcare companies is accounted for by economic reporting. This implies that there is a positive influence of economic reporting on the financial performance of healthcare firms in Nigeria.

(iii) The result of the analysis showed a better coefficient of -0.337 for social reporting. This implies that -33.7% of the variation in financial performance in the healthcare companies is accounted for by social reporting. This means that more social reporting will decrease the financial performance of selected companies.

(iv) The result of the analysis showed an adjusted R-square of 0.424 for sustainability reporting. This implies that 42.4% of the variation in financial performance in the healthcare companies is accounted for by sustainability reporting.

8.2. Conclusion

From the analysis shown above, it can be concluded that sustainability reporting significantly affects the financial performance of health care companies in Nigeria compositely. It is also worthy of note that the component of sustainability reporting do not significantly affect the financial performance of the healthcare firms individually.

8.3. Recommendations

From the findings of the study, it was recommended that;

(i) The policy makers in government should enforce the inclusion of sustainability reports in the annual reports by the healthcare companies. This will make sustainability reporting a compulsory report rather than a voluntary disclosure.

(ii) The management of manufacturing firms should continue to disclose more economic reports as this positively affect their performance.

(iii) Environmental disclosure affects the financial performance of the healthcare component negatively; the management of the healthcare should spend less on environmental reporting.

(iv) Social disclosure affects the financial performance of healthcare companies negatively; the management of the healthcare should spend less on social reporting.

8.4. Business implication of the findings

The business implication of the findings of this study is that when the healthcare companies are sustainable, they will contribute significantly to the economic growth and development of the country. Another implication of this study is that the full reporting of economic information boost investors' confidence in the sector, thus encouraging more capital inflow in the system.

8.5. Contribution to knowledge

Literature on sustainability reporting focused on a few selected companies with a very short time frame. In contrast, the present study has expanded the scope and specifically focused on the listed healthcare firms in Nigeria. The findings of the present study show that sustainability reporting has a significant impact on the financial performance of health care firms. This is a contribution to the existing body of knowledge. The present study decomposed the empirical model into four with each of them having a control variable of firm size. This has been done in previous literature.

8.6. Suggestion of further studies

It is suggested that a similar study be carried out in other sector of the economy such as the insurance, service, hospitality and ICT sectors.

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	Name of Company	*Sector*	*Year*	*Total Assets N'000*	*Profit for the Year N'000*	*ROA*	*Firm Size*	*E1*	*E2*	*E3*	*E4*	*E5*	*E6*	*E7*	*E8*	*E9*	*E10*	*Eco Nomic Discl Osure*	*Economic Disclos Ure Indect*			
	Ekocorp Plc.	Healthcare	2013	3,312,265	152,766	4.61	6.52	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Ekocorp Plc.	Healthcare	2014	3,465,630	156,708	4.52	6.54	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Ekocorp Plc.	Healthcare	2015	3,662,008	146,929	4.01	6.56	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Ekocorp Plc.	Healthcare	2016	3,819,833	79,600	2.08	6.58	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Ekocorp Plc.	Healthcare	2017	6,086,196	1,212,036	19.91	6.78	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Ekocorp Plc.	Healthcare	2018	5,953,075	328,468	5.52	6.77	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Ekocorp Plc.	Healthcare	2019	6,316,931	225,717	3.57	6.80	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Fidson Healthcare Plc	Healthcare	2013	12,243,088	154,980	1.27	7.09	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Fidson Healthcare Plc	Healthcare	2014	15,772,494	631,825	4.01	7.20	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Fidson Healthcare Plc	Healthcare	2015	16,670,325	744,378	4.47	7.22	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Fidson Healthcare Plc	Healthcare	2016	16,666,935	316,762	1.90	7.22	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Fidson Healthcare Plc	Healthcare	2017	17,446,718	1,060,789	6.08	7.24	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Fidson Healthcare Plc	Healthcare	2018	20,483,325	97,447	0.48	7.31	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Fidson Healthcare Plc	Healthcare	2019	20,364,351	407,188	2.00	7.31	0	1	0	0	0	1	0	1	0	1	4	40	0	0	0
	Glaxo Smithkline Consumer Nig. Plc	Healthcare	2013	26,213,663	2,919,170	11.14	7.42	1	1	0	0	0	1	1	1	0	1	6	60	1	1	0
	Glaxo Smithkline Consumer Nig. Plc	Healthcare	2014	27,992,868	1,848,842	6.60	7.45	1	1	0	0	0	1	1	1	0	1	6	60	1	1	0
	Glaxo Smithkline Consumer Nig. Plc	Healthcare	2015	31,329,713	873,134	2.79	7.50	1	1	0	0	0	1	1	1	0	1	6	60	1	1	0

	Name of Company	*Sector*	*Year*	*Total Assets N'000*	*Profit for the Year N'000*	*ROA*	*Firm Size*	*E1*	*E2*	*E3*	*E4*	*E5*	*E6*	*E7*	*E8*	*E9*	*E10*	*Eco Nomic Discl Osure*	*Economic Disclos Ure Indect*			
	Glaxo Smithkline Consumer Nig. Plc	Healthcare	2016	28,189,079	2,378,145	8.44	7.45	1	1	0	0	0	1	1	1	0	1	6	60	1	1	0
	Glaxo Smithkline Consumer Nig. Plc	Healthcare	2017	26,495,179	486,433	1.84	7.42	1	1	0	0	0	1	1	1	0	1	6	60	1	1	0
	Glaxo Smithkline Consumer Nig. Plc	Healthcare	2018	15,700,056	617,624	3.93	7.20	1	1	0	0	0	1	1	1	0	1	6	60	1	1	0
	Glaxo Smithkline Consumer Nig. Plc	Healthcare	2019	18,685,048	917,105	4.91	7.27	1	1	0	0	0	1	1	1	0	1	6	60	1	1	0
	May and Baker Nigeria Plc.	Healthcare	2013	8,160,048	103,089	1.26	6.91	0	1	0	0	0	1		1	0	1	5	50	0	0	0
	May and Baker Nigeria Plc.	Healthcare	2014	8,095,707	63,341	0.78	6.91	0	1	0	0	0	1	1	1	1	1	5	50	0	0	0
	May and Baker Nigeria Plc.	Healthcare	2015	8,236,738	68,033	0.83	6.92	0	1	0	0	0	1	1	1	1	1	5	50	0	0	0
	May and Baker Nigeria Plc.	Healthcare	2016	8,619,721	41,094	0.48	6.94	0	1	0	0	0	1	1	1	1	1	5	50	0	0	0
	May and Baker Nigeria Plc.	Healthcare	2017	7,663,898	370,866	4.84	6.88	0	1	0	0	0	1	1	1	1	1	5	50	0	0	0
	May and Baker Nigeria Plc.	Healthcare	2018	8,102,078	585,200	7.22	6.91	0	1	0	0	0	1	1	1	1	1	5	50	0	0	0
	May and Baker Nigeria Plc.	Healthcare	2019	9,493,753	716,440	7.55	6.98	0	1	0	0	0	1	1	1	1	1	5	50	0	0	0
	Morison Industries Plc.	Healthcare	2013	526,215	40,025	7.61	5.72	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Morison Industries Plc.	Healthcare	2014	449,047	82,331	18.33	5.65	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0

	Name of Company	*Sector*	*Year*	*Total Assets N'000*	*Profit for the Year N'000*	*ROA*	*Firm Size*	*E1*	*E2*	*E3*	*E4*	*E5*	*E6*	*E7*	*E8*	*E9*	*E10*	*Eco Nomic Discl Osure*	*Economic Disclos Ure Indect*			
	Morison Industries Plc.	Healthcare	2015	422,741	108,500	25.67	5.63	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Morison Industries Plc.	Healthcare	2016	412,896	78,585	19.03	5.62	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Morison Industries Plc.	Healthcare	2017	543,346	181,178	33.34	5.74	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Morison Industries Plc.	Healthcare	2018	539,873	190,082	35.21	5.73	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Morison Industries Plc.	Healthcare	2019	447,738	104,720	23.39	5.65	0	1	0	0	0	1	0	1	1	1	5	50	1	0	0
	Neimeth International Pharmaceuticals Plc	Healthcare	2013	2,891,079	130,578	4.52	6.46	0	1	0	0	0	1	0	1	1	1	5	50	1	0	0
	Neimeth International Pharmaceuticals Plc	Healthcare	2014	2,782,488	228,535	8.21	6.44	0	1	0	0	0	1	0	1	1	1	5	50	1	0	0
	Neimeth International Pharmaceuticals Plc	Healthcare	2015	2,200,244	335,684	15.26	6.34	0	1	0	0	0	1	0	1	1	1	5	50	1	0	0
	Neimeth International Pharmaceuticals Plc	Healthcare	2016	2,688,730	65,093	2.42	6.43	0	1	0	0	0	1	0	1	1	1	5	50	1	0	0
	Neimeth International Pharmaceuticals Plc	Healthcare	2017	2,280,354	411,484	18.04	6.36	0	1	0	0	0	1	0	1	1	1	5	50	1	0	0
	Neimeth International Pharmaceuticals Plc	Healthcare	2018	2,308,320	184,035	7.97	6.36	0	1	0	0	0	1	0	1	1	1	5	50	1	0	0

	Name of Company	*Sector*	*Year*	*Total Assets N'000*	*Profit for the Year N'000*	*ROA*	*Firm Size*	*E1*	*E2*	*E3*	*E4*	*E5*	*E6*	*E7*	*E8*	*E9*	*E10*	*Eco Nomic Discl Osure*	*Economic Disclos Ure Indect*			
	Neimeth International Pharmaceuticals Plc	Healthcare	2019	2,753,800	220,147	7.99	6.44	0	1	0	0	0	1	0	1	1	1	5	50	1	0	0
	Pharma-Deko Plc.	Healthcare	2013	2,498,136	121,182	4.85	6.40	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Pharma-Deko Plc.	Healthcare	2014	2,839,229	101,007	3.56	6.45	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Pharma-Deko Plc.	Healthcare	2015	2,570,082	659,264	25.65	6.41	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Pharma-Deko Plc.	Healthcare	2016	2,324,045	218,703	9.41	6.37	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Pharma-Deko Plc.	Healthcare	2017	2,270,595	12,607	0.56	6.36	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Pharma-Deko Plc.	Healthcare	2018	2323,137	265,260	11.42	6.37	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Pharma-Deko Plc.	Healthcare	2019	2,197,402	278,883	12.69	6.34	0	1	0	0	0	1	0	1	1	1	4	40	0	0	0
	Union Diagnostic and Clinical Services Plc	Healthcare	2013	3,809,082	111,177	2.92	6.58	0	0	0	0	0	1	0	1	1	1	2	20	0	0	0
	Union Diagnostic and Clinical Services Plc	Healthcare	2014	3,755,636	995,901	26.52	6.57	0	0	0	0	0	1	0	1	0	0	2	20	0	0	0
	Union Diagnostic and Clinical Services Plc	Healthcare	2015	4,036,821	176,038	4.36	6.61	0	0	0	0	0	1	0	1	0	0	2	20	0	0	0
	Union Diagnostic and Clinical Services Plc	Healthcare	2016	4,177,800	316,891	7.59	6.62	0	0	0	0	0	1	0	1	0	0	2	20	0	0	0

	Name of Company	*Sector*	*Year*	*Total Assets N'000*	*Profit for the Year N'000*	*ROA*	*Firm Size*	*E1*	*E2*	*E3*	*E4*	*E5*	*E6*	*E7*	*E8*	*E9*	*E10*	*Eco Nomic Discl Osure*	*Economic Disclos Ure Indect*			
	Union Diagnostic and Clinical Services Plc	Healthcare	2017	4,501,830	302,503	6.72	6,65	0	0	0	0	0	1	0	1	0	0	2	20	0	0	0
	Union Diagnostic and Clinical Services Plc	Healthcare	2018	4,635,448	101,172	2.18	6.67	0	0	0	0	0	1	0	1	0	0	2	20	0	0	0
	Union Diagnostic and Clinical Services Plc	Healthcare	2019	4,706,963	3,477	0.07	6.67	0	0	0	0	0	1	0	1	0	0	2	20	0	0	0

S/ N	Name of Company	ENV 4	ENV 5	ENV 6	ENV 7	ENV 8	ENV 9	ENV 10	Environmental Disclosure	Environemntal Disclosure Index	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Social Disclosure	Social Disclo Sure Index
	Ekocorp Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Ekocorp Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Ekocorp Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Ekocorp Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Ekocorp Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Ekocorp Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Ekocorp Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Fidson Healthcare Plce	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Fidson Healthcare Plce	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Fidson Healthcare Plce	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Fidson Healthcare Plce	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Fidson Healthcare Plce	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Fidson Healthcare Plce	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Fidson Healthcare Plce	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Glaxo Smithline Consumer Nig. Ltd	0	0	0	1	1	0	1	4	40	0	0	0	0	1	1	1	0	0	0	3	30
	Glaxo Smithline Consumer Nig. Ltd	0	0	0	1	1	0	1	4	40	0	0	0	0	1	1	1	0	0	0	3	30
	Glaxo Smithline Consumer Nig. Ltd	0	0	0	1	1	0	1	4	40	0	0	0	0	1	1	1	0	0	0	3	30
	Glaxo Smithline Consumer Nig. Ltd	0	0	0	1	1	0	1	4	40	0	0	0	0	1	1	1	0	0	0	3	30

	Glaxo Smithline Consumer Nig. Ltd	0	0	0	1	1	0	1	4	40	0	0	0	0	1	1	1	0	0	0	3	30
	Glaxo Smithline Consumer Nig. Ltd	0	0	0	1	1	0	1	4	40	0	0	0	0	1	1	1	0	0	0	3	30
	Glaxo Smithline Consumer Nig. Ltd	0	0	0	1	1	0	1	4	40	0	0	0	0	1	1	1	0	0	0	3	30
	May and Baker Nigeria Plc.	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	May and Baker Nigeria Plc.	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	May and Baker Nigeria Plc.	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	May and Baker Nigeria Plc.	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	May and Baker Nigeria Plc.	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	May and Baker Nigeria Plc.	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	May and Baker Nigeria Plc.	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Morison Industries Plc.	0	0	0	1	1	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Morison Industries Plc.	0	0	0	1	1	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Morison Industries Plc.	0	0	0	1	1	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Morison Industries Plc.	0	0	0	1	1	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Morison Industries Plc.	0	0	0	1	1	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Morison Industries Plc.	0	0	0	1	1	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Morison Industries Plc.	0	0	0	1	1	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10

	Neimeth International Pharmaceuticals Plc	0	1	1	1	1	1	1	7	70	0	0	0	1	1	1	0	0	0	0	3	30
	Neimeth International Pharmaceuticals Plc	0	1	1	1	1	1	1	7	70	0	0	0	1	1	1	0	0	0	0	3	30
	Neimeth International Pharmaceuticals Plc	0	1	1	1	1	1	1	7	70	0	0	0	1	1	1	0	0	0	0	3	30
	Neimeth International Pharmaceuticals Plc	0	1	1	1	1	1	1	7	70	0	0	0	1	1	1	0	0	0	0	3	30
	Neimeth International Pharmaceuticals Plc	0	1	1	1	1	1	1	7	70	0	0	0	1	1	1	0	0	0	0	3	30
	Neimeth International Pharmaceuticals Plc	0	1	1	1	1	1	1	7	70	0	0	0	1	1	1	0	0	0	0	3	30
	Neimeth International Pharmaceuticals Plc	0	1	1	1	1	1	1	7	70	0	0	0	1	1	1	0	0	0	0	3	30
	Pharma-Deko Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Pharma-Deko Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Pharma-Deko Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Pharma-Deko Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Pharma-Deko Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30

	Pharma-Deko Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Pharma-Deko Plc	0	0	0	1	1	0	1	3	30	0	0	0	1	1	1	0	0	0	0	3	30
	Union Diag-naostic and Clinical Services Plc	0	0	0	1	0	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Union Diag-naostic and Clinical Services Plc	0	0	0	1	0	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Union Diag-naostic and Clinical Services Plc	0	0	0	1	0	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Union Diag-naostic and Clinical Services Plc	0	0	0	1	0	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Union Diag-naostic and Clinical Services Plc	0	0	0	1	0	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Union Diag-naostic and Clinical Services Plc	0	0	0	1	0	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10
	Union Diag-naostic and Clinical Services Plc	0	0	0	1	0	0	1	2	20	0	0	0	1	0	0	0	0	0	0	1	10