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# CANADIAN CONTEMPORARY RESEARCH JOURNAL

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Volume 1, Issue 1

# CANADIAN CONTEMPORARY RESEARCH JOURNAL

## Volume 1, Issue 1

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# Effect of Sustainability Reporting on Nigerian Listed Companies Performance.

Chikwendu, O. U., Okafor, G. O., & Jesuwunmi, Caleb. D. A.

Department of Accountancy, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

calebian22002@gmail.com

## ABSTRACT

This study is aimed at ascertaining the effect of sustainability reporting on company's performance using twenty selected Nigerian companies over the period of five years with GRI index as proxy for sustainability and return on asset as a measure for performance. The specific objectives include determining the effect economic, environmental and social performance disclosures have on return on asset. The study utilized secondary data obtained from annual reports of the companies under study. The hypotheses developed for this study were tested using multiple regression analysis via SPSS version 23.0. The study revealed that economic performance disclosure and environmental performance disclosure have no significant effect on return on asset while social performance disclosure has significant effects on company's performance. In conclusion for every increase in economic, environmental and social performance disclosure, there is a positive insignificant, negative insignificant and positive significant effect respectively on return on asset. The study therefore recommended that mandatory localized reporting framework in line with international best practices should be put in place to encourage sustainability reporting.

Key words: Sustainability, Reporting, Financial Performance, Nigeria.

\* Corresponding author

E-mail address: calebian22002@gmail.com (C. A. Jesuwunmi)

## 1. INTRODUCTION

Sustainability is currently a burning issue and a major cause of concern across the globe (Priyanka, 2013). Until the late 1980's, business leaders typically

employed the term "sustainability" to mean a company's ability to increase its earnings steadily. Today, the concept of corporate sustainability encompasses every dimension of the business environment, including social, economic and natural resource utilized by the firm. The term has become widely accepted in its current sense after it appeared in 1987 UN report by Norway's former prime minister Harlem Brundtland who defined sustainable development as "meeting the needs of the present without compromising the ability of the future generation to meet their own needs" (UN Report, 1987). The interest of investors in company's non-financial performance has grown significantly over the past few years (Ernest & Young, 2009). According to Borial (2013), Sustainability reporting has become an increasingly common practice in company's attempts to respond to expectations and criticisms from the stakeholders who want to be better informed about the social and environmental impacts of business activities. Sustainability issues are being broadly integrated in different organisational functions and being seen as an important performance assessment. Additionally to financial information, sustainability has been introduced as a reporting subject for companies worldwide in the last few years addressing the goal of creating a sustainable economy, environment and society. Companies that wish to build a sustainable image are keener on adopting the common practice of elaborating sustainability reports. (Hong, Fabio & Thiago, 2014).

Over the past years many governments have promoted sustainability reporting in varied ways, such as: Regulations for sustainability or Environmental Social and Governance (ESG) disclosure, stock exchange rules/public procurement provisions, safety and health protection laws, financial regulations, political and

consultative processes for building consensus, social institutionalized dialogue, and civil dialogue on approaches to effective environmental regulations (Carrot & Sticks, 2013).

Non-financial reporting such as corporate sustainability reporting is a fairly recent trend which has expanded over the last twenty years. Many companies now produce an annual sustainability report and there are a variety of reasons that companies choose to produce these reports, but at their core they are intended to be "vessels of transparency and accountability". Often they are intended to improve internal processes, engage stakeholders and persuade investors. Sustainability reporting is considered as a wider level of transparency and accountability to stakeholders for social activities of firms. This reporting has been used to measure quality of firm's corporate governance and strategic management towards sustaining the future (Isa, 2014). Adams, Thornton and Sepehri (2013) opined that strong sustainability reputation should allow a firm to achieve above average profitability and increased shareholder wealth maximization. Recently, companies have been called upon to fulfill the needs of wide range of stakeholders who pay attention to company's value. They are interested in understanding the approach and performance of company in managing the sustainability such as economic, environmental and social aspect, including the potential for value created from managing sustainability. Besides providing financial information for shareholders, a company needs to publish non-financial as well. Social responsibility reporting is the communication about a company's responsibility for social and environmental aspects surrounding its business. This reflects that companies owe stakeholders an annual accounting of their social and environmental performance as the financial information they provide to shareholders. It is widely believed and suggested by researchers that in today's dynamic and complex business environment, corporate sustainability reporting is likely to influence corporate profitability and overall performance.

Corporate sustainability and its impact on financial performance have emerged as important areas for research in recent years. Various studies have been performed over the last decade for examining this relationship. However, the results have been mixed and inconclusive. Moreover, most of the previous studies have been conducted

in the contest of developed countries. According to a study done by British Standard Institute (BSI) group, majority of firms see sustainability as a driver of growth, but does this mean sustainability is now seen as a component of overall financial and business performance?. The BSI group in conducting a research on how sustainability standards can drive business performance, taking a survey of 150 sustainability executives in the UK covering 20 industry sector, discovered that 70% of respondents say sustainability is well established in their business, 51% of the respondents believe that sustainability issues will impact their firms financial performance over the next two years. The rest of the firms have yet to establish a direct and immediate connection between sustainability and business performance. 36% of respondents see sustainability as impacting performance against non-financial metrics such as energy, environment and social responsibility while 13% see it as a long-term business viability issue.

Companies that integrate sustainability in their core business practices and view the subject as an essential long-term performance factor are on radar of investors (KPMG, 2011). There is an assumption that sustainability reporting aids financial performance, this study seeks to find out to what extent that has been. Forbes Africa (2012) ranked twenty of Nigerian companies as among the top twenty-five performing companies in West Africa. One begins to ask if their esteemed performance was as a result of the fact that they incorporate sustainability report in their annual report. This study therefore examines if there is any effect sustainability reporting had on the performance of these Nigerian companies listed among the top 25 performing companies in West Africa. The following research questions and null hypotheses were raised in order to address the aforementioned objectives:

- i. What is the effect of sustainability reporting surrogate on return on asset?
- ii. What is the effect of economic performance disclosure on return on asset of a company?
- iii. What effect does environmental performance disclosure have on company's return on asset?
- iv. What is the effect of social performance disclosure on return on asset of a company?

### **Null Hypotheses**

Ho: Sustainability reporting surrogate has no significant effect on return on asset.



Ho: Economic performance disclosure has no significant effect on return on asset of a company.

Ho: Environmental performance disclosure has no significant effect on company's return on asset.

H1: Social performance disclosure has a significant effect on return on asset of a company.

The outcome of this study will be of immense benefits to potential and existing investors in the sense that it shows how responsible a company they wish to invest in is and how willing they will be to make investment. Companies can also monitor their performance when they see how their report on sustainability affects their financial performance and their operating environment. This can help them achieve customer loyalty, greater access to finance and increased brand value. Creditors will also benefit as it shows the financial standing of the company as this will boost their confidence in the company. Academic researchers will also benefit as this will contribute to the body of existing literature which will be of immense benefit in the future. This study covers a period of five years, from 2011 to 2015 annual report data of twenty Nigerian companies who made the Forbes Africa top twenty five companies in West Africa in 2012. Forbes Africa (2012) Return on asset, economic, environmental and social data were extracted for the years under study. 2011 was chosen because the ranking was made in 2012 and 2011 annual accounts must have contributed immensely to their ranking performance. The rest of the study is divided into review of related literature, methodology, data analysis, conclusion and recommendations.

## **2. Review of Related Literature**

### **2.1 Conceptual Review**

#### **2.1.1 Sustainability Reporting**

There is no single, generally accepted definition of sustainability reporting. It 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 sustainability reporting and sustainable development reporting but increasingly these terms are becoming more specific in meaning and therefore subsets of sustainability reporting (KPMG, 2008). According to parliament of Australia (2010), sustainability reporting involves companies and organizations demonstrating their corporate sustainability through measuring and

publicly reporting on their economic, social and environmental performance and impacts. GRI (2011) defines sustainability reporting as the practice of measuring, disclosing and being accountable to internal and external stakeholders for organizational performance towards the goals of sustainable development.

Sustainability reporting is the incorporation of the environmental, societal and economic aspects of an organization to the reporting and communication to the interested parties. The most solid reason for the initiation of such reporting is due to the stakeholder pressure and coercive pressures upon the organizations. This reporting is mainly used as a communicating mode to the wider stakeholder base of the organization. Sustainability reporting is closely related with corporate social responsibility reporting. It has a voluntary character. Social responsibility reporting refers to the measurement and communication of information about company's effect on employee welfare, the local community and the environment. Information on company welfare may involve working conditions, job security, equal opportunity, workforce diversity and child labour. Environmental issues may include the impact of production process, products and services on air, water, land, biodiversity, and human health (Gentry, 2007).

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

loyalty, increases access to capital and leads to reduction in waste. It is a virtuous cycle where one sustainable activity benefits the next and keeps the wheel turning.

### **2.1.2 Economic Performance Indicators**

The economic dimension of sustainability concerns the organization's impacts on the economic conditions of its stakeholders and on economic systems at local, national and global levels. The economic indicators illustrate flow of capital among different stakeholders and main economic impacts of the organization throughout society. Disclosures are to be made on market presence and indirect economic impacts as well (SRG, 2011).

There are six core economic performance indicators that should be disclosed. They include:

- i. Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payment to capital providers and governments.
- ii. Financial implications and other risks and opportunities for the organizations activities due to climate change.
- iii. Significant financial assistance received from government.
- iv. Policy practices and proportion of spending on locally-based supplies on significant locations of operations.

### **2.1.3 Environmental Performance Indicators**

The environmental dimension of sustainability concerns an organization's impacts on living and non-living natural systems, including ecosystems, land, air and water. Environmental indicators cover performance related to inputs (e.g., material, energy, water) and outputs (e.g., emissions, effluents, waste). In addition, they cover performance related to biodiversity, environmental compliance and other relevant information such as environmental expenditure and the impacts of products and services (SRG, 2011).

There are seventeen core environmental performance indicators that should be disclosed. Amongst them are:

1. Materials used by weight or volume
2. Percentage of materials used that are recycled input materials
3. Direct energy consumption by primary energy source
4. Indirect energy consumption by primary source
5. Total water withdrawal by source
6. Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected area
7. Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas
8. Total direct and indirect greenhouse gas emissions by weight
9. Other relevant indirect greenhouse gas emissions by weight
10. Emission of ozone-depleting substances by weight

### **2.1.4 Social Performance Indicators**

The social dimension of sustainability concerns the impacts an organization has on the social system within which it operates. The indicators surround labor practices, human rights, society and product responsibility (SRG, 2011). There are thirty-one core social performance indicators that should be disclosed. Amongst them are:

- i. Total workforce by employment type, employment contract and region, broken down by gender.
- ii. Total number and rate of new employee hires and employee turnover by age group, gender and region.
- iii. Return to work and retention rates after parental leave, by gender.
- iv. Rates of injury, occupational diseases, lost days and absenteeism and number of work related fatalities by region and gender.
- v. Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious disease.
- vi. Average hours of training per year per

employee by gender, and by employee category.

- vii. Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operations.
- viii. Percentage of operations with implemented local community engagements, impact assessments, and development programs.
- ix. Percentage and total number of business units analysed for risk related to corruption.
- x. Total number of incidents of discrimination and corrective actions taken.
- xi. Total hours of employee training on policies and procedures concerning aspect of human rights that are relevant to operations, including the percentage of employees trained.
- xii. Operations with significant potential or actual negative impacts on local communities.

### **2.1.5 Company's Performance**

According to business dictionary, performance is the accomplishment of a given task measured against present known standards of accuracy, completeness, cost and speed. In a contract, performance is deemed to be the fulfillment of an obligation in a manner that releases the performer from all liabilities under the contract.

A performance measure is a quantifiable indicator used to assess how well an organization or business is achieving its desired objectives. Many business managers routinely review various performance measure types to assess such things as results, production, demand and operating efficiency in order to get more objective sense of how their business is operating and whether improvement is required.

An organizational performance is an analysis of a company's performance compared to goals and objectives. Within corporate organizations, there are three primary outcomes analyzed: financial performance, market performance and shareholder value performance (in some cases, production capacity performance may be analyzed).

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time and can be used to compare similar firms across the

same industry or to compare industries or sectors in aggregation. (Investopedia, LLC, 2016).

### **2.1.6 Return on Asset (ROA)**

The dependent variable used as a measure of company performance is return on asset (ROA). Return on asset is one of profitability ratios which measures the income or operating success of a company for a given period of time (Weygandt, 2007). In addition, ROA is known as the variable to measure economic performance and more related to efficiency compared to Return on Equity (Lorenzo, 2009). Return on asset is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. (Investopedia, LLC, 2016). Lopez, Garcia and Rodriguez (2007) opined that accounting based measures are preferable used to measure organization's performance because the audited accounting data is likely to be authentic and credible and is not influenced by market perception or speculations, and is thus considered less noisy in comparison to market based indicators like stock returns, share prices etc.

The formula of ROA:  $ROA = \text{Net Profit} / \text{Total asset}$

### **2.1.7 Global Reporting Initiative (GRI)**

Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework. Sustainability reports based on the GRI framework can be used to benchmark organizational performance with respect to laws, norms, codes, performance standards and voluntary initiatives; demonstrate organizational commitment to sustainable development; and compare organizational performance. GRI promotes and develops this standardized approach to fulfill demand for sustainability information.

As economy globalizes, new opportunities to generate prosperity and quality of life that are arising are accompanied by new risks to the stability of the environment. According to Global Reporting Initiative (2011), there is a contrast between the improvement in the quality of life and alarming information about the state of the environment and the continuing burden of poverty and hunger on millions of people. It raises an issue about how to create new and innovative choices and ways of thinking. New knowledge and innovation in



technology, management, and public policy are challenging organizations to make new choices in the way their operations, products, services and activities impact the earth, people and economics.

It is the Global Reporting Initiative's mission to fulfill this need by providing trusted and credible framework for sustainability reporting that can be used by organizations of any size, sector or location. Sustainability reports based on GRI reporting framework disclose outcomes and results that occurred within the reporting period in the context of the organization's commitments, strategy, and management approach. The GRI reporting framework is intended to serve as generally accepted framework for reporting on an organization's economic, environmental and social performance.

### **2.1.8 GRI (3.1) Disclosure Index**

The disclosure quality of sustainability reporting is obtained from annual data disclosed by the company. In the standard GRI version 3.1 performance indicators are divided into three categories namely economic, environmental and social. Social indicators are further categorized by labour, human rights, society and product responsibility. Each category includes a disclosure on management approach and a corresponding set of core and additional performance indicators. The core options contain the essential elements of a sustainability report. It provides a background against which an organization communicates the impacts of its economic, environmental and social and governance performance, and can be applied by any organization regardless of their size, sector or location. An organization should report on core indicators unless they are deemed not material on the basis of the GRI reporting principles. In measuring sustainability performance disclosure in total, the maximum core index which should be disclosed is 55. In partial, the maximum core index for economic performance disclosure, environmental performance disclosure and social performance disclosure are 7, 17 and 31 respectively. If a company discloses items in accordance with GRI indicators, it will be scored 1, while the companies not disclosed of GRI items will be given a score of zero (0).

$$\text{Index score} = n/k$$

Where; n= number of index which is fulfilled by the company

k= the maximum index which should be fulfilled by the company.

## **2.2 Theoretical Framework**

### **2.2.1 Legitimacy Theory**

According to legitimacy theory there is a contract between an organization and society which states that an organization owe the society an obligation to disclose the activities within the society and this makes them disclose these activities. Deegan (2000) states that legitimacy theory asserts that organizations continually seek to ensure that they operate within the bounds and norms of their respective societies, that is they attempt to ensure that their activities are perceived by outside parties as being legitimate. Legitimacy theory relies upon the notion that there is a "social contract" between the organization in question and the society in which it operates. The concept is used to represent the multitude of implicit and explicit expectations that society has about how the organization should conduct its operations. It is assumed that society allows the organization to continue operations to the extent that it generally meets their expectations. Legitimacy theory emphasizes that the organization must appear to consider the rights of the public at large, not merely those of its investors. Failure to comply with societal expectations may lead to sanctions being imposed by the society. According to this perspective, a company would voluntarily report their activities if management perceived that those activities were expected by communities in which it operate.

The legitimacy theory states that in order to maintain its business activities, companies need to behave as to what is expected from society (O'Donovan, 2002). The company's need to legitimate its activities drive companies into making sustainability reports, as the information disclosed in these documents is important to change society's perception towards the company (Deegan, 2002). Cho and Patten (2007) also support the argument that companies use disclosure as a legitimizing tool. Hedberg and Malmberg (2003) have found in their empirical evidence from Sweden companies, that they produce corporate sustainability reports to seek organizational legitimacy. They were particularly interested in reporting their environmental and ethical/social statistics to their financiers.

### 2.2.2 Stakeholder Theory

This theory was propounded by Edward Freeman. According to business dictionary, the stakeholder theory was first proposed in the book strategic management: A stakeholder approach by R. Edward Freeman and outlines how management can satisfy the interest of stakeholders in a business.

The basis of stakeholder theory, defines stakeholders as "any group or individual who can affect or is affected by the achievement of the firm's objectives". Primary stakeholders include employees, owners (which include shareholders), consumers, government bodies, the community and silent stakeholders. Silent stakeholders include the environment and future generations who need other bodies to represent them (Francisco and Zahir, 2014).

According to Freeman (2009), a successful business cannot exist in a vacuum. It requires that there be investors to give them money, customers to buy their goods and services, employees to serve the customers, suppliers to sell them the goods that they will sell, and a community within which they can thrive. If any of these groups are absent, the business cannot be successful.

The stakeholder theory presumes that the values of the companies are an important factor as how they do business, so they need to explicitly alert its stakeholders of those values in order to build a meaningful relationship between them (Freeman, Wicks & Parmer 2004). Grey, Kouhy and Laversl (1996) said that companies use the sustainability report to shape stakeholders opinion in a positive way, opening doors for them to keep conducting their business activities.

This work is anchored on legitimacy theory as it believes that companies will need an environment to operate before thinking of relating with its stakeholders. According to the theory there exists a social contract between an organization and the society and the organization's need to legitimate its activities drive them into making sustainability reports.

### 2.3 Empirical Review

Adams, Thornton and Sepehri (2010) conducted a research on the impact of the pursuit of sustainability on the financial performance of the firm from 2008 to 2009 using Dow Jones Sustainability US Index

(DJUSI) to proxy sustainability against growth in stock price. The study concluded that corporate sustainability label has no statistically significant impact on the financial performance of firms and that it does not result in higher stock prices or enhanced returns to shareholders in the short run although the study suggested a longer study covering 5-10 years to gauge the long term impact of sustainability on stock price performance. The study also stated that sustainability efforts can be employed to build brand loyalty and corporate reputations in the long term which should be positively correlated to long term shareholder wealth maximization.

Pieter, Merwe and Panagiotis (2011) in investigating the economic performance of sustainability reporting companies versus non-reporting companies in South Africa from 2002-2009 concluded that even though some evidence indicates that companies that disclose sustainability reports may experience better economical performance, statistical analysis could not confirm a definite positive relationship between sustainability reporting and economic performance.

Andrea (2012) in conducting a research on performance indicators in corporate social responsibility and sustainability reports in Hungary reviewed a total of 70 CSR/sustainability reports published within a period of 9 years. The study found that majority of reporting companies apply GRI's G3 as a reporting standard and guideline (with most widely used application level being B/B+).

A study conducted on the impact of sustainability reporting on company performance by Annisa & Wiwin (2012), covered 32 companies listed on Indonesia stock exchange for the period 2006-2009. The independent variables; sustainability reporting, economic performance disclosure, environmental disclosure and social disclosure were measured by means of disclosure index. Sustainability reporting guidelines from Global Reporting Initiative (GRI) was used as the basis of calculating the index score while return on assets was used to proxy performance. The study generalized that sustainability reports influences company's performance. Further analysis of the study showed that only social performance disclosure influences ROA while economic performance disclosure does not influence company's performance. According to the study, social performance disclosure does significantly influence company's performance.

Priyanka (2013) conducted a research on impact of sustainability performance of company on its financial performance using twenty listed Indian companies. The study covering a period of two years from 2011-2012 used overall sustainability rating, community performance rating, employee's performance rating, environmental performance rating and government performance rating as proxies for sustainability performance of company while return on asset, return on equity, return on capital employed, profit before tax and growth in total assets as proxies for financial performance. Applying multiple regression technique, the study found that corporate sustainability as a whole has no significant influence on financial performance. The study also found that government and community dimensions have positive influence while employees and environment dimensions have negative influence on financial performance.

In a literature review study on the relationship between performance measurement and sustainability reporting, Speziale and Klovienė (2014), revealed a relationship between performance measurement and corporate social responsibility in terms of integrated ownership and supporting the decision making process at different stages; planning, control and reporting. According to the study, the integration of performance measurement and corporate social responsibility could have a potentially positive effect on the achievement of corporate objectives.

Isa (2014) in conducting a research on sustainability reporting among Nigerian food and beverage firms with a total of six randomly selected firms found that environmental activities represent 20.40% of the total disclosures followed by product 19.75% and the least human rights disclosures representing 12.84% and that disclosures are determined by the size of the firms and it tend to vary inversely with firm's size. The study also found that large firms tend to disclose small amount of sustainable information relative smaller ones.

Wiwik (2015) in conducting a research on value relevance of financial performance and the quality of sustainability disclosure based on global reporting initiative used return on asset as a proxy for profitability and financial leverage (debt to equity ratio) as a proxy for risk while GRI disclosure index was used to measure sustainability. Tobin's Q was used to measure firm value. Revenues growth was selected as a moderating variable with regards to business growth. The study found that

revenues growth was a moderating variable of the relationship between the quality of corporate sustainability disclosure and firm value.

## 2.4 Summary of Empirical Review

From the empirical analysis, different indicators have been used to proxy sustainability and the results have been inconclusive. Both financial and market indicators have been used to measure performance with divergent findings. This study seeks to measure the effect of different segments of sustainability; economic, environmental and social using GRI disclosure index for each segment on a financial performance indicator- return on asset.

## 3. Methodology

Research design is the specification of methods and procedures for acquiring the information needed for the research. Ex-post facto research design was used. This study is historical in nature and it covers five years annual report of companies under study starting from 2011 to 2015. This study was done in Nigeria and it covers a 5 year period from 2011 to 2015. This study consists of twenty Nigerian listed companies that made the Forbes Africa top twenty-five companies in West Africa in year 2012. Due to the fact that our population is not large we therefore adopt the whole companies as our sample size. The companies are:

1. Dangote Cement Plc
2. Zenith Bank Plc
3. Eco Transnational Incorporated
4. Nigerian Breweries Plc
5. First Bank Plc
6. Guaranty Trust Bank Plc
7. United Bank of Africa
8. Guinness Nigeria
9. Nestle Nigeria Plc
10. Access Bank Plc
11. Flour Mills of Nigeria Plc
12. Union Bank of Nigeria Plc
13. Stanbic IBTC
14. First City Monument Bank

15. Lafarage Cement WAPCO Nigeria Plc

16. Total Nigeria Plc

17. Unilever Nigeria Plc

18. PZ Cussons Nigeria Plc

19. UACN

20. Cadbury Nigeria Plc

One of the companies (Stanbic IBTC) failed to report their 2015 accounts so due to this we had to drop it and made use of nineteen companies but believes that this 19 companies will help us answer the research questions thereby achieving our objectives. Secondary data were used. These are data already collected and readily available from other sources. For the purpose of this study, data were obtained from the company's websites and published annual report of the companies under study. The technique used in analyzing the formulated hypotheses for the study is the multiple regression technique done with the aid of SPSS (Statistical Package for Social Sciences) version 23.0. The study also used GRI 3.1 to analyze economic, environmental and social performance disclosure index. In doing this, content analysis 0, 1 was used to extract data from Global Reporting Guideline.

A null hypothesis (H0) was accepted if the p-value is equal to or greater than the level of significance (5%= 0.05) or otherwise reject and accept the alternate hypothesis (Ha).

### Specification and Measurement of Model(s)

Company's Performance-CP =  $f$  (Sustainability Reporting-SR).....(i)

Decompose the endogenous and exogenous latent variables, that is, Company's Performance and Sustainability Reporting.

CP. (ROA) =  $f$  (SR-ECODIS,ENVIDIS,SOCIDIS).....(ii)

Company's Performance is a function of Sustainability Reporting

Equations (i) to (ii) are called functional form of the models.

$ROA_{it} = \beta_0 + \beta_1 ECODIS_{it} + \beta_2 ENVIDIS_{it} + \beta_3 SOCIDIS_{it}$ ..... (iii)

Equation (iii) is called deterministic or mathematical model. Introduce the error term or stochastic term to the models.

$ROA_{it} = \beta_0 + \beta_1 ECODIS_{it} + \beta_2 ENVIDIS_{it} + \beta_3 SOCIDIS_{it} + \mu_{it}$ ..... (iv)

Equation (iv) is called econometric or multiple linear regression model.

**Table 3.1 Nomenclature of variables and measurement.**

S/N	Variables Code	Name of Variables/ Measurement	Type of Variables
1	Company performance-CP	Return on asset	Endogenous-latent
2	Return on Asset-ROA	Return on Asset =net profit / total assets	Endogenous(dependent) /explained
3	Sustainability Reporting-SR	Economic disclosure-Ecodis, Environmental disclosure- Envidis, Social disclosure- Socidis	Exogenous(Independent) –latent
4	Economic disclosure-Ecodis,		Independent/explanatory
5	Environmental disclosure- Envidis,		Independent/explanatory
6	Social disclosure- Socidis		Independent/explanatory
7	$\beta_0$	Intercept term/constant	Parameter
8	$\beta_1$ -3	Co-efficient parameter	„
9	$\mu$	Error term/stochastic	„
10	I	Individual firm/organization	„
11	T	Year	„

Source: Designed by the researcher, 2016.



## 4. Data Analysis and Results

### 4.1. Answers to Research Questions

This section answers our research questions.

i. **To what extent have Sustainability Reporting surrogates predict or influence the companies' performance?**

**Table 4.1.1: The model summary of Return on Assets (ROA) and economic performance disclosure.**

Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	Std. Error of the Estimate
.1	.327	.107	.077	.084477

Source: Researcher's computation using SPSS version-23.

From Table 4.1.1 shows the model summary, the co-efficient of determination (R<sup>2</sup>) is .107, and the adjusted co-efficient (Adj R<sup>2</sup>) is .077. Because multiple linear regression was used in the analysis of this study, the researcher used the Adjusted co-efficient of determination (Adj.R<sup>2</sup>) .077. Thus, this shows that about 7.7% change in return on

asset can be explained by Sustainability Reporting surrogates. The remaining 92.3% may be explained by the error or stochastic term.

ii. **What is the effect of economic performance disclosure on company's return on asset?**

**Table 4.1.2: The effect of coefficient of economic performance disclosure on Return on Asset.**

	Standardized Coefficients
(constant)	Beta -.006
Economic Performance Disclosure	.053

Source: Researcher's computation using SPSS version-23.

The standardized co-efficient established the nature of effect economic performance disclosure has on Return on Assets (ROA). The co-efficient of the explanatory variable (economic Performance Disclosure) is .053, thus; the beta weight shows that there is positive effect of economic performance disclosure on return on assets [ $\beta = 0.53$  or 5.3%]. This implies that for every one additional change in economic performance disclosure it will lead

to 5.3% increase in overall companies' financial performance (i.e. return on asset). Can we conclude that this is significant? This prompts us to test of hypothesis.

iii. **What effect does environmental performance disclosure have on company's return on asset?**

**Table 4.1.3: The effect of coefficient of Environmental Performance disclosure on Return on Asset.**

	Standardized Coefficients
(constant)	Beta -.006
Economic Performance Disclosure	-.033

Source: Researcher's computation using SPSS version-23.



The standardized co-efficient determines the type of influence environmental performance disclosure has on Return on Assets (ROA). The co-efficient of the regressor (environmental Performance Disclosure) is -0.033, thus; the beta weight shows that there is negative effect of environmental performance disclosure on return on assets [ $\beta = -0.33$  or -3.3%]. This implies that for every one marginal

change in environmental performance disclosure it will lead to 3.3% decrease in overall companies' financial performance (i.e. return on asset). Can we conclude that this is significant? This prompts us to test of hypothesis.

**iv. What is the effect of social performance disclosure on company's return on asset?**

**Table 4.1.4: The effect of coefficient of Social performance disclosure on Return on Asset.**

	Standardized Coefficients Beta
(constant)	-.006
Social Performance Disclosure	.315

Source: Researcher's computation using SPSS version-23.

The effect of the co-efficient determines the type of the influence Social performance disclosure has on Return on Assets (ROA). The co-efficient of the explanatory variable (Social Performance Disclosure) is 0.315, thus; the beta weight shows that there is positive effect of social performance disclosure on return on assets [ $\beta = .315$  or 31.5%]. This implies that for every one marginal change in social

performance disclosure it will lead to 31.5% increase in overall companies' financial performance (i.e. return on asset).

## 4.2 Test of Hypotheses

**i.  $H_0$ : The sustainability reporting surrogates prediction or influence on companies' performance is not significant.**

**Table 4.2.1: Showing the ANOVA table for Sustainability Reporting effect on Return on Asset (ROA).**

	R <sup>2</sup>	Adj. R <sup>2</sup>	Sum of Squares	df	Mean Square	F	Sig..
Regression	.107	.077	.078	3	.026	3.622	.016
Residual			.649	91	.007		
Total			.727	94			

Source: Researcher's computation using SPSS version-23.

The ANOVA table is used to test the overall significance of the model from the value of the t-statistics. The F-statistics is 3.622 with the probability value (Pvalue) of .016, because this is less than 5% level of significance, the study rejects the null

hypothesis and accept the alternate hypothesis and concludes that sustainability reporting has significant effect on companies' financial performance (i.e. return on assets) of the selected quoted companies [ $F(3, 91) = 3.622$  (Adj. R<sup>2</sup> = .077;  $p \leq .05$ )].

**Table 4.2.2: Showing the co-efficient table for sustainability reporting surrogates effect on Return on Assets (ROA).**

	Standardized Coefficients Beta	T	Sig
(Constant)	-.006	-.197	.844
Economic Perf. Dis.	.053	.455	.650
Environmental Perf. Dis.	-.033	-.290	.772
Social Perf. Dis..	.315	2.794	.006

Source: Researcher's computation using SPSS version-23.

The results of the co-efficient establish the nature of the impact of sustainability reporting surrogates effect on Return on Assets (ROA). The co-efficients of the explanatory variables that is, economic, environmental and social performance disclosures are 0.053, -0.033, and 0.315 respectively, the impact from the model of the study is thus;  $ROA_{it} = \beta_0 + \beta_1 ECODIS_{it} + \beta_2 ENVIDIS_{it} + \beta_3 SOCIDIS_{it} + \mu_{it}$ . Transform we:  $ROA_{it} = -.006 + 0.053 ECODIS_{it} - 0.033 ENVIDIS_{it} + 0.315 SOCIDIS_{it} + \mu_{it}$ . This equation shows that there is negative and positive effect

of sustainability reporting on companies financial performance (i.e. return on assets) [ $\beta = .315$ ;  $p = .006$ ]. The beta values show the level of contribution of the independent variables on the dependent variable (ROA). The result shows that there is linear relationship between one of the explanatory variables and the dependent variable [ $F(3, 91) = 3.622$  (Adj.  $R^2 = .077$ ;  $p \leq .05$ )].

**ii. Ho: Economic performance disclosure has no significant effect on company's performance.**

**Table 4.2.3: Showing the co-efficient table for Economic performance disclosure effect on Return on Assets (ROA).**

	Standardized Coefficients Beta	T	Sig
(Constant)	-.006	-.197	.844
Economic Perf. Dis.	.053	.455	.650

Source: Researcher's computation using SPSS version-23.

The beta weight [ $\beta = .053$ ;  $p = .650$ ] shows that there is insignificant positive effect of Economic performance disclosure on return on assets. The beta values show the level of individual contribution of the explanatory or independent variables (ECODIS) on the dependent variable (ROA). The result shows that Economic performance disclosure had impacted on return on assets to the tune of 5.3% (i.e. 0.053), on the other hand, for every increase in Economic performance disclosure, there

is an insignificant positive increase in return on assets to the tune of 5.3% (i.e. .053). Therefore we accept the null hypothesis and reject the alternate and conclude that Economic performance disclosure has no significant effect on company's financial performance [ $\beta = .053$ ;  $p = .650$ ].

**iii. Ho: Environmental performance disclosure has no significant effect on the performance of a company.**

**Table 4.2.4: Showing the co-efficient table for Environmental performance disclosure effect on Return on Asset (ROA).**

	Standardized Coefficients Beta	T	Sig
(Constant)	-.006	-.197	.844
Economic Perf. Dis.	-.033	-.290	.772

Source: Researcher's computation using SPSS version-23.

The results of the co-efficient establish the nature of the impact of Environmental performance disclosure effect on Return on Assets (ROA). The co-efficient of the beta ( $\beta$ ) is -0.033ENVIDIS, this shows that there is an insignificant negative effect of Environmental performance disclosure on return on assets [ $\beta = -0.033$ ;  $p = .772$ ]. The beta values show the level of individual contribution or prediction of the independent variables (ENVIDIS) on the regressed variable (ROA). The result shows that Environmental performance disclosure had impacted on return

on assets to the tune of -3.3% (i.e. -0.033), on the other hand, for every increase in Environmental performance disclosure, there is an insignificant negative decrease in return on assets to the tune of 3.3% (i.e. 0.033). Therefore we accept the null hypothesis and reject the alternate and conclude that Environmental performance disclosure has no significant effect on company's financial performance [ $\beta = -0.033$ ;  $p = .772$ ].

**iii. Ho: Social performance disclosure has no significant effect on company's performance.**

**Table 4.2.5: Showing the co-efficient table for Social performance disclosure effect on Return on Assets (ROA).**

	Standardized Coefficients Beta	T	Sig
(Constant)	-.006	-.197	.844
Social Performance Disclosure	.315	2.794	.006

*Source: Researcher's computation using SPSS version-23.*

The results of the co-efficient establish the nature of the impact of Social performance disclosure effect on Return on Assets (ROA). The co-efficient of the explanatory variable is 0.315, the impact from the social performance disclosure of the study is thus; [ $\beta=.315$ ;  $p=.006$ ]. This equation shows that there is significant positive effect of Social performance disclosure on return on assets [ $\beta=.315$ ;  $p=.006$ ].

The beta values show the level of individual contribution of the independent variables (SOCIDIS) on the dependent variable (ROA). The result shows that Social performance disclosure had impacted on return on assets to the tune of 31.5% (i.e. 0.315), on the other hand, for every increase in Social performance disclosure, there is a significant positive increase in return on assets to the tune of 31.5% (i.e. 0.315). Therefore we reject the null hypothesis ( $H_0$ ) and accept ( $H_a$ ) the alternate and conclude that social performance disclosure has significant positive effect on company's financial performance, that is, return on asset [ $\beta=.315$ ;  $p=.006$ ].

## 4.4 Discussion of Findings

The study found that economic performance disclosures indicators of the companies studied from 2011-2015 has insignificant effect on their performance. This is in agreement with the study carried out by Pieter, Merwe & Panagiotis (2011) in South Africa covering the year 2002-2009. The study concluded that though some evidence indicates that companies that disclose sustainability reports may experience better economical performance, statistical analysis could not confirm a definite positive relationship between sustainability reporting and economic performance. In a similar study by Annisa and Winwin (2012), on 32 Indonesia companies found that economic performance disclosure does not influence company's performance.

The study shows that environmental performance disclosure indicators have insignificant effect on the

performance of companies. This is in agreement with the research result of Annisa and Wiwin (2012) in studying 32 Indonesia companies covering the period 2006-2009 found that environmental performance disclosure does not influence company's performance. This study also shows that there exist a significant effect between social performance disclosure indicators and company's performance. This is in agreement with the findings of Annisa and Wiwin (2012) that social performance disclosure influences ROA.

## 5. Summary of Findings, Conclusion and Recommendations

### 5.1 Summary of Findings

From the study of the effect of sustainability reporting on company's performance, the following findings were made.

1. Sustainability reporting has a general significant effect on company's return on asset.
2. Economic performance disclosure has a positive insignificant effect on company's return on asset.
3. Environmental performance disclosure has a negative insignificant effect on company's return on asset.
4. Social performance disclosure has a positive significant effect on company's return on asset.

### 5.2 Conclusion

In this study, effort has been made to examine the effect of sustainability reporting on company's performance. The study has four specific objectives: to determine the effect economic, environmental and social performance disclosures have on company's performance. The study made use of secondary data. The study found that economic performance disclosure and environmental performance disclosure has no significant effect on company's performance while social performance

disclosure has a significant effect on company's performance. Mandatory localized reporting framework in line with international best practices should be put in place to encourage sustainability reporting.

## Implication of Findings

The findings of this study have some implications for companies. For instance, two of the findings of this study showed that environmental performance disclosure and economic performance disclosure had insignificant effect on return on asset of selected companies. This implies that a certain percentage of change on return on asset can be explained by environmental performance disclosure.

It was also revealed that economic performance disclosure has an insignificant positive effect on return on asset. This implies that a change in return on asset can be explained by economic performance disclosure though insignificant. Companies should not relent on reporting on economic activities as it has a positive effect on return on asset and may become significant on the long run.

## 5.4 Recommendations

From the study, the following recommendations are made to enhance sustainability reporting.

1. Sustainability reporting should be encouraged and a regulatory body set up to see that company's include sustainability report in their annual report as the study has shown there is a significant effect of sustainability reporting on company's performance.
2. Companies should be encouraged to disclose economic performance as this may increase their performance in the long run.
3. Since companies have not been complying fully to international best practices, there should be mandatory localized environmental reporting framework in line with international best practices on issue of sustainability reporting.
4. Companies should maintain a good relationship with their employees, suppliers, local communities and others concerned and report this appropriately in their annual report as this has an effect on their performance.

## 5.5 Contribution to Knowledge

To the best of our knowledge this study has contributed to the body of existing literature by looking into the effect each of the component of sustainability: economic, environmental and social has on company's performance.

The study also contributed to knowledge by finding out that economic performance disclosures has no significant effect on return on asset.

## 5.6 Suggestions for Further Study

Since we have different financial performance indicators, the researcher suggests that further studies should be carried out using other indicators such as return on equity, or a market performance indicator like market share. Further research can be carried on least performing companies covering same number of years or a broader number of years.

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