ENVIRONMENTAL RESPONSIBILITY AND PERFORMANCE OF QUOTED OIL COMPANIES IN NIGERIA

BY

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BEING A RESEARCH WORK PRESENTED TO THE DEPARTMENT OF ACCOUNTING AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF M.SC ACCOUNTING AND FINANCE DEGREE

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DECLARATION

I hereby declare that this Thesis is a product of my research effort and has to the best of my knowledge, never been previously presented and or submitted for a higher degree. All works and articles consulted have been acknowledged accordingly in the reference.

ARMAYA'U YUSUF _____

Date

CERTIFICATION

This thesis entitled Environmental Responsibility and Performance Of Quoted Oil Companies in Nigeria by Armaya'u Yusuf M.Sc/ADMIN/9946/2009-2011 meets the regulations governing the award of the degree of Master of Science Accounting and Finance of the Ahmadu Bello University and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This thesis is dedicated to the Almighty God, for giving me the enablement to carry out this research and also to my mum, wife and children for their understanding and moral support.

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ABSTRACT

The increase in global environmental awareness and the campaign for sustainable economic development is redirecting the attention of firms towards environmental sensitivity. Multinational oil companies in Nigeria extract a large amount of the world's energy but treat the indigenous resident with neglect as claimed by oil producing communities. While on the other hand, the oil companies are claiming to be discharging their environmental responsibility. Therefore, the study examines the impact of environmental responsibility on the performance of quoted Nigerian oil companies. Correlational research design is adopted using multiple regression as tool of analysis for the study. The result reveals that environmental responsibility has significant impact on the performance of quoted oil companies in Nigeria. It is therefore recommended that the management of oil companies should increase charitable contribution among others to their host community.

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CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

In recent years, environmental pollution becomes so acute and the stakeholders' awareness to the issue becomes so serious that environmental accounting has become a strong branch of accounting. Still, attention towards the style and recognition of environmental accounting is not a generalized one. Legal authorities, standard setting bodies and other regulators cannot come to a consensus regarding the conceptual framework of environmental accounting and its disclosure. Thus, such disclosure is not mandatory rather voluntary with no specific style or format. With the passage of time, more guidelines are coming in customized format that may lead us to reach a common format for recognizing environment related data and disclosure thereof through financial statements. Still, such disclosure is guided by the social responsibility and commitment on the part of the entities that work as strong agents for polluting the environment (Pramanik et al, 2007).

The increase in global environmental awareness and the campaign for sustainable economic development is redirecting the attention of firms in developing countries towards environmental sensitivity. The quest for

sustainability has caused an emergence of many global institutions enunciating varying norms that guide human interaction with the environment. These standards are influencing business corporations to understand that their strategic position in society has the power to influence behaviour and alter the state of physical, social and economic environment. At various national levels are government regulations, society pressure groups and green consumer pressure. These developments are reawakening corporate attention to strategic and competitive role of environmental responsibility as a strategy to corporate survival.

Within the developing nations, the understanding is somewhat different mainly because of weak government regulations and lack of organised pressure groups and consumer awareness to influence corporate behaviour. Hence many corporations in developing countries such as Nigeria behave in a manner that suggests they can achieve corporate goal even if environmental and social responsibility are trampled upon. Although environmental regulation, pressure group activity, and consumer awareness is weak in developing countries, some corporations in these countries are becoming conscious of their international market and are making appreciable effort as regards sustainable business practices. The result of sampled industries in Nigeria shows that few companies are becoming environmentally sustainable. However a large number of firms

are still apathetic about their environmental and social responsibility (Ngwakwe, 2009).

The insecurity of life and properties of oil producing companies in the Niger Delta area of Nigeria is a classical example of insufficiency and inadequacy of economic performance and efficiency for organisational survival and growth. Nigeria, like most of the developing countries is a mono economy nation. It derives the majority of its income from the oil and gas industry, an industry that is heavily reliant on environmental resources and consequently degrades and pollutes the environment, (Owolabi, 2009).

Nigeria is an example of developing countries that Myers (1994) describes as having massive degradation and destruction of environmental systems and natural resources threatening their continued and sustainable development. Olorode(2000) traced the origin and the dynamics of the Nigerian Civil war of 1967 to 1970 to socio-political factors in the petroleum industry. The socio environmental induced crisis in the oil and gas sector of the economy is a national knowledge that has created very serious security problems to life and property. It is expected that managers of economic entities in Nigeria should take a cue from the oil and gas industry of the limit to economic growth of firms that take no account of

social and economic dimensions of their relationships with the society where they operate.

Oil Pollution from spills, oil well blow-outs, oil ballast discharges and improper disposal of drilling mud from petroleum prospecting and other production waste have resulted in problems such as the loss of the aesthetic values of natural beaches due to unsightly oil slicks; damage to marine wildlife, modification of the ecosystem through species elimination and the delay in biota (fauna and flora) succession, and decrease in fishery resources. It is against this background that a number of companies and other organizations are solidifying their environmental approach and developing business activities that take the environment into consideration as environmental conservation efforts continues to increase. Efforts made in environmental accounting comprise a part of these environmentally conscious business activities. Environmental accounting data is not only used by companies or other organisations internally, but is also made public through disclosure in environmental reports.

The disclosure of environmental accounting information as one of the key elements in an environmental report enables those parties utilizing this information to get an understanding of the company's stance on environmental conservation and how it specifically deals with environmental issues. Thus, Environmental Accounting disclosure should

generate benefits, so as to be a sustainable business practice. A corporation should not continue a policy that generates negative cash flow (Tsoutsoura, 2004). Therefore, Environmental Accounting disclosure should have bottom line benefits in order to be sustainable. This study is carried out to contribute from an African nation perspective to the global literature on environmental disclosure in annual reports and also to provide a basis for corporate investment decision making.

The current global corporate move, towards environmental accounting disclosure makes it necessary for Nigerian companies to join the cue. However, could these companies, in such a challenging business environment, continue with environmental accounting, when there might not be a favourable economic return? It is important to consider, if environmental accounting practices generate benefits to sustain the venture. That is to say, whether environmental accounting practices, improves corporate performance, which according to Jensen (2002), is the prior objective of any firm. Thus, it is against this background that this study is carried out, to address the above mentioned problem.

1.2 Statement of the Problem

Prior studies of environmental accounting disclosures in Nigeria have been exploratory and descriptive and have mainly focused on discussing the

phenomenon (its meaning and disclosure), without examining its economic and or financial implication, thus there is a gap between the studies on environmental accounting disclosure and the impact of such disclosures on firm's financial performance in Nigeria.

According to some prior studies outside Nigeria like McWilliams A, & D Siegel (2000), Cormier D, Magnan M & Van Velthoven B (2005) there are mixed findings. This study adopts the perspective, that investments in Environmental Accounting are associated positively with corporate financial performance. Hence, environmental accounting helps build name recognition, customer loyalty market position (Fombrun and Shanley, 1990) and (Rosen, Sandler, and Shani, 199. The perspective of this study is consistent with recent research documenting a positive relationship between environmental accounting and Corporate Performance, Waddock and Graves (1997), Roman, Hayibor, and Agle (1999), Orlitzky (2001), Ruf, Muralidhar, Brown, Janney, Paul (2001), Simpson and Kohers (2002), Tsoutsoura (2004). If environmental accounting disclosure is being practised by some Nigerian companies; the question then arises, on the impact such disclosure has on their corporate performance. In other words, is there any economic benefit associated with environmental accounting disclosure in Nigeria? The problem of this study therefore, is to empirically

ascertain, if environmental accounting disclosure by companies in the Nigerian oil sector, has any impact on financial performance.

1.3 Objective of the Study

The main objective of the study is to examine the impact of environmental responsibility on the performance of quoted Nigerian oil companies. Other specific objectives include:

1. To determine the effect of Employee Health and Safety (EHS) on Return on Asset (ROA) of quoted Nigerian oil companies.
2. To identify the contribution of Employee Welfare and Social Benefit (EWSB) on ROA of quoted Nigerian oil companies.
3. To find out the impact of Donations and Charitable Contributions (DCC) on ROA of quoted Nigerian oil companies.

1.4 Research Hypotheses

In view of the objective of the study, the following hypotheses have been formulated in null form:

1. EHS has no significant impact on the ROA of quoted Nigerian oil companies.
2. EWSB has no significant impact on the ROA of quoted Nigerian oil companies.

3. DCC has no significant impact on the ROA of quoted Nigerian oil companies.

1.5 Scope of the Study

This research examines the relationship between environmental responsibility and corporate performance, through the use of three sustainable indicators namely: Employee health and safety (EHS), Employee Welfare and Social Benefit (EWSB), Donations and Charitable Contributions (DCC). The cost of these Environmental Responsible acts is assessed against expenditure for fines and penalties to ascertain the extent which environmental responsibility is able to reduce conflict between the firm and its business environment, thus enhancing financial performance.

The study covers a period of twelve years ending in December 2009. This period is so considered owning to the democratic dispensation, which revolutionized the Nigerian corporate environment. In the same vain the period was characterized by conflicts in the Niger-Delta region resulting from environmental neglect. The period is also considered because of the data available at the time of carrying out the study.

This study uses the Nigerian Stock Exchange listing to select its sample firms. The firms were selected based on those that submitted their annual reports consistently within the period of this study. The Nigerian oil

sector was selected because it is characterized by a lot of environmental issues; also most of the firms in this sector are multinationals and have long embedded themselves in environmental accounting practices.

1.6 Significance of the Study

Prior studies of environmental accounting disclosures in Nigeria have been exploratory and descriptive and have mainly focused on discussing the phenomenon (its meaning, practice and disclosure), without examining its economic and or financial implication, thus there is a gap between the study on environmental accounting disclosures and the impact of such disclosures on firm's financial performance in Nigeria.

Gaps exist between perception of environmental issues and actual performance. For example, the existence of gaps between perception of managers and accounting professionals of environmental issues and management; and actual firms' performance as reported by (Jaggi and Zhao, 1996; Owolabi, 2001) and this could be mainly attributed to the perceived cost and liabilities of environmental preservation. So also according to Owolabi 2009, the results of one of his study shows some evidence that 35% of companies sampled (60%of sampled sectors) provide some form of environmental disclosure in their annual report over a five-year period from 2002 to 2006(both years inclusive). The information

disclosed is however brief, mostly descriptive and narrative in nature. It neither provides environmental mitigating cost nor liability. Its usefulness and reliability in decision making is in doubt and the result is not too different from earlier studies in environmental disclosure (see for example; Jaggi and Zhao, 1996; Owolabi 2001 and Gray, 2002). Beside this, no previous research has investigated the relationship between environmental accounting disclosure and firm financial performance in the Nigeria oil sector, this research is therefore a humble attempt to fill this gap.

The study also provides a means for stakeholders to understand, evaluate and give their support to such efforts as environmental accounting continues to take root as part of the social system. Also government and government agencies will benefit immensely as the study provides a purposeful thought about the need to develop environmental reporting requirements in companies' financial report. The study if properly employed could be used as a tool for conflict resolution in the oil producing states. Similarly, students and other researches will find the work useful as it provides a wide range of opportunities for further study. This study is carried out to contribute from an African nation perspective to the global literature on environmental disclosure in annual reports and also to provide a basis for corporate investment decision making.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

Japan business accounting council (2000) states that, Environmental Accounting aims at achieving sustainable developments, maintaining a favorable relationship with the community, and pursuing effective and efficient environmental conservation activities. This accounting procedure allow a company to identify the cost of environmental conservation during the normal course of business, identify benefit gained from such activities and provides the best possible means of quantitative measurement (in monetary value or physical units) and support the communication of its results. Here in, environmental conservation is defined as the prevention, reduction, and/or avoidance of environmental impact, removal of such impact, restoration following the occurrence of a disaster, and other activities. Environment impacts are the burden on the environment from business operations or other human activities and potential obstacles, which may hinder the preservation of a favorable environment. (Japan Environmental Accounting Guidelines 2002).

According to the State of Queensland (Environmental Protection Agency 2002), Environmental Accounting is a system for providing accurate and quantitative measures of the costs and resulting effects, efficiency and effectiveness of investments in environmental preservation activities. The benefit of undertaking corporate environmental accounting initiatives is that the identification and greater awareness of environmental related costs often provides the opportunity to find ways to reduce or avoid these costs, while also improving environmental performance. The data for each of these components is represented in figures or descriptive information in other words, it is a structure for systematically identifying measuring and communicating environmental conservation cost and the economic benefit of environmental conservation measures; this is the financial performance portion of environmental accounting representing the activities of companies and other organization in monetary value. The environmental accounting system also identifies, measures and communicates the environmental conservation benefit, which is the environmental performance portion represented in physical units. The results of environmental accounting can also be used for analysis and evaluation.

David (2003) the quantitative management of environmental conservation activities is an effective way of achieving and maintaining sound business management in other words, in carrying out environmental conservation activities, a company or other organization can accurately identify and measure investments and cost related to environmental conservation activities and can prepare and analyze this data. By having better insight into the potential benefit of these investments and costs, the company can not only improve the efficiency of its activities, but environmental accounting also plays a very important role in supporting national decision-making. In addition, companies and other organizations are required to have accountability to stakeholders, such as consumers, business partners, investors, employers, local residents, and administration, when utilizing environmental resources (public goods) for their business activities. Disclosure of environmental accounting information is a key process in performing accountability. Consequently, environmental accounting helps companies and other organizations boost their public trust and confidence and are associated with receiving a fair assessment.

United State Environmental Protection Agency (2005), states that the term Environmental Accounting has many meanings and uses Environmental accounting can support national income accounting, financial accounting or internal business managerial accounting. The focus

here is on the application of environmental accounting as a managerial accounting for internal business decisions. Moreover, the term Environmental Cost has at least two major dimensions: It can refer solely to costs that directly impact a company's bottom line (here termed "private costs') or it also can encompass the costs to individuals, society and the environment for which a company is not accountable (here termed "societal costs"). The discussion here concentrates on private costs because that is where companies starting to implement environmental accounting typically begin. However, much of the material is applicable to societal costs as well.

Gravgard (2007) different uses of the umbrella term environmental accounting arise from three distinct contexts. National income accounting is a macro-economic measure. Gross Domestic Product (GDP) is an example. The GDP is a measure of the flow of goods and services through the economy. It is often cited as key measure of our society's economic well-being. The term environmental accounting may refer to this national economic context. For example environmental accounting can use physical or monetary units to refer to the consumption of the nation's natural resources, both renewable and non-renewable in this context. Environment accounting has been termed "natural resources accounting."

Financial accounting enables companies to prepare financial reports for use by investors, lender and others. In the U.S, Publicly held corporation's report information on their financial condition and performance through quarterly and annual reports, governed by rules set by the Securities and Exchange Commission (SEC) with input from industry's self-regulatory body, the Financial Accounting Standards Board (PASB). Generally Accepted Accounting Principles (GAAP) is the basis for this reporting. Environmental accounting in this context refers to the estimation and public reporting of environmental liabilities and financially material environmental costs.

According to the first SEPA report of China, in 2007, the economic loss due to environmental causes is billion RMB, equivalent to 3.05% of GDP, this calculation only includes the environmental cost due to environmental pollution, excluding other environmental degradation factors such as deforestation and ecological degradation.

John Elkington (2007), the sustainable development think tank said, 'Sustainability is working with Shell Nigeria to make their operations more sustainable'. This is one notable attempt by a major trans-national to apply the principles of the 'triple bottom line' to its business. Critics remain to be convinced whether this much publicized repositioning amounts to more

than sophisticated green wash. Given that a sustainable oil company is a contradiction in terms, we were also intrigued by the brief of new Shell Chemicals executive vice-president responsible for sustainable development. It not only covers health, safety and environment (HSE), but also such 'mainstream' areas as strategy and planning, portfolio management, mergers and acquisitions and joint ventures. The implication sustainability considerations will help reshape the Shell Chemicals portfolio of businesses over time. Hopefully, the approach will spread to other Shell businesses. The sustainable development community, meanwhile, must develop its toolkit for triple bottom line accountability and management. If sustainable development is to become a global reality rather than remain a seductive mirage, governments, communities, companies and individuals must work together to improve their 'bottom line' (economic, social and environmental) performance. To this end, we not only need new forms of accounting but also regulations.

2.1.1 Basic Environmental Accounting Elements

Environmental accounting is premised upon clarification of the objectives of engaging in environmental activities. The objectives must conform to policies for environmental considerations made in the business activities of companies and other organizations and with their environmental targets and environmental action plans.

2.1.2 Economic benefits Associated with Environmental Conservation Activities

The economic benefit associated with environmental conservation activities is contribution to the profit resultant of environmental conservation activities a company or other organization carries out, as measured in monetary value. The economic benefit associated with environmental conservation activities is divided into actual benefits and estimated benefits depending on whether the data is confirmed. Actual benefits are the economic benefits measured based on confirmed data. Estimated benefits are those economic benefits measured based on a certain premise. There is no established method to measure estimated benefit when measuring the economic benefit associated with environmental conservation activities. These guidelines only propose a method for the actual benefit. For revenue, the results of environmental conservation activities are posted as revenue to the financial statements for the current period in instances in which expenses have been reduced, the difference in expenses between the base period and the current period according to the method used to calculate the environmental conservation benefit is deemed to be the expense avoided as a result of environmental conservation activities executed and is measured using the following formula. Economic benefit associated with environmental conservation activities (expense reduction). Expense in the base period – Expense in the current period

2.1.3 VALUATION

There is a growing interest in the development of resource and environmental accounting in Nigeria. The development of natural resource accounting has focused on placing monetary value on known physical quantities of the resource in order to obtain a wealthier value for natural capital. The natural resource stock account is usually recorded both in physical and monetary terms.

The natural resource stock account is one of the major satellite accounts being currently developed in the environmental and economic account at the Federal Office of Statistics. The issue of valuation is also being properly considered. The system of integrated Environmental and Economic Accounting (SEEA) developed by he United Nations Statistical Division, applies three categories of valuation in different version. There are, maintenance casting of natural asset, and (environmental quality) degradation and contingent and related valuations of welfare efforts of environmental degradation. However, for reasons of data availability and compatibility with conventional accounting rules the market valuation approach has been adopted.

2.1.4Functions and Roles of Environmental Accounting

The functions of environmental accounting are divided into internal and external functions.

Internal Functions

As one step of a company's environmental information system, internal function makes it possible to manage environmental conservation cost and analyse the cost of environmental conservation activities versus the benefit obtained and promotes effective and efficient environmental conservation activities through suitable decision-making. It is desirable for environmental accounting to function as a business management tool for use by managers and business units.

External Functions

By disclosing the quantitatively measured results of its environmental conservation activities, external functions allow a company to influence the decision making of stakeholders, such as consumers, business partners, investors, local residents and administration. It is hoped that the publication of environmental accounting results will function both as a means for companies to fulfill their responsibility for accountability to stakeholders and simultaneously, as a means for appropriate evaluation of environmental conservation activities.

2.1.5 Basic Dimensions of Environmental Accounting

Relevance

Environmental accounting should provide valid information related to a company's environmental conservation costs and benefits from

associated activities, which contribute to the decision making of stakeholders. The goal is to provide information beneficial to stakeholders in their decision making.

a. Materiality and Significance

b. Relevance

In environmental accounting, materiality is placed on the aspects of quantity and significance is placed on the aspects of quality. From the standpoint of the materiality, consideration is given to the quantitative impact of data that is expressed in monetary value or physical units. The significance focuses on the quality of information from the standpoint of environmental conservation or the future impact that it carries.

Reliability

Environmental accounting should eliminate serious inaccurate or biased data and aid in building the trust and reliability of stakeholders.

Faithful Representation

When disclosing environmental accounting data, it should be represented accurately faithfully. In addition to the fact that the information must be accurate and without error, it must represent the costs and benefits that could be reasonable to represent without misleading.

Substance over Form

Information disclosure should not just be a mere formality of following steps laid out within the guidelines. When necessary, the company should determine an appropriate method of disclosure, which conforms to and accurately describes the actual environmental activities being conducted. In the event that the substantiality of the information is not fully communicated when following the format set out by environmental accounting guidelines, necessary supplementary information should be provided to better explain reality.

Neutrality

Information that is disclosed should take a fair and impartial stance. A fair and impartial stance is when the company avoids the arbitrary selection if information or intentionally direct readers toward a given conclusion.

Completeness

The scope of environmental accounting should extend to all material and significant information for all environmental conservation activities.

Prudence

Information that may be vague or unclear should be handled carefully and the nature, scope and grounds on which it is based should be made clear. Careful selection is necessary in regard to projected results and

predicted comprehensive impact. If these results or impacts are disclosed then the premises and reasoning behind the information should be clearly stated to prevent any misunderstandings by stakeholders.

Understandability

By achieving understandability of disclosure of necessary environmental accounting data, environmental accounting should eliminate the possibility of any mistaken judgment about the company's environmental conservation activities. To ensure that the disclosed information is easy to understand for stakeholders, wording should be made as simple as possible. No matter how complex the content might be, it is necessary to disclose all essential information.

Comparability

Environmental accounting makes it possible for a company o make year-on-year comparisons. Information provided should be comparable with different companies in the same sector. There are two methods for comparison: term: comparison of identical companies or organizations and comparison between companies in the same business sector. It is essential that comparability be ensured when environmental accounting information is disclosed so as not to create misunderstandings amongst stakeholders. Nevertheless, due to the fact that environmental accounting information spans independent and divergent categories, simple comparisons are

difficult when there are differences in the business sector, type of operation or activities engaged in by the businesses. Therefore, in cases in which complex methods have been selected in order to acquire information for use as bases for comparison, the content of said methods shall be clearly stated and care shall be taken so as not to produce misunderstanding amongst stakeholders.

Verifiability

Environmental accounting data should be verifiable from an objective standpoint.

Verifiable information is data for which the party, which created the data, can obtain the same results when using premises, standards and methods, identical to those used.

It is recommended to adopt common formats for disclosure of the environmental accounting aggregation results as given in the following examples, with the goal of promoting uniform understanding throughout society as a whole. It is not necessary for companies and other organizations to publish at the outset all environmental conservation cost, environmental conservation benefit or economic benefit associated with environmental conservation activities. Depending upon the current duration and goals of the efforts being made by the company or other organization, it

is acceptable to begin by publishing only the environmental conservation costs and to proceed in stages thereafter.

Even in such cases, it is important to maintain consistency with the main statements and those for auxiliary details and to proceed with efforts to engage in the publication of external data. The guidelines represent a summary of the basic thinking behind environmental accounting. This aims toward a comprehensive environmental accounting methodology covering both external and internal data application.

The environmental management activities of companies and other organization proceed by establishing a policy for environmental consideration in business activities overall, setting concrete environmental policy goals, creating an environmental activity plan for achieving environmental goals and executing evaluating and revising environmental conservation activities based upon that plan. While these environmental management activities are executed by the entire organization as a whole, each of the management units is more closely departmentalized so as to improve the effectiveness of these activities. Therefore, each type of internal management information is accumulated in the prescribed management unit. Environmental accounting must function to provide joint quantitative data on environmental conservation activities covering not only

disclosure but also internal management within the flow of environmental management activities.

The environmental accounting information is closely connected to other management data, such as financial, personnel and facility information. Therefore companies and other organizations may contrive to effectively combine environmental accounting information with other management to implement multifaceted revisions of their environmental conservation activities. Also, the publication of some of this management information can also be helpful in leading to a proper evaluation of the company or other organization by external parties.

There is scanty documented research into the effect of corporate sustainability on firm performance in Nigeria. Thus, some research similar to that undertaken by this paper may be found in international accounting literature. Let me now take a look at some similar theoretical background.

2.2 Theoretical Background

Gray (2000) claims that there has been significant growth in environmental and social auditing and reporting since the 1990s. Possible explanation for this trend is not unconnected with business firms' desire to create, maintain or repair their societal legitimacy. Arguably, legitimacy

theory is the more probable explanation for the increase in environmental disclosures since the early 1980s (O'Donovan, 2002). Other researchers that have agreed to the dominance of Legitimacy theory as a more profound explanation to corporate social and environmental reporting include (O'Donovan, 1999; Walden and Schwartz, 1997; Gray *et al*, 1995a; Hooghienstra, 2000; and Wilmshurst and Frost, 2000). Other theories that provide a sound theoretical foundation to substantiate the value of social and environmental accounting research, and by extension their disclosure include Stakeholder theory (Guthrie and Parker, 1990; Roberts, 1992; Gray et al, 1995a; and Roberts and Mahoney, 2004); Institutional theory(Cormier et al, 2005; Meyer and Rowan, 1977) and Resource Dependence theory(Pfeffer and Salancik, 1978, 2003) Legitimacy theory (Lindblom, 1994; Suchman, 1995) is value system centered. A dichotomy exists between the value system of organisations and those of the society. Legitimacy exists at the organisational level when there is congruence between organisation and societal value system.

Institutional theory, unlike legitimacy theory specifies how societal expectations are met and gained by institutionalising norms and rules. Some code of behaviour to earn, nurture and maintain societal expectations; and thus create a positive organisation-society interface. Resource dependence theory concerns itself with the strategy organisations adopt in drawing

resources from the environment. This position is imperative because organisations are interdependent with selves and the environment. The resolution by organisations of different and conflicting expectations of different stakeholders is what stakeholder theory engages in. This is more necessary because of divergent impacts different stakeholders have on organisations.

Another paradigm for a sustainable business is propounded by Elkington (2001) via his triple bottom line approach. His first theory is that capitalism must satisfy legitimate demands for economic performance. With this, Elkington echoes Adam Smith's theory of the firm, that the firm has one and only one goal that is to satisfy the desires of shareholders by making profits. However, profit may not be attainable if the environment in which the business operates is neglected. Hence, according to Elkington (2001), firms must also be accountable for social and environmental performance. The economic, social and environmental consciousness of corporations - the tripod goal, creates a balance that makes their operations and actions sustainable. This new role must pervade all facets of business operations; it has to perform life-cycle technology, accommodate social and pressure groups, recreate corporate governance, remodel products and services, and ensure adherence to legislation.

A corporation which accommodates the triple bottom line is contributing to sustainable development – the goal of the millennium. In support of this view, Hart added that the achievement of sustainability would require a blending of product stewardship, green technology and pollution prevention. Hart's argument is that if production processes and technology are refashioned, the company would have advanced pollution control one step further because if a pragmatic prevention strategy is put in place, this obviates the stage of having to control and possibly clean up after an occurrence of pollution, hence saving both costs and redeeming corporate image. Implementing product stewardship means that the organisation is avoiding pollution from the point of product manufacture through the total life cycle. Perhaps the substratum of environmental theory may be entrenched in two major theories: technocentric, and ecocentric. Technocentric theory as pioneered by O'Riordan emphasizes the need for environmentally friendly products and clean technology. The ecocentric theory by Pepper and Dobson, stresses the need for businesses to produce a balanced report that includes reporting the impact of business activity on the environment. A useful report would include how the corporation has managed its immediate and remote environment, but many businesses lack the strategy for proper environmental management, hence Epstein, outlines the importance of developing a corporate environmental strategy, which

would minimise environmental impact through recycling, life cycle assessment and waste reduction strategies. His premise is that modern corporations can be organised and managed in a manner less desecrating of the environment.

Part of this management should include proper integration of environmental reports into internal management decisions which would aid management in planning for the social and environmental responsibility facing the corporation. To this end, Shaltegger et al (1999) proposed a new form of business accountability to enhance environmental management. They recommend environmental management strategies including ecological investment. This is ideal if environmental and social responsibility of businesses is to be achieved to support sustainable economic development. These theories are encapsulated in the United Nation's (UN) definition of sustainable development as 'development that meets the needs of the present without compromising the ability of future generations to meet their own need'

In spite of the diversity in their level of analysis and specificity, the various theories are united in their resolve to advance and sustain positive organisation – society interface. This study is therefore anchored on the principle of sustainable development, which seeks to achieve societal and

environmental equity while in pursuit of economic gain. This will be approached by evaluating the sustainable business practices of the companies studied and how such affects corporate performance; sustainability in this context refers to the ability of the firm to maintain an equitable balance between economic wealth, eco-efficiency or environmental protection, and social-equity or social development. The idea is that if a firm must achieve its long term economic objective, it must not neglect the environmental and social responsibility aspect of the triple bottom goal of sustainable economic development. A review of some previous research which has some semblance to this paper is presented in the next paragraph.

2.3 Some Prior Research

Various authors, accounting associations and researchers have addressed the environmental reporting issue and concluded (based on different objectives) that environmental disclosures are important to both internal and external users (Gamble et al, 1996). Some of the objectives that formed the basis of their investigation include: the usefulness of environmental or social disclosures to investors (Buzby and Falk, 1979; Rockness and Williams', 1988; Longstreth and Rosenbloom, 1973, Gray et al , 1995 Deegan and Rankin 1997 and O'Donovan G.,2002) and the results

produced are mixed; the quality of environmental disclosures(United Nations 1992; Gamble et al, 1996; and Gray, 2000) revealing poor and inconsistent information; the relationship between stock price movement and environmental related information(Shane and Spicer, 1983; Freedman and Jaggi, 1986; and Konar, and Cohen, 1997) revealed some association in some of the studies but none in others; studies by (Rockness, 1985; Milne. and Adler, 1999) on reliability of social and environmental disclosures in annual accounts have not found them as reliable measures of social performance. A number of studies have been undertaken in different countries to examine corporate environmental performance from different perspectives. As observed by (Guthrie and Parker, 1989; Hogner, 1982; and Tinker and Neimark, 1987) a number of researchers have noted a substantial increase in environmental disclosures in annual reports in the last four decades.

The theoretical perspectives provided by (Gray et al 1995a, 1995b) for discussing environmental disclosure are: decision-usefulness studies, economics-based theories such as Positive Accounting Theory and political economy theories. The political economy theories such as stakeholder and legitimacy theories are more useful than economics-based theories because their focus is beyond shareholders' wealth maximization.

Several researchers have examined the association between corporate environmental performance and economic performance (Spicer, 1978; Chen and Metcalf, 1980; Jaggi and Freedman, 1992). The results of these studies are inconclusive. Their findings indicate that the association in the short run is expected to be negative, but that it is likely to be positive in the long run. Overall, results strongly suggest that environmental disclosure is multi-dimensional and is driven by complementary forces (Cormier et al, 2005). Clause and Rikhardsson, studied the effect of environmental investment on investment decisions. The results suggest that environmental information disclosure influences investment allocation decisions. This finding would imply that companies that are apathetic to their environmental responsibility might experience eventual crashes on their stock price if their investors are rational in considering the future value of the firm based on its present state of environmental responsibility.

Lars and Henrik (1997) investigated the effect of environmental information on the market value of listed companies in Sweden using a residual income valuation model. The results show that environmental responsibility as disclosed by sampled companies has value relevance, since it is expected to affect the future earnings of the listed companies. Their finding has implications for companies that pollute the environment – their future solvency may be eroded with gradual depletion in earnings.

Moskowitz (1972) finds a positive relationship between socially responsible business practices and corporate equity returns. Related studies conducted by Balabanis et al (2001) and Tsoutsoura (2004) using indicators such as return on capital employed and return on assets, reveal a positive relationship between the social responsibility of companies and the selected indicators of performance. Turban and Greening (2006) examined the effect of corporate social performance on organizational attractiveness to prospective employees. Their finding shows that qualified employees are influenced by the social responsibility habits of their potential employers. This finding has positive implications for job satisfaction and productivity and should serve as a warning to companies in the present competitive labour market wherein the quality of a company's employees forms a vital part of its value and competitive strategy as well.

Aupperle and Hartfield (1995) , Cochran and Wood (2003) follow a similar line of research by investigating the relationship existing between corporate social responsibility and firm performance. Lankoski (2000) in his doctoral dissertation analysed, at firm level, the relationship between environmental performance and economic performance. His data shows a correlation between environmental performance and economic performance. Mackinlay (2002) finds no strong relationship between economic performance and corporate social and environmental investment.

While some companies may start reaping benefits within a short period, others may experience economic gain only after a long period. According to Hillman and Kein (2003) not all social investment may yield return in a financial form but may boost corporate competitive strategy and be of strategic value. McWilliams and Siegel (2007) arrived at an informative finding, showing statistically that research and development expenditure tends to erode the immediate financial benefits of a company's environmental investment. It is possible that this finding may have led other researchers such as Teoh et al (2008), to find no relationship between corporate financial performance and social expenditure. The motivation for many firms is that corporate social and environmental responsibility opens the door of corporate strategy to other benefits that might accrue from being socially responsible. For instance, Burke and Logsdon (2005) findings show that, while some firms fail to seek competitive advantage through social responsibility, in most instances those firms that do voluntarily decide to go beyond legal and social demands find that this creates value both within the firm and from customers' perspective. This type of competitive value places a firm above its competitors, who may find it difficult to understand their success. Companies that struggle to remain socially responsible add brand value to their products and services.

Regulation has been found to ginger cooperate environmental and social responsibility; for instance Porter and Linde (2006) found legal regulation as a factor that engenders corporate innovation among firms in their bid to remain environmentally sustainable according to regulation. It is therefore possible that weak environmental regulation in developing countries may contribute to low level sustainable corporate behaviour in these countries. It is therefore important that a sound regulatory institution is established in developing nations to encourage companies to be environmentally responsible if the goal of sustainable development must be realised.

Gaps exist between perception of environmental issues and actual performance. For example, the existence of gaps between perception of managers and accounting professionals of environmental issues and management; and actual firms' performance as reported by (Jaggi and Zhao, 1996; Owolabi, 2001) and this could be mainly attributed to the perceived cost and liabilities of environmental preservation. . Beside the gaps, no previous research has investigated the relationship between environmental accounting disclosure and corporate financial performance within the Nigerian oil sector, this research is therefore a humble attempt to fill this gap. The following paragraphs summarize the state of

environmental regulation in Nigeria which motivates corporate environmental responsibility in some companies.

2.4 Environmental Regulation in Nigeria and Firm Attitude

Environmental regulation in Nigeria existed as window dressing before 1988. However, this changed as a result of an attempt in 1997 by a foreign company, acting through an agent, to dump toxic waste in the Niger Delta region. This event shocked the Federal Government of Nigeria and highlighted the porous nature of environmental regulation in the country. This gave rise to the promulgation of Decree no.42 of 1988 by the former Federal Military Government of Nigeria. This decree made it a criminal offence for anyone to carry or dump any harmful waste within the entire land mass and waters of the Federal Republic of Nigeria. The episode gave rise to the need for an agency to oversee environmental protection; hence Decree 58 of 1988 gave birth to the Federal Environmental Protection Agency (FEPA). The Decree was later amended in 1992 by Decree No 59 of 1992, granting the FEPA the responsibility for protection of the environment, biological diversity, conservation and environmental technology and research. It was this decree that created the first standards of environmental regulation in Nigeria. The standards include: water quality, effluent limitation, air quality, atmospheric protection, ozone layer

protection, noise levels and the control of hazardous substances. These represent the efforts made by successive administrations to ameliorate the environmental problems of the country. However, on May 29, 1992 the civilian government under President Olusegun Obasanjo, added an impetus to the struggle against environmental menaces by according the environment a greater priority. To this effect, it created, for the first time in the history of Nigeria, the Ministry of Environment in June 1999. The former regulatory agency, the FEPA, was absorbed by the Ministry of Environment which took over all its functions.

It is also important to add that the establishment of another control agency the National Agency for Food and Drug Administration and Control (NAFDAC), the first of its kind in Africa, brought unprecedented sanity to the food and drug industries. The Agency performs routine field supervision for environmental and standard compliance in the manufacture and sale of food and drugs. The Agency has launched numerous awareness campaigns to the extent that customers have been sensitized to ask for the NAFDAC certification number before buying any consumable. Hence manufacturers have had no choice other than to commence with compliance. With these two Agencies complementing each other, Nigeria could be said to be regulated environmentally, socially and health wise in comparison to other African countries. The regulatory laws are in full force and this has resulted

in various forms of seizure and suspension of non-compliant firms. Given the history of environmental regulation in Nigeria, it is understandable that sustainable business practice is relatively new in terms of enforceable regulatory standards.

Some proactive firms in Nigeria had established the culture of being environmentally friendly even before the existence of regulations in Nigeria. This was in keeping with the global sustainable movement which had changed the nature of the market from producer orientated to green consumer orientated. A manager had this to say, “We copied sustainability from the West many years before the environmental protection agency was legalized in Nigeria, our R&D foresaw it would happen in Nigeria, it is a small world, what happens in America, Europe and Far East, would eventually affect our business in Nigeria,’’

Most firms believe that they have carved a niche for themselves by being early birds on sustainability. Currently many of the manufacturing and service firms in Nigeria have a high degree of competitive advantage beyond that of their competitors. These firms have substantially improved their asset base as is noticeable from their financial statements and are experiencing improved turnover on a yearly basis. Some firms reveal that the regulatory role of the two agencies in Nigeria is yielding some measure

of compliance. A manager in one company said, “The regular facility inspection by the National Agency for Food and Drugs has made us acquire one of the latest water treatment plants, and our products have regularly been passing through the laboratory tests.’’ Many companies have shown an appreciable level of sensitivity to sustainable business practices. One possible marketing impact of sustainability, according to a marketing manager is the increasing level of turnover, probably because customers say much about our products and we were the first within this industry to receive ISO certification and the media publicized it.”

Many firms have sound information on environmental protection, greenhouse gases (GHG), carbon capture and geological storage, and biodiversity. Leading manufacturing firms report efforts in water reduction and improvement in the quality of waste water discharged into the environment. It is also interesting to see that few companies are struggling to maintain biodiversity through recycling of their waste. There are efforts by some companies to provide sustainable energy and sustainable products through adequate product life cycle management. There are also efforts by some companies to help combat the dreaded AIDS through various communities educational and support programmes including the building of cottage hospitals. A chief executive of one of the breweries in Nigeria

stated, ‘our company is at peace when our host community is healthy, and we have invested a lot in various community health efforts’.

Another manager when asked what he thought his companies gain from being environmentally friendly said, ‘No more legal battles with the community, customers, employees and the local council, various fines and penalties are relatively reduced compared to the years of our ignorance.’ Other reports of sustainable responsibilities include employee health and safety, safety of product transportation, a business ethics charter (very few companies report this), environmental research and development. Although most reports are alluring, many of the firms do not disclose the real cost of engaging in responsible business practices. Hence three indicators, which had financial cost across many firms, were chosen: the investment in Employee Health and Safety (EHS), Employee Welfare and Social Benefit (EWSB), Donations and Charitable Contributions (DCC).

2.5 SUMMARY

This chapter reviewed related literature. Here the study focused on examining Environmental Responsibility (ER) concepts. A theoretical background was highlighted and ER theories were reviewed.

Prior researches similar to this study were examined in this chapter. So also environmental regulations in Nigeria and firms attitude were discussed and finally the perceptions of some stakeholders were highlighted.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

The primary purpose of this study is to discover if any relationship exists between the Environmental Responsible practices of oil companies and their performance in Nigeria. The study adopts a methodology used in an earlier study by Ngwakwe 2009. Although he carried out a study on manufacturing industries in Nigeria, this study will be on oil industries in Nigeria. The study employed three independent variables namely: Employee Health and Safety (EHS), Employee Welfare and Social Benefit (EWSB), Donations and Charitable Contributions (DCC), in explaining the environmental accounting disclosure and financial performance relationship in quoted oil companies in Nigeria. Then the study disaggregates the effect of the various aspects of environmental accounting on firm's performance which is represented by financial performance and measured by Return on Asset (ROA). This was then be used to determine whether there are any differences between environmentally responsible and irresponsible firms. To qualify for inclusion in the sample selection, firms must have reported on fifty percent of the following in terms of environmental and social disclosure: green house gas (GHG) including carbon capture and storage (CCS), biodiversity through waste recycling, water treatment and quality of

waste water discharged into the environment, product life cycle management, employee health and safety, business ethics charter, environmental research and development, community development, equal opportunity in employment, product innovation and packaging and employee training and development.

Firms that report up to fifty percent of the above list were grouped as ‘environmentally responsible’ while firms reporting less than fifty percent were grouped under ‘environmentally irresponsible’. Firms were randomly selected from each of these groups. The limit was decided by the researcher based on convenience. However, of these limit only qualified firms were included in the multiple regression analysis because the companies most have financial data on selected independent variables i.e Employee Health and Safety (EHS), Employee Welfare and Social Benefit (EWSB), Donations and Charitable Contributions (DCC). The three independent variables were chosen because they were common and consistently reported among the ‘responsible’ firms. For the purpose of this study, performance was measured by Return on Assets (ROA), which is profit before interest and tax divided by total assets. This is preferred in this research because the researcher believes it is more comprehensive in measuring performance since total assets are equal to the total liabilities of the firm. A differential analysis of means between the Return on Assets (ROA) of the two groups

was first established before proceeding to an empirical analysis of the impact of selected independent variables.

3.2 Research Design

The study employs co-relational research and descriptive research approaches for the purpose of addressing the problem of the research. Co-relational research approach will be used where the variables to be investigated, are amenable to empirical measurement and verification. Descriptive research approach was used where the variables cannot be subjected to empirical measurement and as such non-metric approach will be used in arresting such situation.

3.3 Sources and Method of Data Collection

The study used data mainly from secondary sources. This is because the estimation of the model employed in the study requires the use of data in the form of financial and market information.

In this regards, the sources of data for the study are the Nigerian Stock Exchange Fact Book and the annual reports and accounts of the companies for all the years covered by the study.

3.4 Population and Sampling Procedure

The study focuses exclusively on oil firms within the downstream oil sector as classified by the Nigerian Stock Exchange and the Corporate Affairs Commission. These companies must have filed their annual report within the last twelve years (1998-2009) to be selected. This restriction places a limit on the number of firms qualified for the study. The empirical study is therefore of selected oil companies in Nigeria. Oil companies were chosen for this study because of the environmental and social effects which some of their operations has on the environment. In addition these companies are amenable to the regulations and also their activities have caused armed confrontations in the Niger Delta. The oil firms are also more likely to release pertinent information needed for this research. The data were collected from their end of year reports. Thus the data set covers the selected oil firms in Nigeria.

3.5 Model Specification

The model in this study was adopted from the work of Collins C Ngwakwe 2009, the model has however, been modified to suit this study.

MODEL

$$\mathbf{ROA = \alpha + \beta_1 EHS + \beta_2 EWSB + \beta_3 DCC + \mu_1}$$

The model uses a single dependent variable represented by ROA. The model has three independent variables; Employee Health and Safety (EHS), Employee Welfare and Social Benefit (EWSB), Donations and Charitable Contributions (DCC) [ROA=f (EHS+EWSB+DCC)]. The model employs a linear regression equation to test the various hypotheses. The equation is provided below:

a. $Y= f(X_1+X_2 +X_3 e)$

Where Y= ROTA, X_1= EHS, X_2 = EWSB, X_3 = DCC and e=error

ROA= dependent variable, an index of performance

3.6 The Variables

In the differential analysis the difference between the means of the two dependent variables was sought. This is the difference between the paired sample ROA of environmentally responsible firms and the ROA of environmentally irresponsible firms. A multiple regression tests was conducted; the dependent variable was ROA while the independent variables were Employee Health and Safety (EHS), Employee Welfare and Social Benefit (EW&SB), Donations and Charitable Contributions (D&CC).

3.7 Technique of Data Analysis

This study employs the multivariate technique for the purpose of data analysis. A multiple regression model used by Ngwakwe (2009) in an earlier study was be used. The model uses a single dependent variable Return on Asset ROA and three explanatory variables, Employee Health and Safety (EHS), Employee Welfare and Social Benefit (EW&SB), Donations and Charitable Contributions (D&CC).

The basic aims of the multiple regression model in this study is to investigate empirically if any relationship exist between Corporate Sustainable practices of oil companies and their performance in Nigeria. More specifically, the multiple regression model specifically assesses the aggregate impact of the three explanatory variables on corporate financial performance. The model is estimated using the coefficients of the independent variables and their level of significance. These tests provide an empirical platform for generalization in this study.

3.8 Justification of the Data Analysis Technique

Multiple regression is the appropriate method of analysis when the research has a single, metric dependent variable (Agbadudu, 2002). The objective of multiple regression is to predict the variability in the dependent variable based on its covariance with all the independent variables.

It has proved to be a powerful tool used in developing economic and business models for the purpose of analyzing the relationship between variables (McClave and Benson, 1988). The tool has been employed in this study because it permits the extraction of parameter estimates which show the contribution of the various explanatory variables in predicting the dependent variable.

Finally, the use of the multiple regression is encouraged in this study because of the present day preponderance of computer programs (SPSS, E-Views, etc) for the purpose of multivariate analysis.

3.9 Summary of the Chapter

The purpose of this study, as earlier stated is to empirically test if any relationship exists between Environmental Responsibility of oil companies and their performance in Nigeria. This chapter dealt with sampling procedure, method of data collection and research method used.

Also, models were initiated for testing the hypotheses raised. In the next chapter, data was presented and analyzed in a bid to establishing the degree of the impact of Environmental Responsibility on the firms' performance.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter deals with the presentation, analysis and interpretation of the data collected and processed for the purpose of testing empirically, the model of the study.

Multiple regression has been used to estimate the relation between the independent variable (Employee Health and Safety, Employee Welfare and Social Benefit and Donations and Charitable Contributions) and the dependent variable (Return on Asset) as the measure of Quoted oil marketing companies performance. For the ROA, the technique of least Squares has been used to estimate the regression Coefficient in the model of the form.

$$\mathbf{ROA = \alpha + \beta_1 EHS + \beta_2 EWSB + \beta_3 DCC + \mu_1}$$

The results are presented in three sections. Section one present some basic statistics from the sample of Quoted oil marketing companies used in the study. Section two present the regression results for the Quoted oil marketing companies using the level of Return on Asset (ROA) as dependent Variable. Section three discusses the combine impact of environmental responsibility on the performance of the Nigerian Quoted oil marketing companies.

The table 4.1 below presents the extracted data from the financial statement of the sample companies.

Table 4.1: Aggregate values of Dependant and Independent variables

ROA	EHS	EWSB	DCC
0.16	**63000.0**	**230000.0**	**3100.0**
0.14	**51000.0**	**205000.0**	**2500.0**
0.14	**56000.0**	**394000.0**	**2500.0**
0.11	**61000.0**	**273000.0**	**5200.0**
0.11	**63000.0**	**274000.0**	**5700.0**
0.12	**76000.0**	**309000.0**	**5600.0**
0.12	**55000.0**	**206000.0**	**4600.0**
0.10	**74000.0**	**395000.0**	**5300.0**
0.10	**58000.0**	**315000.0**	**4500.0**
0.11	**68000.0**	**390000.0**	**4100.0**
0.10	**56000.0**	**373000.0**	**5500.0**
0.11	**64000.0**	**369000.0**	**4700.0**

Source: *Financial Statements of Sample Firms*

4.2 Basic Sample Statistics

The sample descriptive statistic is first presented in table 4.2, the correlation matrix is presented in table 4.3, while the tolerance and variable inflation factor are presented in table 4.4.

4.2.1 Sample Descriptive Statistics

Table 4.2 shows the mean, standard deviation, minimum and maximum values of the variables used in the study. The full results are containing in Appendix A.

Table 4.2 Sample Descriptive Statistics (1998-2009 data)

Variable	Mean	Std.Dev	Tolerance	VIF
EHS	6.2083	7633.16	0.646	1.549
EWSB	3.1108	73267.2	0.834	1.199
DCC	4.4417	1164.20	0.744	1.344

Source: Regression Result Using SPSS

Table 4.2 indicate that, on average, during the period of the study the Employee Health and Safety, Employee Welfare and Social Benefit and Donations and Charitable Contributions have a mean of 6.21, 3.11 and 4.44 respectively. Employee Health and Safety has the highest standard deviation of 7633.16 signifying its low contribution to the Quoted oil marketing companies' performance model which can be confirm by significant value of t- statistics in the coefficient table (see appendix A), while Donations and Charitable Contributions has the lowest standard deviation which indicates its higher significant to the model of the study. This can be confirmed by the values of the mean which Employee Health and Safety having highest mean and DCC with lowest mean.

The tolerance value and the variance inflation factor (VIF) are two advanced measures of assessing multicollinearity between the independent valuables of the study. From table 4.2, the variance inflation factors were consistently Smaller than ten indicating complete absence of multicollinearity (eg Neter et al ; 1996 and Cassey, et al; 1999). This shows the appropriateness of fitting the model of the study with the three independent variables. In addition, the tolerance values are consistently smaller than 1.00 thus further substantiates the fact that there is complete absence of multicollinearity between independent variables (Tobachmel and fidell, 1996).

4.2.2 Correlation Matrix

The correlation matrix is used to determine the relationship between the dependent and independent variable of the study.

Table 4.3 below presents the correlation matrix for the sample observations. The full results are contained in Appendix C.

Table 4.3 Correlation Matrix for the sample Observed

Variable	ROA	EHS	EWSB	DCC
ROA	1.000			
EHS	0.26	1.000		
EWSB	0.48	0.41	1.000	
DCC	0.78	0.51	0.20	1.000

Source: Regression Result Using SPSS

Table 4.3 indicates that there is a positive relationship between Return on Asset and Employee Health and Safety, Employee Welfare and Social Benefit and Donations and Charitable Contributions. This implies that environmental responsibility proxies are contributing positively to the performance of Nigerian Quoted oil marketing companies. The correlations between the independent variables are all not significant. This implies that there is no colinearity between the independent variables which signifies the fitness of the model.

4.3 Environmental Responsibility and Quoted oil Marketing Companies' Performance in Nigeria.

The results of OLS in relation to the impact of environmental responsibility on the performance of Nigerian Quoted oil marketing companies are discussed. The study used three environmental responsibility proxies; Employee Health and

Safety, Employee Welfare and Social Benefit and Donations and Charitable Contributions. The study also utilises Return on Asset measured by net profit as a percentage of net assets value as proxy of performance.

The regression results are presented in table 4.4 below.

Table 4.4: Impact of Environmental Responsibility on the Performance of Quoted oil marketing companies s in Nigeria.

Environmental Responsibility	Performance
Variables	ROA
Intercept	6.658 (0.000)
EHS	0.094 (1.902)
EWSB	0.028 (2.677)
DCC	0.001 (4.884)
R^2	0.81
Adj. R^2	0.74
F. Sig.	0.003
Durbin Watson	1.901

Source: Regression Result Using SPSS

Table 4.1 relates environmental responsibility proxies to Quoted oil marketing companies' performance variables. The estimated relationship for the model is

ROA =-6.658 + 1.902(EHS) + 2.677(EWSB) + 4.884(DCC)

The model indicates that all the 3 proxies of environmental responsibility have significant impact on Quoted oil marketing companies' performance as measure by ROA. Thus, EHS has a significant impact of 10% level on performance, while EWSB and DCC have significant impact of 5% and 1% respectively. The implication of these results is that the higher the level of environmental

responsibility, the higher the performance of the Quoted oil marketing companies. The Durbin – Watson Statistic of 1.901 indicates absence of serial correlation.
The results therefore, provide the basis for rejecting all the hypotheses (1, 2 and 3) of the study which state that Employee Health and Safety, Employee Welfare and Social Benefit and Donations and Charitable Contributions have no significant impact on the Return on Asset of Nigerian Quoted oil marketing companies.

Finally, the combined impact of the proxies of environmental responsibility on the performance of Nigerian Quoted oil marketing companies is indicated in the model summary of the regression result. The combined relationship between the dependent and independent variables of the study is 90% which implies strong positive relationship and statistically significant at 5% level. While the coefficient of determination R^2 of 0.81 shows that environmental responsibility in Nigerian quoted oil marketing companies occupies 81% of their performance and the remaining 19% is covered by other factors.

4.4 Discussion of Major Findings

The research focuses on investigating the contribution of Environmental Responsibility of quoted Nigerian oil marketing companies to their performance. The major finding of this research is that the Environmental Responsibility of

Nigerian quoted oil marketing companies has positive impact on their performance during the period of the study.

Firstly, Employee Health and Safety as one of the indicators of Environmental Responsibility shows 10% statistical significance on the performance of quoted oil marketing companies in Nigeria. This implies that a company has discharged that responsibility and it has impacted on their performance.

Secondly, Employee Welfare and Social Benefit also as one of the indicators of Environmental Responsibility shows 5% statistical significance on the performance of quoted oil marketing companies in Nigeria. This shows that a company has carried out that responsibility and it has impacted on their performance.

Thirdly, Donations and Charitable Contribution as one of the indicators of Environmental Responsibility shows 1% statistical significance on the performance of quoted oil marketing companies in Nigeria. This implies that a company has discharged that responsibility and it has impacted on their performance.

It can be observed that the DCC impacted higher than EHS and EWSB. EHS had the lowest contribution on the performance of the companies. The

implication of this result is that the companies are participating more in DCC while participating much less in the area of EHS and EWSB. This maybe as a result of the fact that donating to the community is with less commitment than EHS and EWSB, which are supposed to be more impacting on the lives of members of the community.

4.5 Policy Implication of the Study

Regulatory authorities such as NNPC and DPR should ensure participation in ER by oil companies; this will improve the performance of the companies, which will in turn improve the economy through job creation and boosting GDP.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The study examines Environmental Responsibility and the performance of quoted oil marketing companies in Nigeria. Multiple regression was used to determine the impact. The cumulative influence of the ER proxies on the performance of the oil companies is that the 3 proxies are significant at 1% which implies that our level of confidence on this result is as high as 99% only 1% is revealed to be term error.

5.2 Conclusion

In view of the findings of this study the following conclusions were made:

1. Employees Health and Safety has significant impact on the performance of quoted oil marketing companies in Nigeria. This result was in line with our expectation, as we believe healthy employees would have a higher productivity and impact positively on the overall company's performance.
2. It was also concluded that Employee Welfare and Social Benefit has significant effect on the performance of quoted oil marketing companies in Nigeria. In theory, welfare motivates workers so also in this case EWSB motivate employees and thus impacting on performance.
3. Finally it was concluded that Donations and Charitable Contribution impacted on the performance of oil marketing companies in Nigeria. This result was also expected because of the Nigerian style of ER, this provides a peaceful environment for the companies to operate thus it reduces conflict

between the companies and host community and thereby enabling a condulsive environment for production.

5.3 Recommendations

In line with the findings and conclusions of this study, it is recommended that:

1. The management of oil companies should improve their participation in EHS and EWSB so as to affect the community better which will in turn improve performance of their respective companies and the employee performance.
2. Regulatory authorities such as NNPC and DPR should ensure participation and in compliance with the principles of sustainable development that underpins the concept of environmental responsibility by oil companies in Nigeria.
3. The management of oil companies should increase their charitable contribution to the community they are operating in. This will go a long way in improving a peaceful environment and performance in general.
4. The government should work closely with the oil companies to support economic development and management of environmental responsibility dialogue with the business world and other stakeholders in determining common standards, reporting mechanisms and the extent to which they should be responsible.

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