DETERMINANTS OF CORPORATE SUSTAINABILITY REPORTING IN SELECTED COMPANIES IN NIGERIA

By

NWOBU, OBIAMAKA ADAEZE
MAT. NO: CU021010093

MAY, 2017

DETERMINANTS OF CORPORATE SUSTAINABILITY REPORTING IN SELECTED COMPANIES IN NIGERIA

By

NWOBU, OBIAMAKA ADAEZE
MAT. NO: CU021010093
B.Sc. (Hons.) Accounting (Covenant University)
M.Sc. Accounting (Covenant University)

A THESIS SUBMITTED TO THE DEPARTMENT OF ACCOUNTING, COLLEGE OF BUSINESS AND SOCIAL SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY (Ph.D) DEGREE IN ACCOUNTING

MAY, 2017

ACCEPTANCE

This is to attest that this thesis is accepted in partial fulfilment of the requirements for the award of the degree of **Doctor of Philosophy in Accounting**, in the Department of **Accounting**, College of Business and Social Sciences, Covenant University, Ota.

Mr. Philip John Ainwokhai ___________________________
Secretary, School of Postgraduate Studies Signature & Date

Professor Samuel T. Wara ___________________________
Dean, School of Postgraduate Studies Signature & Date

DECLARATION

I, **NWOBU, Obiamaka Adaeze**, (CU021010093), declare that this research was carried out by me under the supervision of Dr. Akintola A. Owolabi of the Lagos Business School, Pan-Atlantic University and Professor Francis O. Iyoha of the Department of Accounting, Covenant University, Ota. I attest that the thesis has not been presented either wholly or partly for the award of any degree elsewhere. All sources of data and scholarly information used in this thesis are duly acknowledged.

NWOBU, Obiamaka Adaeze ____________________________

Signature & Date

CERTIFICATION

We certify that the thesis titled "Determinants of Corporate Sustainability Reporting in Selected Companies in Nigeria" is an original work carried out by NWOBU, OBIAMAKA ADAEZE, (CU021010093), in the Department of Accounting, College of Business and Social Sciences, Covenant University, Ota, Ogun State, Nigeria, under the supervision of Dr. Akintola A. Owolabi and Professor Francis O. Iyoha. We have examined and found the work acceptable for the award of a degree of Doctor of Philosophy in Accounting.

Dr. Akintola A. Owolabi ______________________
Supervisor **Signature & Date**

Professor Francis O. Iyoha ______________________
Co-Supervisor **Signature & Date**

Dr. (Mrs.) Olubukunola R. Uwuigbe ______________________
Head of Department **Signature & Date**

Professor Chinwuba A. Okafor ______________________
External Examiner **Signature & Date**

Professor Samuel T. Wara ______________________
Dean, School of Postgraduate Studies **Signature & Date**

DEDICATION

This work is dedicated to my God, and my Father in Heaven, the Lion of the tribe of Judah, the I Am that I Am, the Ancient of Days, my way maker, the God who performs wonders, the God who stills every storm, the Lord of Hosts, my Creator, Defence, Strength, Strong tower, Protector, Comforter, Provider and Helper in the person of the Holy Spirit, the God of Abraham, Isaac and Jacob; the God of the helpless and the fatherless, the God who helped me start and complete this thesis, the God that has fought, won victories and is still fighting all His battles without the support of man, the all sufficient, reliable, dependable and mighty God. Thank You my God and to You alone be all the glory and worship in the name of Jesus Christ, Amen.

ACKNOWLEDGEMENTS

I thank God, my helper, my shield, my defence, my stronghold and the maker of all things, because without Him, this research could not have been concluded. Thank you my God.

I thank the Chancellor and Chairman Board of Regents, Dr. David O. Oyedepo, for the Covenant University platform that enabled me to carry out this research. I appreciate the management of Covenant University which is made up of the Vice Chancellor – Professor Aaron Aderemi Atayero, Deputy Vice Chancellor - Professor Shalom Chinedu, Registrar – Mrs. Mary Aboyade and all the management team for their support.

I especially appreciate my Supervisor Dr. Akintola A. Owolabi, who made corrections to improve this work and mentored me through this research. I appreciate my Co-supervisor Professor Francis O. Iyoha, for making corrections to improve this work. I also thank my Head of Department, Dr. (Mrs.) Olubukunola R. Uwuigbe, for her corrections to this work.

I appreciate my College Examiners Professor K.S. Adeyemi, Professor Philip O. Alege and Dr. Henry Okodua for their advice and corrections to this work. I also appreciate the Postgraduate representative – Professor Olawole O. Obembe for his corrections to this work. I thank the Dean of School of Postgraduate Studies – Professor Samuel T. Wara, the Deputy Dean of School of Postgraduate Studies - Dr. Abiodun H. Adebayo, for their inputs to this work.

I also thank all members of faculty and staff in the Department of Accounting for their support throughout the duration of this work. I thank Dr. (Mrs.) Olubukunola R. Uwuigbe, Dr. Uwalomwa Uwuigbe, Dr. Dick O. Mukoro, Dr. Samuel A. Fakile, Dr. (Mrs.) Dorcas T. Adetula, Dr. Kingsley Adeyemo, Dr. Stephen A. Ojeka, Dr. Egbide Ben-Caleb, Dr. (Mrs). Imoleayo F. Obigbemi, Dr. Samuel O. Faboyede whose scholarship helped to bring out this work; and Mr. Uchenna Efobi, Mr. Olamide Olusanmi, Mr. Anijesushola Ajayi, Mrs. Folashade Owolabi, Mrs. Omotola Ezenwoke, Mrs. Sharon Oluseyi, Miss Peace Okougbo, Mr. Imaga Ogbu, Mrs. Omowunmi Kuku, for all their support. I remember Mrs. Ochim Modupe, who assisted in typing and printing the vital documents pertaining to this work.

I appreciate my only brother, Ikechukwuka Nwobu, who went to be with God in Heaven in the course of my Ph.D program, he was a friend and of great support. God bless you. I appreciate my Parents, Mr. Samuel Ogugua Nwobu and Mrs. Adaeze Nwobu for their prayers and support. I specially thank my mother, Mrs. Adaeze Nwobu, for her time, love, patience and goodwill. I thank my sisters, Udochi and Chioma Nwobu for their goodwill towards me. May God take us to great heights in this world in Jesus name and I pray that we all make it to Heaven after fulfilling the purposes for which we were born. I thank Mr. Taiwo Oyekoya for his support. Finally, I thank everyone who has contributed directly or indirectly to the success of this research. God Bless You.

TABLE OF CONTENTS

	PAGE
TITLE PAGE	i
ACCEPTANCE	ii
DECLARATION	iii
CERTIFICATION	iv
DEDICATION	v
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xi
LIST OF FIGURES	xv
LIST OF ABBREVIATIONS	xvi
LIST OF APPENDICES	xvii
ABSTRACT	xviii

CHAPTER ONE: INTRODUCTION

1.1	Background to the Study	1
1.2	Statement of the Problem	4
1.3	Research Questions	6
1.4	Objectives of the Study	6
1.5	Research Hypotheses	6
1.6	Scope of the Study	7
1.7	Justification for the Study	7
1.8	Significance of the Study	8
1.9	Limitations of the Study	9
1.10	Definition of Terms	10

PAGE

CHAPTER TWO: LITERATURE REVIEW

2.0 Preface 12
2.1 Review of Contextual Information 12
2.1.1 Nature of Accounting 12
2.1.2 History of Sustainability Reporting 14
2.1.3 Standards and Guidelines on Sustainability Reporting 20
2.1.4 Reasons for Corporate Sustainability Reporting 24
2.1.5 Empirical Studies on External Factors Influencing Corporate Sustainability Reporting 26
2.1.6 Empirical Studies on Internal Business Organizational Factors and Sustainability Reporting 38
2.1.7 Empirical Studies on Corporate Sustainability Disclosures in Annual Reports 49
2.2 Review of Existing Relevant Theories 56
2.2.1 New Institutional Theory 56
2.2.2 Legitimacy Theory 63
2.3 Conceptual Framework 65
2.3.1 Concept of Corporate Sustainability Reporting 65
2.3.2 Conceptual Framework of the Study 72
2.3.3 Gap in the Literature 79

CHAPTER THREE: METHODOLOGY

3.0 Preface 83
3.1 Research Design 83
3.2 Study Population 84
3.3 Sampling Technique and Size 88
3.3.1 Sample Size – Secondary Data 88

PAGE

3.3.2 Sample Size for Survey 89

3.4 Data Gathering Method 91

3.4.1 Sources of Data 91

3.4.2 Research Instrument 91

3.5 Validity and Reliability of Research Instrument 93

3.6 Methods of Data Analysis 94

3.6.1 Method of Data Analysis for Survey 94

3.6.2 Method of Data Analysis for Secondary Data 94

3.6.3 Model Specification 95

3.6.4 Operationalisation of Variables 103

CHAPTER FOUR: RESULTS

4.0 Preface 112

4.1 Data Analysis 112

4.1.1 Secondary Data Analysis – Preliminary 112

4.1.2 Primary Data Analysis – Preliminary 174

4.1.3 Test of Hypotheses 188

CHAPTER FIVE: DISCUSSION

5.0 Preface 235

5.1 Discussion of Results for Test of Hypothesis One 235

5.2 Discussion of Results for Test of Hypothesis Two 239

5.3 Discussion of Results for Test of Hypothesis Three 240

5.4 Discussion of Results for Test of Hypothesis Four 243

PAGE

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.0 Preface 245

6.1 Summary of Work Done 245

6.2 Summary of Findings 246

6.2.1 Theoretical Findings 246

6.2.2 Empirical Findings 247

6.3 Conclusion 247

6.4 Recommendations 248

6.5 Contributions to Knowledge 249

6.6 Suggestions for Further Study 249

References 250

Appendix I: Sustainability Reporting Index 281

Appendix II: Research Questionnaire 283

Appendix III: List of Companies in the Population as at 2015 286

LIST OF TABLES

		PAGE
Table 2.1:	Summary of Theories and Literature Reviewed on Determinants of Sustainability Reporting	81
Table 3.1:	Market Segmentation on the Main Board of the Nigerian Stock Exchange	87
Table 3.2:	Computation of Usable Annual Reports	90
Table 3.3:	Independent Variables (Institutional Field Factors) and Sources of Information	110
Table 3.4:	Dependent and Independent Variables (Reporting Process Factors) and Sources of Information	111
Table 4.1:	Summary Statistics of Data from Annual Reports and Company Websites	114
Table 4.2:	Summary Statistics of Variables for Banking Sector	116
Table 4.3:	Summary Statistics for Variables for Oil and Gas, Consumer Goods and Industrial Goods Sectors	119
Table 4.4:	Number of companies engaging in Reporting Economic Indicators in the Banking sector	122
Table 4.5:	Number of companies engaging in Reporting Environmental Indicators in the Banking sector	126
Table 4.6:	Number of companies engaging in Reporting Governance Indicators in the Banking sector	130
Table 4.7:	Number of companies engaging in Reporting Social Indicators in the Banking sector	133
Table 4.8:	Number of Companies Reporting Economic Indicators in the Oil and Gas Sector	136
Table 4.9:	Number of Companies Reporting Environmental Indicators in the Oil and Gas Sector	139

PAGE

Table 4.10:	Number of Companies Reporting Governance Indicators in the Oil and Gas Sector	143
Table 4.11:	Number of Companies Reporting Social Indicators in the Oil and Gas Sector	146
Table 4.12:	Number of Companies Reporting Economic Indicators in the Consumer Goods Sector	149
Table 4.13:	Number of Companies Reporting Environmental Indicators in the Consumer Goods Sector	154
Table 4.14:	Number of Companies Reporting Governance Indicators in the Consumer Goods Sector	158
Table 4.15:	Number of Companies Reporting Social Indicators in the Consumer Goods Sector	162
Table 4.16:	Number of companies engaging in Reporting Economic Indicators in the Industrial Goods Sector	164
Table 4.17:	Number of companies engaging in Reporting Environmental Indicators in the Industrial Goods sector	167
Table 4.18:	Number of companies engaging in Reporting Governance Indicators in the Industrial Goods Sector	169
Table 4.19:	Number of Companies Reporting Social Indicators in the Industrial Goods Sector	171
Table 4.20:	Descriptive Analysis of Economic, Environmental, Social and Governance Indicators across Time Periods	173
Table 4.21:	Descriptive Analysis of Perceived Importance of Coercive Pressures	175
Table 4.22:	Descriptive Analysis of Perceived Importance of Normative Pressures	177
Table 4.23:	Descriptive Analysis of Perceived Importance of Mimetic Pressures	179
Table 4.24:	Descriptive Analysis of Actual Influence of Coercive Pressures	181
Table 4.25:	Descriptive Analysis of Actual Influence of Normative Pressures	183

		PAGE
Table 4.26:	Descriptive Analysis of Actual Influence of Mimetic Pressures	185
Table 4.27:	Descriptive Statistics for Sustainability Reporting Indicator Scores for 2010 to 2014	189
Table 4.28:	Multivariate Tests[b]	191
Table 4.29:	Pairwise Comparisons	193
Table 4.30:	Descriptive Statistics for Sustainability Reporting Indicator Scores in the Banking Sector from 2010 to 2014	195
Table 4.31:	Multivariate Tests[b]	197
Table 4.32:	Descriptive Statistics for Sustainability Reporting Indicator Scores for Industrial Goods Sector from 2010 to 2014	199
Table 4.33:	Multivariate Tests[b]	201
Table 4.34:	Descriptive Statistics for Sustainability Reporting Indicator Scores for Oil and Gas Sector from 2010 to 2014	203
Table 4.35:	Multivariate Tests[b]	205
Table 4.36:	Descriptive Statistics for Sustainability Reporting Indicator Scores for Consumer Goods Sector from 2010 to 2014	207
Table 4.37:	Multivariate Tests[b]	209
Table 4.38:	Pairwise Comparisons	211
Table 4.39:	Estimation Results for Sustainability Reporting Using Institutional Field Factors for the 54 Sample Companies for the Period 2010 to 2014	214
Table 4.40:	Estimation Results for Sustainability Reporting Using Reporting Process Factors for the 54 Sample Companies for the Period 2010 to 2014	217
Table 4.41:	Correlation Matrix of Independent Variables	219
Table 4.42:	Estimation Results for Sustainability Reporting Using Both Institutional Field and Reporting Process Factors for the 54 Sample Companies for the Period 2010 to 2014	222
Table 4.43:	Total Variance Explained	224

PAGE

Table 4.44:	Pattern matrix for Principal Component Analysis with Oblimin rotation of five factor solution of Factors Influencing Sustainability Reporting	228
Table 4.45:	Structure matrix for Principal Component Analysis with Direct Oblimin rotation of five factor solution of Factors Influencing Sustainability Reporting	229
Table 4.46:	Component Correlation Matrix	231
Table 4.47:	Pearson Correlations	234

LIST OF FIGURES

		PAGE
Figure 2.1:	Conceptual Framework of Sustainability Reporting, Organizational Field and Internal Organizational Structures	74
Figure 4.1:	Scree Plot	226

LIST OF ABBREVIATIONS

CBN:	Central Bank of Nigeria
CGC:	Code of Corporate Governance
GHG:	Greenhouse Gas Emissions
KPMG:	Klynveld Peat Marwick Goerdeler
PWC:	PricewaterhouseCoopers
SEC:	Securities and Exchange Commission
UNEP:	United Nations Environment Programme
UNEP FI:	United Nations Environment Programme Finance Initiative

LIST OF APPENDICES

PAGE

Appendix I: Sustainability Reporting Index 281

Appendix II: Research Questionnaire 283

Appendix III: List of Companies in the Population as at 2015 286

ABSTRACT

The purpose of this study is to empirically assess how institutional field and internal organizational process factors determine sustainability reporting based on new institutional theory and legitimacy theory. This study employed longitudinal and survey research design to actualize its objectives. Primary data was collected using questionnaire administered to companies to decipher the importance and performance of factors that determine sustainability reporting in Nigeria. Fifty four (54) corporate actors responded to the survey. Secondary data from annual reports, sustainability reports of companies and organizations were also used to actualize the research objectives in this study. Panel data regression techniques namely Fixed Effects estimation and Random Effects estimation in addition to Pooled Ordinary Least Squares regression was carried out on the secondary data collected from corporate reports. Based on the Hausman specification tests, the fixed effects model was more appropriate. The empirical results based on 2010 to 2014 data on sustainability reporting, institutional field factors and reporting process factors lend some support to the new institutional theory and legitimacy theory. The data analyses also showed that there was a statistical significant variation in sustainability reporting from year 2010 to 2014 in the sample companies. The study further revealed that the companies were influenced by the disclosure guidelines of the Nigerian Stock Exchange regulator (SEC), banking sector regulator introduced in 2011 and 2012 respectively. Results of the Fixed Effects model showed that Securities and Exchange Commission (SEC) code of corporate governance, Central Bank of Nigeria Sustainability Banking Principles, accounting firm affiliation and sustainability reporting. Also, stakeholder engagement had a significant positive relationship with sustainability reporting. From these findings, it can be concluded that stakeholder engagement is crucial for sustainability reporting. The implication of these findings is that companies should take their sustainability reporting through assurance in order to improve the reporting content. This has the potential of improving sustainability reporting, as well as adding value to the sustainability principles put in place by regulators. Companies should be monitored by regulators to ensure that disclosure requirements of the code of corporate governance and sustainable banking guidelines are properly implemented. Small and medium sized accounting firms should be equipped with relevant information on sustainability reporting to enable them offer advisory services to companies.

Key Words: Assurance; Accounting Firm; External Governance Bodies; Regulator; Stakeholder Engagement; Sustainability Reporting.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The failures of companies such as Enron and Parmalat, among others have prompted questions about the adequacy of traditional financial reports in assessing corporate performance (Calitz *et al.*, 2015). These unpleasant incidences are st irring demands from different governments, stock market regulators, media and academia, for increased corporate transparency and disclosure in order to assess performance in diverse areas that are potential sources of risk. Transparency and disclosure practices of companies are major determinants for successful corporate governance. According to Kocmanova *et al.* (2011), the practice of transparency and disclosure in companies highlight the importance of corporate governance in contributing to both corporate prosperity, and responsibility. However, Popa *et al.* (2009) note that corporate transparency and disclosures are more useful when sustainability reporting is incorporated along side. Sustainability reporting provides information that increases corporate transparency and accountability in economic, environmental, social and governance terms; it provides information not entirely captured in corporate financial statements such as statement of financial position, statement of comprehensive income and statement of cash flows.

Internationally, a study by an accounting firm - Klynveld Peat Marwick Goerdeler (2015) shows growing interest in corporate transparency, particularly with respect to sustainability reporting and disclosure. According to Gould (2011), sustainability reporting is necessary to equip stakeholders with information of an organization's performance in tangible aspects. In 2011, the International Federation of Accountants (IFAC) developed a sustainability framework, enabling business organizations to incorporate sustainability issues in their business approach, process and reporting practices. The reporting aspect of IFAC's sustainability framework involves providing audit and assurance on sustainability performance to enhance the credibility of sustainability reports, incorporating sustainability impacts in financial statements, and employing narrative reporting to capture sustainability information not included in financial statements.

In foreign contexts as United Kingdom, United States, and Australia, companies were found to engage in sustainability reporting (Klynveld Peat Marwick Goerdeler, 2011; Klynveld Peat Marwick Goerdeler, 2015). Also, Klynveld Peat Marwick Goerdeler (2011) and Klynveld Peat Marwick Goerdeler (2015) show that South African companies are taking the lead in the practice of sustainability reporting in the African continent; although, companies in Nigeria are also implementing this practice. However, because business organizations operate within different economic, environmental, social and government contexts, it is important to account for specific factors which influence the sustainability reporting for each company. A number of studies (Adams, 2002; Frost *et al.*, 2005; Guthrie and Farneti, 2008; Kolk, 2008; Larrinaga-Gonzalez and Perez-Chamorro, 2008; Wild, 2008; Adams and Whelan, 2009; Bebbington *et al.*; 2009; Farneti and Guthrie, 2009; Dilling, 2010; Bennett *et al.*, 2011; Farneti and Rammal, 2013; Gherardi *et al.*, 2014; Peters and Romi, 2015; Thoradeniya *et al.*, 2015) have been undertaken with respect to corporate sustainability reporting and disclosures in countries other than Nigeria.

Adams (2002) notes many factors that could influence social reporting of corporate organizations. These factors stem from internal and external organizational environment. In examining factors, which influence social reporting of corporate organizations, a study done by Frost *et al*. (2005) examine sustainability reporting of businesses trading on Australian Stock Exchange (ASX). Likewise, Guthrie and Farneti (2008) assess Australian public organizations' compliance with Global Reporting Initiative (GRI) guidelines on sustainability reporting. Other studies include Kolk (2008), where the sustainability reporting practices of multinational organizations are examined, and Larrinaga-Gonzalez and Perez-Chamorro (2008), where it is argued that sustainability reporting practices of corporate businesses should take cognizance of their organizational structure. In the same vein, Adams and Whelan (2009) note that business organizations will engage in sustainability reporting when stakeholders create cognitive dissonance.

Further on factors which influence sustainability reporting, Bebbington *et al*. (2009) explore the influence of regulations, normative and cognitive pressures on organizations' initiation of sustainability reporting. Farneti and Guthrie (2009) explore reasons for sustainability reporting by government organizations; Dilling

(2010) investigates common features of organizations which employ GRI guidelines for preparing the sustainability reports of their companies. Other studies such as that of Bennett *et al*. (2011) examine the extent of corporate sustainability reporting in the United Kingdom. Also, Farneti and Rammal (2013) examine the motives for sustainability reporting in the Italian Public Sector; and Thoradeniya *et al*. (2015) find empirical evidence that corporate actors often respond to forces within business organizations to create change that spur sustainability reporting.

In Nigeria, there are studies on environmental reporting, which convey information on environmental performance. Studies such as Owolabi (2001), Owolabi (2009) and Uwuigbe (2011) focus on environmental reporting in Nigeria. Environmental reporting is an earlier form of corporate reporting, which focuses on environmental policies, performance and management approaches to environmental protection, and environmental liabilities. Although, the need for sustainability reporting is becoming prominent in the corporate world, its history is incomplete without acknowledging the role of environmental reporting in creating awareness for corporate sustainability. Sustainability reporting on its part gives more detailed information about performance in the following areas amongst which are economic, environmental and social, governance, company policies and management approaches which influence sustainability performance. The difference between environmental reporting and sustainability reporting lies in their history and composition of the respective reports.

Sustainability reporting, therefore, contrasts environmental reporting which focuses on environmental performance in areas such as climate change, waste, water usage, environmental protection costs, environmental liabilities and greenhouse gas emissions (Beck *et al.*, 2010). Sustainability reporting is also related to the Triple Bottom Line (TBL) concept; which Husillos *et al.* (2011) and Jackson *et al.* (2011) explain as an accounting performance measurement approach that goes beyond reporting financial information to report on an organization's impact on the planet and people that dwell on it. The 'planet' and 'people' dimension of organizational performance is often given partial attention in business accounting. For instance, apart from recent approaches that incorporate social and environmental performance of organizations into corporate reports, value added statement were previously used

to report on a company's generation of value and distribution of same to shareholders, employees, government and community. TBL reporting also seeks to convey a company's financial, social and environmental performance.

In the Nigerian context, the response of companies to forces within its environment is yet to be ascertained. Also based on available literature on sustainability reporting in Nigeria, the perception of corporate actors of institutional pressures influencing sustainability reporting has not yet been examined, by researchers. There is also advocacy that sustainability reporting should reflect in internal organizational processes of companies to enhance its authenticity (Herschovis *et al.*, 2009). These approaches to study sustainability reporting could increase its quantity and quality by reporting entities (Adams, 2002; Adams and Larrinaga-Gonzalez, 2007).

1.2 Statement of the Problem

Developments in businesses worldwide particularly in relation to sustainable development indicate the importance for companies to integrate sustainability aspects into their corporate reporting mechanism. The accountability side of companies is not complete without the reporting mechanism, hence the release of sustainability reports and inclusion of sustainability disclosures in corporate annual reports. The contents of sustainability reports either published as stand-alone reports or integrated into corporate annual reports in Nigerian companies have received some attention in recent years. Asaolu *et al.* (2011) observe that sustainability reporting is voluntarily practiced by multinational oil and gas companies in Nigeria; reporting was deficient as companies were not guided by any legislation on what to report.

The accountability that financial results of companies communicate is an important aspect of their transparency that cannot be ignored: but financial results alone cannot communicate a company's social and environmental impacts. These impacts are redefining the meaning of business value. Therefore, in order to improve the content of sustainability reports, external pressures and organizational context have roles to play in the transformation process.

An unanswered question is how these factors can be assessed. There has not been much discussion on corporate sustainability reporting arising from conformity to

external pressures and organizational contexts in Nigeria. Companies could be influenced by members of their organizational field such as stock market regulators, banking sectors' sustainability reporting requirements, companies in the industry that are successful - in terms of their profit, size of the company, professional accounting firm, foreign presence, industry affiliation, membership of external bodies that govern sustainability such as United Nations Environment Programme (UNEP), United Nations Global Compact (UNGC) and global oil and gas industry association for environmental and social issues (IPIECA), and they gradually become homogenized by them.

Sustainability reporting could also be influenced by the organizational context or process depicted by attitudes of key decision makers, board of directors' committee on sustainability issues, stakeholder engagement, sustainability framework and assurance. Another issue is whether the organizational context leads to more or less sustainability reporting, or, whether they lead to situations where business organizations report on sustainability without improving on their internal processes. This kind of situation creates a decoupling between sustainability reporting and internal processes, and could result in less accountability from sustainability reporting and disclosures.

The nature of these pressures may differ across different geographical and corporate contexts. So, it is necessary to examine the external and internal contexts and how the pressures located there influence a company to engage in sustainability reporting given that business organizations operate in different organizational fields. Researchers (Hossain *et al.*, 2013; Parker, 2005) advocate that there is need to approach the research on sustainability reporting or any of its variants by engaging with business organizations. This research approach could reveal the attitudes and internal contexts of reporting as well as how key decision makers view the external pressures influencing what organizations report. There is an additional need to decipher how the organizational field (which is made up of other business organizations, stakeholders, professional accounting firms, foreign presence, industry affiliation, external bodies that govern sustainability) influences what companies report. Based on the literature reviewed, there is no empirical study that has focused on the determinants of sustainability reporting from this perspective.

Therefore, this study focused on assessing the institutional field and internal organizational determinants of sustainability reporting in Nigeria.

1.3 Research Questions

The main research question of this study is: how do institutional field and internal organizational process factors influence sustainability reporting of companies in Nigeria? In order to answer this main question, the research questions formulated and addressed are:

1. What is the variation in sustainability reporting across selected companies from 2010 to 2014 in Nigeria?
2. To what extent do companies' institutional field factors influence their sustainability reporting in Nigeria?
3. To what extent do internal organizational processes of companies influence their sustainability reporting in Nigeria?
4. What are the factors that influence sustainability reporting in Nigeria from the perspective of corporate respondents?

1.4 Objectives of the Study

The main objective of this study is to determine the relationship between institutional field factors and internal organizational process factors and sustainability reporting of selected corporate business organizations in Nigeria. The specific objectives are: to

1. Examine the variation in sustainability reporting across selected companies from 2010 to 2014 in Nigeria;
2. Assess the extent that companies' institutional field factors influence their sustainability reporting in Nigeria;
3. Investigate the extent that internal organizational processes of companies influence their sustainability reporting in Nigeria; and
4. Assess the factors that influence sustainability reporting in Nigeria from the perspective of corporate respondents.

1.5 Research Hypotheses

In order to carry out the objectives, the following hypotheses stated in null form are tested:

H_{01}: There is no significant variation in sustainability reporting across selected companies from 2010 to 2014 in Nigeria.

H_{02}: Companies' institutional field factors do not influence their sustainability reporting in Nigeria.

H_{03}: Companies' internal organizational processes do not influence their sustainability reporting in Nigeria.

H_{04}: There are no significant factors that influence sustainability reporting in Nigeria from the perspective of corporate respondents.

1.6 Scope of the Study

The scope of the study is presented in the following manner: subject matter, sample size, time period and geographical location.

The subject matter of this study is the determinants of corporate sustainability reporting in selected companies in Nigeria. The sample size of this study is 54 companies selected from four sectors of the Nigerian Stock Exchange (NSE) namely: oil and gas, consumer goods, industrial goods and banking sectors in Nigeria. Also, within these sectors, only publicly quoted companies constituted the population of this study as a result of ease of accessing their information (through annual reports, corporate websites). These sectors were included in this study because of their contribution in terms of market segmentation. The banking sector is part of the financial services sector which constitutes 40 percent of the market segmentation in the Nigerian Stock Exchange (NSE). In descending order, the consumer goods, industrial goods, oil and gas sectors constitute 29 percent, 20 percent and 5 percent respectively of the market segmentation in the NSE (The Nigerian Stock Exchange, 2015). The time period of the study is from 2010 to 2014. The location of this study is Nigeria.

1.7 Justification for the Study

Previous studies on sustainability reporting have mainly focused on countries such as United Kingdom, United States, Australia, China and Canada, and, to a lesser degree, developing countries such as Bangladesh, Sri Lanka and Egypt which focus mainly on internal organizational determinants of sustainability reporting rather than a mix of factors that can contribute to sustainability reporting from the internal and

external organizational field. Moreover, single studies on sustainability reporting of companies including those in the financial services sector are rare. This study examines sustainability reporting in companies in the industrial goods, consumer goods, banking, oil and gas sectors in Nigeria. Evidence of research into sustainability reporting in Nigeria is also rare, with studies such as Owolabi (2001) and Uwuigbe (2011) focusing on aspects of indicators sustainability reporting such as environmental disclosures. There is no previous study on determinants of sustainability reporting of companies in Nigeria with particular reference to organizational field factors (both internal and external).

This study adds to the understanding of sustainability reporting by heeding to studies such as Adams (2002) and Bebbington *et al*. (2009) to investigate a host of factors that could be responsible for sustainability reporting, recognizing that in the Nigerian context, several interactions within and outside companies are responsible for the level of reporting. More so, this research focus could provide new explanations for corporate sustainability reporting. It is also important to note that this study recognizes that a single theory underpinning corporate disclosure practices as argued in prior studies such as Momin (2006) and Damayanthi and Rajapakse (2013) may risk ignoring other possible explanations. These research perspectives encouraged the researcher to use the new institutional and legitimacy theories in this current study. Therefore, this study aims to assess the determinants of sustainability reporting, in order to provide explanations from the new institutional and legitimacy theories.

1.8 Significance of the Study

Few studies have examined how pressures from the organizational field and within organizations influence corporate sustainability disclosures. Another issue that has not been dealt with in the literature is managers' perceptions about the institutional factors influencing corporate disclosures. This is necessary in order to assist companies to effect the necessary changes in sustainability reporting. Specifically, the current study is significant in the following ways:

1. This study brought to the fore the key factors which drive sustainability reporting. The knowledge of such factors should enable models to be developed which map the relationship between the factors and aspects of

corporate sustainability reporting. Consequently, future researchers should be able to make inferences from this study.

2. Companies can evaluate the current state of their disclosure practices, in the light of the factors that this study identified and examined. This could enable them make the necessary changes (behavioural or structural) that may be necessary to lead to improvements in sustainability reporting. Company directors and chief executive officers can employ the findings of this study to allocate resources to the internal organizational processes and structures that can influence sustainability reporting.
3. The findings of this study could be useful to the Securities and Exchange Commission, Central Bank of Nigeria and other regulators to enable them assess sustainability reporting practice of companies in Nigeria.
4. Earlier studies in Nigeria had focused on managers' rationale towards corporate environmental issues and reporting (Owolabi, 2001), environmental cost information (Owolabi, 2007), and the quantity of environmental disclosures (Owolabi, 2009; Uwuigbe, 2011). The current study differs from them because it empirically assessed the perceptions of managers on the determinants of sustainability reporting. This is premised on the assertion by Husillos *et al.* (2011) that managers' rationale towards the factors influencing corporate reporting can enhance or inhibit the development of triple bottom line reports. The relationship between triple bottom line reports and sustainability reports lies in their ability to capture social and environmental disclosure practices by companies. Also, another relationship between these two reports is that they communicate the contribution of a company to the goal of sustainable development. This study also differs from prior studies because it examines the relationship between institutional field factors and internal organizational factors that have not been employed in research based on the Nigerian context.

1.9 Limitations of the Study

This study is limited to analysis of sustainability reporting in annual reports and stand-alone sustainability reports of the sample companies. The researcher does not claim that all the annual reports of companies in the four sectors included in this study were analysed. A major reason for this was absence of complete annual

reports for the 2010 to 2014 period for some of the sampled companies. Also, some companies may be engaging in sustainability reporting by using their corporate websites. This study did not use data from website of the sampled companies as source of information on sustainability reporting. The current study is also limited to content analysis of corporate reports over a period of five years.

1.10 Definition of Terms

Assurance on Sustainability Report: refers to the enhancement of credibility by means of external verification of sustainability reports (Global Reporting Initiative, 2013b).

Banks' Sustainability Reporting Requirements: refers to the Sustainability Banking Principles of the Nigerian Central Bank of Nigeria (Central Bank of Nigeria, 2012).

Board Committee on Sustainability: refers to sustainability committee on the board of directors of a business organization.

Economic Impacts: refers to value added by a business organization in terms of sales volume, payment to employees, payment to government, local community donations, payment to shareholders in form of dividend (Global Reporting Initiative, 2013a).

Environmental Impacts: refers to negative and positive changes in the environment arising from the operations of a business organization (Global Reporting Initiative, 2013a).

External Institutions that Govern Sustainability: refers to institutions external to the business organization that have voluntary sustainability reporting guidelines. The business organizations subscribe to the demands of these external institutions by joining them as members (Adeniyi, 2016).

Governance Indicators: refers to the business organizations' internal governance approach to sustainability issues (Global Reporting Initiative, 2013a).

Social Impacts: refers to the manner in which the operations of a business organization affect the people in the organization and in the communities where it operates (Global Reporting Initiative, 2013a).

Stakeholder-Oriented Country: refers to a country with a wide range of stakeholders who influence companies with their values and norms (Huijbregts, 2013).

Sustainability Framework: refers to the manner in which issues bothering on environmental, social and economic performance are managed in an organization (Cahaya, 2011).

Sustainability Reporting: refers to a report prepared by companies which discloses economic, environmental and social performance of business organizations. It also entails reporting the governance approach to sustainability performance (Global Reporting Initiative, 2013a).

Sustainability Reporting Index: refers to the number of observed items reported by a company divided by the number of expected items a company is expected to report based on the researcher's reporting index. The values on the sustainability reporting index can be between 0 and 1.

Sustainability Reporting Indicators: refers to the various aspects of environmental, social and economic performance of a business organization, as well as governance approach to sustainability issues (Global Reporting Initiative, 2013a).

Traditional Accounting: is an aspect of accounting that considers only the financial performance of a business (Elliott and Elliott, 2011).

Voluntary Disclosures: refers to those disclosures that are provided by companies through their reports based on the discretion of management (Okafor and Ogiedu, 2011).

CHAPTER TWO
LITERATURE REVIEW

2.0 Preface

The purpose of this chapter is to review relevant literature on the determinants of sustainability reporting. This chapter consists of three parts; namely review of contextual information, theoretical framework and conceptual framework. The literature review concludes with discussion of gaps identified in the literature.

2.1 Review of Contextual Information

The review of contextual information for this study covers the nature of accounting procedures, history, concept, standards and guidelines on sustainability reporting, reasons for sustainability reporting. It also includes empirical studies on external factors and sustainability reporting, empirical studies on internal business organizational factors and their influence on sustainability reporting, and empirical studies on corporate sustainability reports presented in annual company reports.

2.1.1 Nature of Accounting

Accounting involves collection of financial information, recording, analysis of same, and reporting the result of financial information to show financial status of private or public organizations (Omolehinwa, 2000). Ambashe and Alrawi (2013) trace the history of Accounting to ancient civilizations such as Babylonian civilization (3000-2000 BC), Egypt civilization (3000-1000 BC), Greek civilization (1000-1 BC), early Islam accounting system (652 AD) and Italy (1495 AD). Accounting systems have been relevant from the period of early civilization because one of the common features of this era was engagement in commerce (Woolf, 1912). Through expansion in commerce, there has been growing need to exchange value (especially money) for goods and services; this remained a recurring theme throughout accounting developments in countries like Britain and America. Also, increase in commercial activities results in diverse types of business enterprises such as sole proprietorship, partnership and limited liability companies.

Since owners of most businesses cannot do both administrative and financial management work in the businesses they own, they opt for employees, who can

manage, and render accounts of the companies' transaction. According to Akinyemi *et al.* (2015), such managers or employees (agents) act on behalf of owners (principals) of businesses; while the business owners provide the financial resources to build, expand, and sustain the business, the agents perform administrative and practical accounting work. Therefore from the early days of commerce, a fiduciary relationship exists between business owners and their money managers. Also, principals or business owners expect their agents to be stewards of resources placed in trust in their custodial account. Since money constitutes a major resource required for any business to carry out its operations, and this requires proper accountability, and management, the need for accounting agents or managers has continued to grow over the years.

According to Ambashe and Alrawi (2013), accounting is an information system that records and communicates the monetary events of an organization to internal and external users. Although, money is necessary for any business, it does not constitute the sole resource for it to operate successfully. There are environmental resources as well as social resources which are derived from the planet and people. Therefore, these resources need to be accounted for because they can affect the ability of a business to operate successfully.

Traditional accounting is associated with information pertaining to the financial performance of a business. Other information is provided by management in corporate annual reports, where financial information is presented. Okafor and Ogiedu (2011) state that management disclosures are valuable source of information for investors. These disclosures can be mandatory and voluntary. Investors require financial information, information about directors, management, major shareholders, business objectives, research and development, amongst others. Utami (2015) notes that a shift from profit maximization as the sole objective of a business to accounting for the interest of stakeholders is a recent development in business organizations. Accounting in the interest of business stakeholders can influence the value of companies. Sustainability reporting meets this need because it includes reporting on economic, environmental and social aspects of a business as well as governance approaches to manage those aspects.

2.1.2 History of Sustainability Reporting

The advocacy for corporate sustainability reporting by leading governments has been on the increase with the coming together of Brazil, Denmark, France and South Africa, in support of the United Nations Conference on Sustainable Development (Rio+20). The aforementioned countries attracted the support of the Global Reporting Initiative (GRI) and United Nations Environment Programme (UNEP). These two bodies became part of recognized leading institutions in sustainability reporting. The GRI has been developing frameworks and guidelines which organizations are employing to report on sustainability. These frameworks include Reporting Guidelines which include the indicators of sustainability reporting which organizations can use in measuring and reporting their sustainability performance. In addition, the United Nations Environment Programme (2012) emphasizes the need for partnership between countries and organizations towards the actualization of the goal of sustainable development through provision of relevant information to enable the former improve the quality of life for their people, without putting future generations at risk.

In addition to this step, the Corporate Sustainability Reporting Coalition (CSRC) at the instance of Aviva in September 2011 prepared a policy, which proposes corporate sustainability reporting as a mandate for advancement of a green economy. In The CSRC is a global union of financial institutions, professional bodies, non-governmental organizations and investors with assets worth US$2 trillion. United Nations member states are mandated to develop rules which board of directors in companies should adhere to in consideration of sustainability issues, integrate those which they consider significant within their annual reports and financial statements, or explain why they do not (Corporate Sustainability Reporting Coalition, 2012).

Although, according to Dilling (2010), the European Union (EU) encourages voluntary sustainability reporting, some countries in the EU such as Denmark, Finland, Sweden, Belgium, the Netherlands and Germany have either legislative or non-legislative bodies which drive social responsibility and sustainability reporting. The Association of Certified Chartered Accountants (2004) notes that the first sustainability reports in Africa and the Middle East were published in 1993 and

since then reporting has grown slowly. Majority of the corporate sustainability reporters and reporting developments have occurred in South Africa. For instance, the King Code II (now revised) corporate governance report in South Africa has been noted as the first in any African jurisdiction to include a comprehensive section on integrated sustainability reporting. There is the King III code of corporate governance with effect from 2010 requiring amongst others that companies incorporate sustainability reporting and disclosures into their financial reports (Integrated Reporting and Assurance Services, 2012).

The United Nations Environment Programme (2013) discloses that there was a coming together of South Africa, Brazil, Denmark and France in 2012 to support paragraph 47 of the UN Conference on Sustainable Development. According to the United Nations (2012), in paragraph 47 the importance of sustainability reporting is recognized; interested stakeholders in industry, governments, and non-governmental organizations have been encouraged to design ways through which the goal of sustainable development can be actualized. The governments of Austria, Columbia, Norway and the Switzerland have also joined South Africa, Brazil, Denmark and France in favor of Paragraph 47 of the Rio+20 outcome document on this same issue.

According to the Department for Environment, Food and Rural Affairs (2006), environmental matters are required to be incorporated in the Business Review using Key Performance Indicators (KPIs) in the United Kingdom. These KPIs are quantifiable metrics that reflect the environmental performance of a business in the context of its overall objectives. Environmental issues also have the ability to contribute to financial risk when they are not well managed. For instance, when not properly managed, material usage, fuel consumption, energy reduction, water usage, waste, spill, assessment of suppliers based on environmental risks are likely to pose significant risk to the long-term value of a business.

The Nigerian experience towards corporate sustainability reporting is still evolving. According to Okoye and Ngwakwe (2004), increasing awareness of social and environmental issues is resulting in clamors for sustainable economic development. There is also a shift towards stakeholder-oriented corporate governance requirements depicted in the changes made to the Code of Corporate Governance for

companies operating on the stock market. This code was issued by the Securities and Exchange Commission - SEC (the stock market regulator) in Nigeria. This regulatory board demands that companies incorporate the requirements of the Code in line with reporting on sustainability as part of their corporate governance from the year 2012 (Securities and Exchange Commission, 2011). In furtherance of this course, the Central Bank of Nigeria (CBN) sent a specific circular to financial institutions in September 2012, advising them to incorporate sustainability issues in their corporate reporting by December 31, 2013 to enable them produce a stand-alone report by December 31, 2014. Therefore, financial institutions are expected to abide by a set of sustainable banking principles to promote sustainability reporting (Central Bank of Nigeria, 2012).

Also, Christofi *et al.* (2012) argue that standardization of disclosures in sustainability reports of companies. In their view, this step is necessary because investors in the past have not been able to reward companies for adhering to sustainability issues or punish those that violate them in their decision making (in terms of investment). The demand made by both SEC and CBN for sustainability reports from companies aligns with the need for standardization of its practice. In other countries where sustainability reporting was practiced as at 2012, very few stock markets had listing rules and voluntary initiatives towards sustainability reporting at that time. However, in Africa, the Johannesburg Stock Exchange in South Africa is one of the few which has continued to subscribe to rules that enhance sustainability reporting in companies.

Outside the African continent, the listing requirement of Indian Stock Exchange mandates that the top 100 publicly quoted companies must disclose environmental, social and governance issues in their annual reports (United Nations Conference on Trade and Development, 2013). Other countries whose stock market or stock market regulatory body requires sustainability reporting for listed companies only are Pakistan, Malaysia, Canada, Philippines, Singapore, China, Brazil and the United States of America (Sustainable Stock Exchange Initiative, 2013).

According to United Nations Conference on Trade and Development (2013), the Nigerian Stock Exchange announced that it has joined the United Nation (UN) Sustainable Stock Exchanges (SSE) initiative. Nigeria is the second African country

to join the UN SSE. The SSE explores how stock markets and stakeholders such as regulators, investors and corporate entities can collectively enhance corporate transparency through environmental, social and governance disclosures while encouraging responsible approaches to investments which are often described as Socially Responsible Investing (Sustainable Stock Exchange Brochure, 2012).

According to the World Commission on Environment and Development (1987), sustainable development implies that a business meets present needs while ensuring that resources to meet those needs in future periods are available. The Business Action for Sustainable Development (2012) also emphasizes that in actualizing the goals of sustainability as it relates to national development, the private sector has a responsibility. The International Institute for Sustainable Development and Deloitte & Touche (1992) advocates a way through which organizations in the private sector can carry out this role. In their view, by incorporating policies and processes relating to sustainable development in organizations, the goal of sustainable development in the private sector can be easily achieved. The integration of these policies and processes should translate to more accountability to stakeholders other than the owners of the business and lead to continuous improvement of reporting practices. This is a departure from the capitalism approach of business enterprises in the private sector where 'profit' is the sole concern of the owners and managers.

However, critiques of sustainability reporting have stemmed from the assertion that pre-occupation with corporate responsibility issues may lead to loss of short-term earnings and investor's short-run returns (Murray, 2010). Although, empirical studies have not been able to establish the benefits of businesses' contribution to sustainable development, at least, they have been able to establish causal relationships between what is disclosed and financial performance (Weber and Koellner, 2008; Buys *et al.*, 2011). Corporate disclosure and transparency which details the amount spent on the business' contribution to sustainable development can enable researchers ascertain the financial implications (gains or losses) of business sustainability.

Although, there are opinions that the pursuit of sustainable development by business organizations have demerits, Lozano (2013) states that business organizations are increasingly recognizing their role in making societies more sustainable. Sisaye

(2012) stresses that the approach to sustainability in business organizations has led to innovations in accounting and reporting systems, and is characterized by increases in the volume of social and environmental disclosures to stakeholders such as institutional investors. However, there are still issues of non-standardization (Sisaye, 2011) and inability to compare the contents of disclosures made across different companies and industrial sectors (Asaolu *et al*., 2011).

According to IFAC (2006), the accounting profession has roles to play with respect to sustainability accounting and reporting. The roles played by the Professional Accountants in Business (PAIB) in the view of IFAC transcend collecting, analyzing and reporting sustainability information; rather they ought to influence sustainability reporting through strategic decision making. In the same vein, Burritt and Schaltegger (2010) argue that accounting for sustainability should necessarily lead to sustainability reporting. Zvezdov (2012) advocate that a system of generating, preparing and publishing information within accounting systems in organizations is necessary to enhance sustainability reporting.

Also, progress in sustainability reporting will help managers understand the expectations of business stakeholders, by linking sustainability performance to long-term shareholder value. Sustainability performance included in annual reports of companies can show a more authentic picture of the operating performance of companies to their shareholders. The more shareholders assess the quality of sustainability performance through a company's share price, the more companies will be able to improve on the quality of their sustainability reporting (Burritt and Schaltegger, 2010).

The paragraphs below shows discussion on review some prior studies carried out to ascertain the relationship between the disclosures in sustainability reports and share price. The core of these studies examined how share price movements are associated with firm's disclosures about their social and environmental exposures. Belkaoui (1976) observe the disclosure pertaining to environmental aspects of organizational behaviour on the stock market. Also, isolating the specific effects of pollution control expenditures on price behaviour of the stock market was difficult since there were other factors influencing share price. However, using continuously compounded rate of return of a company's shares in a particular time period, there

were significant changes in the share prices of companies which disclosed pollution control expenditures.

Furthermore, studies (Gupta and Goldar, 2005; Murray *et al.*, 2006) on the assessment of how the capital market has rewarded social and environmental activities of companies have mixed results. Gupta and Goldar (2005) examine how environmental rating of companies located in diverse manufacturing industries such as pulp and paper, auto and chlor alkali influenced abnormal returns to the share price. The relationship between both variables, that is, abnormal returns to share price and environmental performance was positive. Contrary to expectations that capital markets should reward the environmental and social activities of companies, Murray, Sinclair, Power and Gray (2006) find no association between corporate social and environmental disclosures and share price returns. Based on country differentiation along lines of development, that is, developed and less developed, there are also conflicting results. For instance, studies such as Belkaoui (1976), and Murray *et al*. (2006) are conducted in a developed country (United Kingdom) while the study by Gupta and Goldar (2005) is carried out in a less developed country (India). This conflict is a pointer to the on-going debate on how corporate social and environmental disclosures are relevant to shareholders.

Social disclosures provide information about social responsibility practices that could increase a company's reputation, reduce potential liabilities and regulatory costs. This suggests a positive association between future cash flows and voluntary practice of social reporting. On the other hand, companies that engage in substantial social and environmental activity, and disclose such, will have reduced information asymmetries and may be faced with lower cost of capital (Plumlee *et al.*, 2010). Disclosure of a firm's social and environmental impact has been argued to play a positive role in the decisions made by investors (see Hassel *et al.*, 2005). Some studies (Jenkins and Yakovleva, 2006; Momin, 2006) examine the possibility of firms contributing to sustainable development through social and environmental responsibility. Corporate accountability with respect to these aspects (social and environmental) is one possible way in which markets may be re-educated towards more sustainable modes of behaviour (Murray, 2010).

Within the context of the capital market, studies (Al-Tuwaijri *et al.*, 2004; Jones *et al.*, 2007; Moneva and Ortas, 2008; Moneva and Cuellar, 2009; Murray *et al*., 2006; Murray, 2010; Kaspereit and Lopatta, 2011; Khaveh *et al.*, 2012) examine the relationship between aggregate stock market performance and a firm's sustainability, social and environmental activities (given by disclosures or information on performance rating). These studies identify both positive and negative relationships between stock market performance and corporate disclosures.

Al-Tuwaijri *et al*. (2004) test the relationship among social disclosures, social performance and financial performance, and find a positive relationship between the variables. Based on a study undertaken by Moneva and Cuellar (2009), companies' reputation for social and environmental responsibility leads to increased market value. Similarly, Khaveh *et al*. (2012) report a significant positive relationship between sustainability reporting and share price. They point out that this relationship was a result of changes in investors' perception about the risk and continuous performance of the company as inferred from sustainability disclosures. However, Moneva and Ortas (2008) report that there is no association between social and environmental disclosures and capital market performance. Jones *et al*. (2007) find that the association between abnormal share returns and sustainability disclosure is negative and weak. Adams *et al*. (2010) find that the corporate sustainability label does not significantly impact performance of firms in financial terms, even though they advocate that corporate sustainability has the potential for shareholder value creation. Kaspereit and Lopatta (2011) find that sustainability reporting seems to have lost its potential signaling effect that exists in previous years (2007 and 2008); they also state that extensive sustainability disclosures results in lower market values.

2.1.3 Standards and Guidelines on Sustainability Reporting

A number of standards, guidelines and organizations are crucial in the development of sustainability reporting. Muller (2011) identifies these guidelines as emanating from the Carbon Disclosure Project (CDP), International Standards Organization (ISO), Global Reporting Initiative (GRI), Greenhouse Gas Protocol and United Nations Global Compact (UNGC). Also, assurance of sustainability disclosures and reporting is overseen by accounting firms namely big four - Klynveld Peat Marwick

Goerdeler (KPMG), PricewaterhouseCoopers (PwC), Ernst&Young, Deloitte and non-big four, AccountAbility principles and International Federation of Accountants (IFAC) and other consultants who are not accounting firms.

The Global Reporting Initiative (GRI) is a leading organization in the field of corporate reporting poised with a mission to promote the use of sustainability reporting by government, business and not-for-profit organizations; thereby contributing to sustainable development. The latest reporting principles and standard disclosures of the GRI (G4) were issued in July 2013 (GRI, 2013a). Previous guidelines are the G3.1 (issued in 2011), G3 (issued in 2006), G2 (issued in 2002) and the 2000 guidelines. The G3.1 guidelines issued in 2011 classify the standard sustainability disclosures along three lines namely strategy and profile, management approach and performance indicators. Based on Global Reporting Initiative (2011), organizations are supposed to declare the level to which they adhere to the guidelines when they report.

The application levels of the GRI are graded C, B and A. Where the organization has employed external assurance from accounting firms, certification bodies and sustainability consultants, an organization can declare the application levels as C+, B+ and A+. However, it is important to note that the provider of assurance offers an opinion on the organization's declaration of adherence to the guidelines (GRI, 2011). The G4 guideline is poised with increased integration of sustainability reporting into financial reporting. G4 also aligns with other reporting standards namely UNGC Principles and Guidelines for Multinational Enterprises by the Organization for Economic Co-operation and Development (OECD) (GRI, 2013a, KPMG, 2013).

This move by the GRI is timely and is in line with the advocacy of Eccles and Krzus (2010) for one report where sustainability disclosures are integrated with financial disclosures. The changes in G4 as against the previous G3.1 are greater emphasis on materiality, definition of reporting boundaries, different nomenclature for the application levels, new governance disclosure requirements and new supply chain requirements. Based on GRI G4 guidelines summarized in KPMG (2013), there are ten new standard disclosures on governance and supply chain impacts.

The principles of United Nations Global Compact (UNGC) cut across human rights, labour, environment and anti-corruption issues. The UNGC principles are mainly concerned with social and environmental aspects of sustainability. The United Nations Environment Programme (UNEP) is a body saddled with the responsibility to lead, encourage partnership with other institutions in caring for the environment to foster improvement in the quality of life both now and in the future (United Nations Environment Programme, 2012). Also, IPIECA, a global oil and gas industry association provides voluntary sustainability reporting guidelines for business organizations in that field.

The International Standards Organization (ISO) develops and publishes an international standard that ensures that materials, products, processes and services are fit for their purpose. Also¸ the Carbon Disclosure Project (CDP) provides a platform for organizations to disclose and manage information pertaining to their environmental performance as it relates to sustainability issues. The Greenhouse Gas Protocol is also used by organizations to measure and manage greenhouse gas emissions. These emissions play a crucial role in corporate accountability pertaining to environmental aspects of its operations and relationship with stakeholders.

AccountAbility is a not-for-profit organization that introduced the AA1000 stakeholder engagement standard; and the latest version of this standard was issued in 2011. This stakeholder engagement standard is based on the notion that without quality stakeholder engagement, there can be no quality sustainability disclosures (AccountAbility, 2011). There is also AA1000 Accountability Principles Standard (AA1000APS) whose framework helps businesses identify, prioritize and report on their sustainability issues and performance. The International Standards on Assurance Engagements (ISAE) 3000 is another internationally recognized standard designed by International Federation of Accountants (IFAC) to guide accounting professionals on matters arising from sustainability and corporate responsibility (International Federation of Accountants, 2010). IFAC is an internationally recognized body of accountants to which several other national accountancy associations such as (Institute of Chartered Accountants of Nigeria and Association of National Accountants of Nigeria) belong.

Echegaray *et al.* (2008) and Ernst&Young (2013) note that sustainability reporting is a growing area, and organizations should recognize the opportunities it affords by addressing the issues relevant to its actualization. Adegbite *et al.* (2012) note that organizations incorporate sustainable practices in business operations in order to increase shareholders' values, improve market share and competitiveness. Center for Corporate Citizenship and Ernst&Young LLP (2013) reveal that sustainability reporting provides major value to organizations because it enhances correct measurement of social and environmental performance; improves reputation, compliance with regulations, risk management, cost savings which enhances long-term profitability and access to capital.

In Nigeria, the Securities and Exchange Commission (2011) stipulates the information that an organization's board should disclose as part of its relationship with other stakeholders. The board of directors is expected to report annually on sustainability issues including the company's social, ethical, safety, health and environmental policies and practices. This is quite narrow unlike the broad definition given by the G3.1. Also, Central Bank of Nigeria (2012), the regulator of banks and financial institutions in Nigeria issued a Circular to banks and financial institutions in September 2012 that requires business organizations in the financial sector to report on sustainability. Unlike the SEC's Code of Corporate Governance, the CBN guidelines on sustainability reporting are more comprehensive.

Specifically, the companies in financial services sector are expected to report on the development of appropriate environmental and social policies, environmental and social procedures, environmental and social reporting criteria and environmental management programme addressing climate change and greenhouse gas emission reduction, water efficiency, waste management, environmentally friendly facilities construction and management. Also, such report should comply with relevant labour and social standards; implement a community investment programme and apply environmental and social standards, relevant to third parties. Financial institutions were also expected to report on the progress made in implementing this principle by 31st December 2013 and produce the first complete sustainability report by 31st December 2014. The report may stand-alone or be integrated within annual reports. They were also expected to fall in line with the Global Reporting Initiative (GRI)

guidelines applicable to the financial sector. Independent third party review was also necessary, hence the financial institutions' regulators required that banks had their information assured and audited.

The sustainability reporting guidelines for banks and financial institutions are more comprehensive than the SEC Code of Corporate Governance disclosure requirements. Also, the former may be able to influence business organizations that are not in the financial sector to compliant to the tenets or requirements of sustainability reporting, because such organizations may require financial support or assistance from the financial services sector.

2.1.4 Reasons for Corporate Sustainability Reporting

The literature on the reasons or motives for sustainability disclosures and reporting infers that organizations engage in sustainability reporting primarily to gain legitimacy from the institutional environment, or to convey accountability. According to Jones (2010), organizations engage in sustainability reporting to enhance their competitiveness, in comparison with other companies producing similar product. Competitiveness or standing out among other organizations can be traced to the goodwill or intangible asset value of the firm because it cannot be physically measured in monetary terms. Bellringer *et al.* (2011) show that in the public sector (local governments) in New Zealand, sustainability reporting is not just undertaken to ensure a more sustainable world but is required for accountability, financial incentive and provision of leadership.

A company's social and environmental issues can materially affect its overall performance in terms of corporate image and reputation. The reporting of these issues among other corporate sustainability indicators can be traced to demands from various stakeholder groups such as investors, customers, employees, Non-Governmental Organizations (NGOs), media and community, for increased levels of transparency and disclosure, ethical reasons and community concerns. Among others, corporate image and reputation were of utmost importance to the reporters. The importance of corporate image and reputation shows that reporting is carried out in order to gain and maintain license to operate from the institutional environment,

which is made up of various stakeholder groups (Tilt *et al.*, 2006; Dobbs and Van Staden, 2011).

When business organizations succeed in making profit and solving sustainability issues, they are bound to attract more capital from the capital market which plays key roles in allocating available financial resources for productive use. Therefore, business organizations cannot ignore issues of sustainability, because it affords them greater opportunity to raise funds through from capital markets to keep growing. However, business organizations can be re-educated by capital markets towards the right sustainable behaviour. On the basis of these arguments, it can be deduced that business organizations can communicate through sustainability reporting in order to attract investors (Murray *et al*., 2006; Kwanbo, 2011; Ioannou and Serafeim, 2014).

The financial and non-financial information signaled to investors by business organizations can alter their investment behaviours. Bushee and Noe (2000) note that institutional investors are attracted to firms as a result of their corporate disclosure practices. United Nations Conference on Trade and Development (2008) particularly note that non-financial information is gaining importance; and although short-term investors may not be interested in corporate responsibility reporting, long-term investors such as pension funds are showing interests in such reporting in order to project future opportunities, risks, liabilities and the general quality of operations of such company.

Corporate visibility, which is measured by media exposure and legal requirements, are some other reasons for sustainability reporting. Business organizations also avoid loss of reputation arising from publicity of inappropriate behaviour by reporting on issues that could boost their intangible value. They may also engage in sustainability reporting when faced with negative publicity (Brown and Deegan, 1998; Garcia-Ayuso and Larrinaga, 2003; Pollach, 2011; Hahn and Kuhnen, 2013). This is because such reporting entities want to convince the relevant stakeholders that they have taken corrective measures on risks arising from their economic, environmental and social impacts as a result of operations.

2.1.5 Empirical Studies on External Factors and Corporate Sustainability Reporting

Past studies (Adams, 2002; Adams and Larrinaga-Gonzalez, 2007; Herschovis *et al.*, 2009; Martha *et al.*, 2012; Schaltegger, 2012) argue that in order to improve the information contained in corporate reports, researchers should seek to understand specific circumstances within which corporate reports are made. This should aid in understanding the hurdles faced by organizations, which prevent them from engaging in the practice of sustainability reporting. The specific circumstances that lead to changes in corporate reporting and disclosure include country of origin, contexts – social, political, economic and cultural, events in the society, media pressure, stakeholder power, regulators and pressure groups.

The general contextual factors can also be referred to as country level factors because they vary from country to country (Adams, 2002; Martha *et al.*, 2012). These variations in country level factors could be as a result of corporate governance, market economies, country of origin, country status (that is, developed or developing), political systems and legal systems peculiar to each country. It has been argued that the organizational field can influence sustainability reporting. Business external environments have peculiar characteristics which can influence the choices of decision makers in organizations about sustainability reporting.

In the external business environment, there are investors, consumers, local and foreign lenders, stock exchange and industry regulators, accounting firms, external governance institutions, successful industry leaders and foreign affiliated companies. From an institutional theory perspective, these constituents of an organizations' external environment exert different pressures on organizations' practices (including sustainability reporting). In summary, these pressures can be coercive, normative or mimetic.

Coercive pressures emanate from institutions that have resources which organizations depend on, and such resources could be financial or regulatory. Therefore, because such institutions have the authority to withhold resources from business organizations for not complying with certain rules or behaviour, the former is said to have coercive influence over the later. Research on the influence of

coercive pressures on sustainability reporting has identified the following factors namely: government policies (Joseph, 2011; Cahaya *et al.*, 2015), stock market and industry regulators (Hess, 2014; Ioannou and Serafeim, 2014; Kumar and Devi, n.d), size of organizations (De Villiers *et al.*, 2014; Mucciarone *et al.*, 2012).

Also, normative pressures influencing sustainability reporting arising from accounting firms (Fernandez-Feijoo *et al.*, 2016) and membership of external governance institutions (Adeniyi, 2016; Weber *et al.*, 2016) have been examined in the literature. Cahaya (2011) has assessed mimetic pressures which arose from successful industry leaders and foreign affiliated companies.

From an institutional theory perspective, each of the pressures – coercive, normative and mimetic can influence the quantity and quality of sustainability information reported by companies. Also, it has been argued that it is better to incorporate the pressures in one study because the influence of one form of pressure rarely leads to the adoption sustainability reporting (Zhao, 2011). Therefore, this study examines factors namely: size, regulation, accounting firm, membership of governance bodies, reporting of the most successful and foreign affiliation influencing private sector organizations' sustainability reporting. These factors are a mix of coercive, normative and mimetic pressures and could assist in shedding more light on the state of corporate sustainability reporting in Nigeria.

This section expounds on the factors in the organizational field namely size, regulator, accounting firm, governance institutions, industry leaders and foreign presence.

a. Company Size

A company is made up of shareholders who are attracted by financial and other information about the choice of shares to invest in. Also, a company is made up of employees who are responsible for carrying out daily operations that pertain to the company. The size variable in corporate reporting is often measured as the total of assets, number of employees and amount of revenue. Assets are resources owned and controlled by organizations; they are financed by the capital contributed in form of equity or shares and liabilities. The liabilities are in form of short and long-term loans made available to such an organization by financial institutions and

individuals. Usually, the amount of total assets that a company has is representative of the following namely: number of shareholders, number of debenture holders, and other long-term liabilities.

Also, the size of business organizations could also be a factor that leads to mimetic pressure. According to DiMaggio and Powell (1983), larger companies are more susceptible to similar reporting practices. The presence of more stakeholders in larger companies means there are more people to whom such companies are accountable to. According to Joseph (2010), size is a coercive pressure that influences organizations to be involved in sustainability reporting. It is a coercive pressure because the persons (stakeholders) provide resources that enable the company to operate effectively. Some of the stakeholders are regulators, finance providers, Delmas and Toffel (2005) state that the host community of a company can impose coercive pressure through filing of lawsuits against them; government bodies are backed by legislation which empowers them to take disciplinary action against the companies within their jurisdiction. The effects of large company size are: greater visibility to its stakeholders (Setyorini and Ishak, 2012), economies of scale that results in lower costs of providing corporate disclosures. Larger companies have more financial resources which they can utilize unlike smaller ones which could be struggling to break even. Conversely, smaller companies tend to hide information because of competition and survival.

The findings in the literature on the relationship between company size and sustainability reporting are inconclusive. Studies (Cormier and Magnan, 2003; Quick, 2008; Elijido-Ten, 2010; Uwuigbe, 2011; De Villiers *et al*., 2014) find that size was a determining factor of sustainability disclosures as well as social disclosures, environmental disclosures. Also, Tavares and Rodrigues (2016) deduce that size was a determinant of sustainability disclosures of public sector organizations. However, there is no significant relationship between company size and social disclosures in Ebiringa *et al.* (2013). There is also no significant relationship between company size and environmental disclosures in De Villiers *et al*. (2014). Interestingly, Ebiringa *et al*. (2013) is based on quoted oil and gas companies in Nigeria which are environmentally sensitive due to the nature of their operations.

The presence of insignificant relationship between company size and disclosures could be attributed to managers' assessment of costs and benefits of releasing the disclosures. Where costs exceed benefits a company could decide not to disclose certain information. More so, companies operating in the oil and gas sector have huge capital base, making size of no significant effect. It is also possible that social disclosures across companies to be similar, that is, there is mimicking effect within the sustainability reporting practices of companies within a particular industry. This finding (Ebiringa *et al*., 2013) in the Nigerian context creates vistas for further research into the extent of similarity in sustainability reporting across companies within the oil and gas industry from 2012 going forward. It is also important to ascertain the sustainability of companies in the oil and gas industry because of its contribution to Nigeria's Gross Domestic Product (GDP).

b. Regulation

Coercive pressures are those arising from regulators and those that provide resources used by companies in carrying out business operations. For example, companies whose shares are quoted on stock markets are answerable to the Securities and Exchange Commission (SEC). The SEC can subject such companies to codes and guidelines to promote best practices in certain areas of corporate life. The code of corporate governance (CGC) by SEC is one of the ways through which companies are guided to improve on their reporting practices. The 2011 CGC by the Nigerian SEC recognizes that a business has stakeholders. This is a step that shows that they are interested in the safety of shareholders, but also in the overall interest of business stakeholders.

Empirical studies on corporate governance models and sustainability reporting have diverse findings. Huijbregts (2013) finds that stakeholder-oriented countries are associated with a higher likelihood of sustainability reporting. On the other hand, Thijssens *et al.* (2015) show that companies in shareholder-oriented countries report more environmental indicators of sustainability than companies in stakeholder-oriented countries. In Thijssens *et al.* (2015) the sample companies were classified based on their country, that is United States of America (US) and Non-US.

When companies are within environments with high levels of litigation, there is tendency that they may not engage in sustainability reporting unless there are mandated to do so by a regulatory body or Act such as SEC, Companies Act and Industry regulator. This could also be a result of fear of attracting legal issues with respect to material sustainability issues disclosed in company reports. These findings suggest that in high risk litigation environments, companies may tend to disclose more good than bad news.

Regulation of sustainability reporting is a way to influence companies through provision of reporting guidelines and filing rules by the regulatory body (government, stock market or others). Additionally, regulation of corporate disclosure comes with costs to be borne by the company because there are expectations from the regulators such as accuracy and completeness of a company's performance. The costs of preparing sustainability reporting include costs of data gathering, employee training, internal audit, writing and external assurance.

These costs notwithstanding, studies (Peters and Romi, 2009; Ioannou and Serafeim, 2014) find that regulations pertaining to environment resulted in increased environmental disclosures pertaining to carbon emissions. In both studies, Japan is one of the sampled companies where mandatory Greenhouse Gas accounting system has been implemented. France has required mandatory reporting of financial, environmental and social issues pertaining to sustainability since year 2001. However, companies in France focus mainly on environmental aspects while deficiencies are noted in the financial and social aspects of sustainability disclosures (Kuhn *et al.*, n.d.).

The presence of regulatory requirements has been argued to less likely pressurize companies to report negative or bad news in sustainability reports (Bell and Lundblad, 2011). However, there is a need for regulators to follow-up companies under their jurisdiction to ensure that they are reporting in line with the reporting guidelines provided for their use and they have implemented a reporting process that takes into cognizance the accuracy and credibility of the information reported. Another approach to regulating corporate disclosures is through Securities and Exchange laws. Studies (Pannu, 2014; Bartels, Fogelberg *et al.*, 2016) state that laws made by the Securities and Exchange body have the ability to compel disclosures.

Disclosures are regulatory mechanisms through which corporate transparency is built. Some of the countries where stock exchanges regulate sustainability through disclosure requirements include Canada, United States of America, China, India and Nigeria.

Contrary to expectations, Pannu (2014) notes that Canadian securities law needs to improve in the area of enforcement and guidance. In a study on the development of sustainability reporting, the Certified General Accountants Association of Canada (2005) reported that sustainability reporting was growing at a slow pace. Their recommendation is that without mandatory regulatory requirements, the widespread adoption of sustainability reporting was likely to take some time.

In China-based studies on sustainability reporting (Zhang *et al.*, 2007; Zuo *et al.,* 2014), there are similar findings as the top 50 listed companies and construction companies increased sustainability reporting. Similarly, Klynveld Peat Marwick Goerdeler (2015) finds that companies in the Americas are ranked second place in corporate responsibility reporting which includes sustainability reporting. More so, more companies in the Asia Pacific region (including China) report the most on corporate responsibility. The findings of Klynveld Peat Marwick Goerdeler (2015) are consistent with those of prior studies such as Zhang *et al*. (2007) and Zuo *et al.* (2014).

According to Whitley (1999), the powers of the state affect its dominance on the economy. The extent to which the state regulates market boundaries on the activities of business organizations through laws or regulations is vital in determining organizations' sustainability commitments, performance and reporting on same. Coercive pressures occur through legal obligations which could impose sanctions on business organizations that neglect them. According to Joseph (2010), different states have different forms of coercive pressures on the councils to implement sustainability reporting.

c. Accounting Firm

Normative pressures in an organization's external environment results from the level of networking among professionals in that environment. One of such professionals is

the independent auditor who is saddled with the responsibility for giving an opinion on the financial reports of business organizations. Jalaludin *et al.* (2011) state that normative pressures emanating from professionalism gives room for similar education and networking among members of such professional circles. Professional groups such as accounting firms provide their members with networking exposure. Consequently, the more business organizations relate with members of similar professional groups, the more sustainability disclosures they are likely to have.

Also, rating of organizations and awards given on the basis of sustainability performance could be a source of normative pressures, because organizations tend to compare their practices with others within their sphere of success. Professional networks include big four accounting firms, foreign presence, industry affiliation, membership of external governance bodies.

Normative pressures emanate from the desire for an organization to conform to the norm of certain professional groups, in order to be accepted by them. The platforms mentioned above offer business organizations that subscribe to them networking exposure; for instance, professional associations have the ability to enhance how organizations ought to report to stakeholders. According to Ioane (2014), because members of the same professional association pass through same form of education, there is tendency for similarities in their behaviour as they spread through organizations. One of such professional associations is accounting firms. There are Big four, medium and small accounting firms. The size of such firms is often measured by the types of services they offer, net worth, number of employees, and international presence.

The big four accounting firms provide services in auditing and assurance of financial reports, sustainability reporting, management consultancy, amongst others. When organizations patronize the services of accounting firms who are similar in this regard, they are influenced to adopt certain corporate reporting practices, which they are privileged to observe through their relationship. Based on studies (Johnson, 2013; Ioane, 2014), normative pressure occurs when organizations draw from similar pool of professionals. For example, accounting firms have members who are trained in similar manner. Also, because these accounting firms render services to

organizations, there is tendency for organizations that patronize them to imbibe similar kind of reporting.

Another institutional factor that exists in the external business environment is the financial auditor of an organization. Auditing of financial statements has dominated the assurance industry. However, studies (O'Dwyer and Owen, 2005; O'Dwyer *et al.*, 2011) note that sustainability reports need to be audited in order to convey credible and reliable information provided to stakeholders about economic, social and environmental performance. Auditors also have analytical procedures for assessing risks that can affect a business, which often include those posed by environmental and other sustainability issues.

Studies (Barako, 2007; Lan *et al.*, 2013) have been carried out to examine the influence of auditor type on voluntary disclosures. The findings of these studies are mixed. The financial auditor type has a negative relationship with forward-looking disclosures and general strategic disclosures of sampled companies; positive relationship exists between financial auditor type and social disclosures (Barako, 2007). Similarly, auditor type is significantly associated with voluntary disclosures (Lan *et al*., 2013). Fernandez-Feijoo *et al.* (2016) show that companies having a Big Four accounting firm as financial auditor have increased sustainability disclosures; companies with highest levels of sustainability disclosures also subject such information to assurance. On the other hand, Salteh *et al.* (2011) do not find a significant relationship between auditor type and voluntary disclosure.

One reason for the positive relationship between auditor type and voluntary disclosures is that auditors that belong to the Big Four category have similar training and are exposed to networking within their professional circles, increasing the likelihood of similar disclosure practices across their client companies. More so, Big Four accounting firms have greater international presence which could make them more inclined to international corporate reporting practices (such as sustainability reporting). Chiang and Northcott (2012) note that there was better support for auditors in the Big Four firms due to access to information from their international network. However, a negative relationship between auditor type and sustainability disclosures could be attributable to avoidance of risks that could arise from the disclosures.

d. Membership of Governance Bodies

Pressure groups have been identified in the literature as a normative influence on the sustainability reporting practice of organizations. Pressure groups have the ability to drive corporate bodies to align with public interests, including improved sustainability performance. In the same vein, these pressure groups could act as governance institutions for the purpose of preserving the values that they stand for. The practice of leaving sustainability governance to the board of directors in companies is good, but oversight from an independent body may be better. This assertion is based on the tenets of internal and external auditing in the traditional financial accounting context, where, organizations' financial statements and reports are audited by persons within and outside the organization to reinforce information credibility.

Literature on the influence of sustainability governance on sustainability reporting is growing because it has been recognized that the board of directors of an organization has the ability to integrate sustainability issues into their strategy. However, a lingering issue is whether the subscription of organizations to sustainability governance institutions improves sustainability reporting. Some of the environmental governance institutions include United Nations Environmental Programme Finance Initiative (UNEP FI), UNGC and IPIECA. Research on the influence of sustainability governance institutions on sustainability reporting are not many compared to those on sustainability governance arising from organizations.

Global Oil and Gas Industry Association for Environmental and Social Issues (2014) in a survey of its members and non-members found that the guidelines have provided improved quality reporting in terms of stakeholder engagement, assurance and identification of material issues such as health and safety, investment in local communities, climate change and Greenhouse gas emissions that a sustainability report should contain.

Studies (Adeniyi, 2016; Weber *et al.*, 2016) examine the influence of UNEP FI codes of conducts on sustainability reporting. They find that members of UNEP FI had more disclosures on sustainability. Although, critics argue that subscription to such codes on sustainability reporting favors large companies, the codes are able to

provide guidance on the reporting of corporate members on issues such as climate change, social and environmental aspects, human rights, water and waste compared to non-members. The voluntary membership of UNEP FI is a normative influence because it arises from interaction of its members through training and guidelines on sustainability reporting.

The findings of these prior studies (Global Oil and Gas Industry Association for Environmental and Social Issues, 2014; Adeniyi, 2016; Weber *et al*., 2016) show that subscribing to governance institutions can help to improve organizational legitimacy. Legitimacy implies that such organizational practices are in line with societal norms and values which include accountability for impacts on society and other sustainability indicators such as climate change, energy reduction, waste, water usage, Greenhouse gas emission, and pollution, amongst others.

e. Reporting of the Most Successful Company in an Industry

Mimetic pressures emanate from copying best practices of those business organizations that are perceived as successful. The relationship between profitability and sustainability reporting of organizations has been examined in the literature. The essence of such studies is to ascertain whether sustainability reporting is a function of profitability, or whether companies tend to mimic the reporting practices of the most successful (in terms of profit) in the industry. Another aspect of research is whether profitability is a function of sustainability reporting. The studies preoccupied with whether sustainability reporting is a function of profitability have mixed outcomes.

Studies (Aggarwal, 2013; Bassey *et al.*, 2013; Mohamad *et al.*, 2014; Nugroho and Arjowo, 2014) find that aspects of sustainability reporting significantly influence profitability. Bassey *et al*. (2013) assess the relationship between environmental cost and firm profitability, and argue that environmental costs increase a company's development in areas such as energy, material and waste management. Furthermore, Aggarwal (2013) finds that environmental aspects of sustainability reporting had negative influence on profitability, and governance aspects had positive influence on sustainability reporting. Reporting of sustainability performance entails that impacts on the environment are disclosed including greenhouse gas emissions, other organic

pollutants, waste disposal and usage of renewable materials. Consequently, these practices could impair profitability in the short-term, and investors may not want to invest based on this performance.

Additionally, research that shows positive relationship between sustainability reporting and profitability implies that a company can bear the costs associated with improved sustainability performance and reporting. Conversely, research that shows negative relationship between sustainability reporting and profitability implies that a company chooses to engage in reporting based on long-term benefits. In other words, for such companies, at the present there are not enough resources for reporting but there is expectation of benefits that accrue to the company in the long-term.

The relationship between profitability and sustainability reporting can be assessed using a new institutional approach. This approach seeks to ascertain whether the sustainability reporting practices of companies is related to the reporting practices of the most successful company (in terms of profitability). This approach to studying sustainability reporting recognizes that the reporting practices of a company could be influenced by the industry leader (in terms of profitability and market share). A company that leads in a particular industry is prone to adopting reporting practices that portray it in good light, with companies in that industry tending to imitate such reporting practices in order to boost their competitive advantage.

Researchers (Aerts *et al.*, 2006; De Villiers and Alexander, 2010) find that companies copy the reporting practices of other companies within the same industry. 'Other companies' also includes industry leaders, for which size has been used to measure the degree of industry leadership. In other words, smaller companies tended to copy the disclosure practices of larger companies. Apart from size, industry leadership can be measured in terms of revenue, profitability and market share. Since profitability can be used to ascertain industry leadership, this study ascertained the degree to which sustainability reporting of companies is related to the reporting practices of the industry leader in terms of profitability.

The use of profitability as a measure of industry leader influences on corporate practices has featured in Haveman (1993). Political visibility is enhanced when a company is successful in terms of profits, and huge profits also indicate large

company size (Hibbitt, 2003). Companies are likely to mimic the sustainability reporting practices of the industry leader when there is uncertainty surrounding the way to approach a disclosure practice such as sustainability reporting. This uncertainty is associated with the contents and mode of sustainability reporting.

f. Foreign Presence

Mimetic pressures could arise from foreign presence of organizations. Consequently, organizations that operate in a foreign country may copy the reporting practices that are prevalent in that foreign country; they may want to access certain benefits by emulating or mimicking their reporting practices. From an institutional theory perspective, foreign affiliation is an external factor that is capable of influencing sustainability reporting of organizations. A foreign affiliated company is one that is related to a company operating in any other country. This status gives rise to two implications namely adherence to parent company and host country requirements (Sufian, 2012). Contrary to theoretical expectations, in studies (Amran and Devi, 2008; Sufian, 2012) no influence of foreign affiliates on social reporting is found. The implication of their findings is that companies that have foreign affiliation do not have more social disclosures. These studies were limited because stand-alone sustainability reports were not used in gathering data. The data was based on information collected from annual reports. The separate sustainability reports could contain more social disclosures.

Similarly, Asaolu *et al*. (2011) find that unlike their foreign affiliated counterparts, multinational oil and gas companies operating in Nigeria do not report on some aspects of sustainability reporting. Interestingly, oil and gas companies are environmentally-sensitive, but the finding of Asaolu *et al*. (2011) is not in tandem with theoretical expectations as parent companies do not make sustainability reporting compulsory probably because the host country (Nigeria) at that time did not regulate the enforcement of sustainability reporting.

Peters and Romi (2009) report that the level of disclosures is related to the market structure of countries. Huijbregts (2013) affirm that the companies within countries that depend on funds from stock markets are associated with a higher likelihood of sustainability reporting, compared to companies that depend more on funds from

banks. In market-based financial systems, organizations' access to funds depends on how their sock is rated by investors. Hendey (2013) also argues that one of the ways coercive pressure is exerted upon business organizations is by withdrawal of the financial support by financial institutions which fund them in order to compel them to adapt to a behaviour or policy.

Wanderley *et al.* (2008) find that the country of origin where a business organization operates has more influence than the industrial sector on the web disclosures on corporate social responsibility of selected companies in Asia and South Africa. Adnan *et al.* (2010) confirm the influence of the country of origin in driving corporate social disclosures; thereby concluding that organizations in emerging markets may prefer to discuss economic performance rather than sustainability performance, even in corporate reporting. Gallego-Alvarez (2012) report that when the headquarters of companies are in countries whose membership of Kyoto Protocol have been endorsed, such companies are more susceptible to voluntary environmental disclosure. These studies point to the role of the country where an organization was registered in influencing corporate reporting.

From the literature, there is a dearth of studies on foreign affiliation and sustainability reporting in the Nigerian context. This gap creates an opportunity to examine the influence of foreign affiliation on sustainability reporting.

Based on the studies reviewed above it is apparent that the external environment of companies can affect corporate reporting practices.

2.1.6 Empirical Studies on Internal Business Organizational Factors and Sustainability Reporting

Summarizing the research on the relationship between internal business organizational factors and sustainability reporting, it is crucial to note that research cuts across different time periods in various countries such as Denmark (Kaspersen, 2013), Asia-Pacific region (Amran *et al.*, 2014), United Kingdom (United (Bebbington *et al.*, 1994; Aburaya, 2012), United States (Eccles *et al.*, 2012), World's largest companies across different countries (Faisal *et al.*, 2012), China, India, Malaysia and the United Kingdom (Adnan *et al.*, 2010), Canada (Herschovis *et al.*, 2009), Sweden (Wallen and Wasserfaller, 2008), Bangladesh (Belal and

Owen, 2007), Australia (Adams and Larrinaga-Gonzalez, 2007), Ireland (O'Dwyer, 2002), Nigeria (Owolabi, 2001), Shanghai (Rowe and Wehrmeyer, 2001).

Studies such as Adams (2002), Stubbs and Higgins (2012) argue that internal corporate contextual factors can influence sustainability disclosures. The internal context factors which influence sustainability reporting are those that originate from organizational processes and structures such as stakeholder engagement, sustainability framework, board committee on sustainability and assurance. The perceptions of corporate managers towards sustainability reporting can also influence what companies report. In the following sub-sections, the internal processes and structures of organizations that influence sustainability reporting are expounded.

a. Stakeholder Engagement

According to Waris and Muhammad (2013), the view of stakeholders plays a crucial role in making organizations adopt certain reporting practices; and by extension sustainability disclosures. The assertion of Elsakit and Worthington (2012) is that the importance of one stakeholder group can vary. Therefore, when one or more stakeholder groups' do not participate in the process of reporting, there is tendency to have low level disclosure practices. This signifies that there is a symbiotic relation between stakeholders and corporate disclosures. However, when stakeholders choose to be less concerned about sustainability issues, the managers tend to withdraw from disclosing relevant sustainability information.

Traditionally, business organizations engage with shareholders through Annual General Meetings (AGM), during which the financial reports of the business are presented to the shareholders. While this is a form of engagement with capital providers, sustainability reporting requires involvement of other business stakeholders such as local communities, financial institutions, regulators, employees, customers and suppliers. According to Adams and McNicholas (2007), stakeholder engagement drives the needed change to incorporate stakeholders in the sustainability reporting process. This change occurs when organizations involves people who are affected either by the decisions they make, or influence implementation of the decision.

Stakeholder engagement does not terminate at the level of preparing reports for a wide range of users; it includes communicating and consulting with business stakeholders by involving them in decision making. Stakeholder engagement requires identification of business stakeholders relevant to the particular company, identification of their needs and involving them in decision making. According to Ayuso *et al.* (2014), stakeholder engagement is a consequence of the stakeholder approach to corporate governance. This approach to corporate governance recognizes that there are persons other than shareholders who are affected by the operations of business organizations. Thus, a company needs to be governed in the interest of its stakeholders.

Another reason for stakeholder engagement is that the externalities which organizations generate as a result of their operations affect stakeholders and overall company value. This is the reason for their incorporating stakeholders' interests in decision making. Based on studies (Manetti, 2011; Epp, 2013) stakeholder engagement can be measured by identification of stakeholder groups, basis for selection of stakeholders, frequency of engagement with stakeholder groups, material issues raised during engagement, organizational response through reporting, and representatives of stakeholder categories in governance bodies.

Studies such as Manetti (2011), Eccles *et al*. (2012), and Greco *et al.* (2015) examine stakeholder engagement and sustainability reporting. They argue that engagement with stakeholders is important in defining material and relevant sustainability reporting information, and helping the organizations have representatives of the various stakeholder categories in their management team. There are mixed results from the three studies. An assessment of sustainability reports of organizations included in the study of Manetti (2011) shows no stakeholder engagement. Companies which report more on sustainability indicators engage with their stakeholders (Eccles *et al*., 2012; Greco *et al*., 2015). Kaur and Lodhia (2014) find that companies engaging in sustainability reporting take stakeholder engagement seriously given by their disclosures on approaches for engagement and challenges encountered.

Studies such as Murguia and Bohling (2013) and Brandt (2015) find that stakeholder engagement is inadequate given the one-sided communication process characterized

by stakeholders raising issues and companies' non-explanation of how they were addressed. Interestingly, these studies are made up of more environmentally sensitive companies, implying that they pay more attention to stakeholder management than engagement. Kaspersen (2013) stress that the business-case approach rather than accountability approach to sustainability reporting may be responsible for absence of adequate stakeholder engagement.

The business case for sustainability reporting is often premised on the need for a business to prepare sustainability reports for the purpose of financial stakeholders (Kaspersen, 2013). On the other hand, sustainability reporting as an accountability mechanism implies organizations' readiness to report true and fair information on sustainability performance cutting across economic, environmental, social and governance aspects. Also, an accountability approach to sustainability reporting implies that an organization identifies the stakeholders in its internal and external business environment who are all pivotal to its success and continuity. Such awareness could foster greater co-operation and engagement between company managers and stakeholders, thereby, resulting in feedback from corporate stakeholders.

Stakeholders are instrumental in ensuring that an organization acts in the public interest. Although, stakeholder engagement is for the enhancement of organizational legitimacy, it may be impracticable for organizations to act on the views of all stakeholders at a particular point in time. Organizational legitimacy is a process and not a destination; it is not an end in itself. Consequently, organizations that have inadequate stakeholder engagement in terms of approach of dealing with issues that stakeholders have raised can improve on their internal mechanisms and constructively develop ways to communicate with stakeholders.

The aforementioned studies (Manetti, 2011; Eccles *et al*., 2012; Kaspersen, 2013; Murguia and Bohling, 2013; Brandt, 2015; Greco *et al*., 2015) were undertaken in foreign countries. Based on the literature reviewed, there has been no assessment of stakeholder engagement in relation to sustainability reporting in Nigeria. In order to ascertain whether sustainability reporting is for legitimacy or accountability purposes, it is imperative to examine organizational structures and processes in relation to stakeholder engagement.

b. Board Committee on Sustainability Issues

The influence of governance indicators such as board composition and characteristics, board structure, board process, board's resource role, board's strategy role, board's service role and board's monitoring role on sustainability reporting and organizations' sustainability performance has been researched into in prior studies (Rubbens *et al.*, 2002; Ricart *et al.*, 2005; Hassan, 2010; Rankin *et al.*, 2011; Aburaya, 2012; Eccles *et al.*, 2012; Amran *et al.*, 2014; Tamoi *et al.*, 2014). Ricart *et al*. (2005) express concerns over the assessment of corporate governance and sustainable development issues (including sustainability reporting) as separate fields of inquiry, leading to less examination of the interactions between the two concepts. However, a reason for recent enquiries into interactions between corporate governance and sustainability reporting is movement from the corporate objective of minimizing agency conflicts (between owners and managers) to acting in the interest of stakeholders.

Accountability towards shareholders is displayed in financial terms, showing them profit that is made by injection of resources into the business. It is on the basis of the need to expand current definition of accountability, that some corporate governance codes in Africa are redefining their focus towards stakeholders (King III Code of Corporate Governance in South Africa; SEC 2011 Code of Corporate Governance in Nigeria). Brennan and Solomon (2008) noted that previously, codes of corporate governance adopted an agency theory perspective which seeks to reconcile business manager and shareholder conflicts; but this has changed because best practice in corporate governance is characterized by increased stakeholder-oriented focus.

The board of directors has been described as a corporate governance mechanism responsible for monitoring, directing and controlling organizations towards the fulfillment of their goals (Osisioma, 2013). One of such goals is improving sustainability performance and the inclusion of the board in overseeing sustainability issues can help to track and monitor what organizations report. In the same vein, studies (DeSimone, 2014) concur that through the board chairman, or any committee of the board, sustainability issues are overseen in business organizations. Board oversight on sustainability issues is also advocated by the GRI guidelines and the International Integrated Reporting Council (IIRC) framework. Some board

committees responsible for overseeing sustainability reporting are sustainability committee, audit committee and risk management committee.

The studies (Rubbens *et al*., 2002; Ricart *et al*., 2005; Adnan *et al*., 2010; Hassan, 2010; Eccles *et al*., 2012; Rankin *et al.*, 2011; Aburaya, 2012; Amran *et al*., 2014; Tamoi *et al*., 2014) on the influence of corporate governance on sustainability reporting have mixed results. Studies (Rubbens *et al*., 2002; Ricart *et al*., 2005; Hassan, 2010; Rankin *et al*., 2011; Aburaya, 2012; Eccles *et al*., 2012) show that companies that engage in sustainability reporting or make effort to improve on their sustainability performance by changing their governance structure, and establishing a separate committee on sustainability. Conversely, Amran *et al.* (2014) find that some company boards do not carry out oversight of sustainability reporting. A reason for this finding could be that the board size is not large enough to meet the responsibility of board oversight on sustainability issues. Tamoi *et al*. (2014) find that organizations where the board is large, with members having higher degrees, disclose more sustainability information.

c. Assurance or Third Party Verification

A tool that is used to measure the credibility and transparency of corporate reporting is external verification. Zulkifli *et al.* (2007) argue that without such verification, social and environmental reports will be futile. In their study, accounting professionals concur that it is necessary to verify information in corporate reports through auditing. The objective of auditing is to provide objective assessment of the measurements used to value social and environmental costs and performance indicators. However, Sawani *et al.* (2010) argue that the low level of awareness of the need for assurance of sustainability information and absence of regulatory pressure to make its practice mandatory is one of the reasons why companies do not subject their sustainability reports to assurance.

Although, it is apparent that assurance on corporate disclosure raises its credibility; the mandatory verification of sustainability reporting is still an unresolved issue in a less developed country such as Nigeria. Where sustainability reporting is not a mandatory requirement, it may also be difficult to impose verification. The issues that sustainability reporting raises are: whether the information represents a true

picture of sustainability performance, and, whether the information content is useful to the relevant stakeholders. The more useful and informative the information reported is, the more likelihood of an external verification that will help to reinforce the characteristics of the information.

According to the Global Reporting Initiative (2013b), benefits of assurance include the following: increased recognition, trust and reliability, reduced risk and increased value, improved board and chief executive officer engagement, strengthened internal reporting and management systems and improved stakeholder communication. The GRI identified accountancy firms, engineering firms and sustainability services firms as professionals that provide external assurance verification. As at 2012, 64% of providers of external assurance of sustainability reports were accounting firms. Perego (2009) find that assurance procedures a company engages and format of reporting improves when big four accounting firms were involved in provision of assurance on organizations' sustainability reporting. It is also reported that non-accounting firm assurance firms positively affect assurance quality in terms of their recommendations and opinions expressed in a sustainability assurance statement.

Studies such as Faisal *et al*. (2012) and Moroney *et al.* (2012) find that assurance improves the quantity of sustainability disclosures. Regulatory mechanisms that enforce assurance guidelines and standards have also been argued to sustain sustainability reporting and assurance (Adam, 2002; Shum *et al.*, 2009). The International Standard on Assurance Engagement 3000 (ISAE3000) are used in performing assurance services on sustainability reports. According to Zhou (2010), accounting firms subscribe to the ISAE3000 when providing assurance on sustainability reports than other types of standard such as AA1000AS of AccountAbility.

Studies such as Zhou (2010), The Association of Chartered Certified Accountants and Net Balance Foundation (2012), and Sam and Tiong (2015) find that the level of assurance of sustainability reports and disclosures are inadequate. A probable reason for this identified by Chatterjee (2012) is that external assurance is an expensive process and the economic costs of obtaining assurance on sustainability disclosures often poses challenge to organizations. Consequently, in order to justify the economic cost of assurance, organizations may need to evaluate the business case

for obtaining such assurance which could be in form of intangible benefits such as increased positive reputation. Reputation could be factored by investors into the company's market value. Another issue that can pose as a challenge to organizations is non-disclosure of actual sustainability performance while reporting more qualitative disclosures.

Sustainability reporting done without assurance by third parties could be a pointer to information that lacks credibility or that which the reporting organization cannot expose for verification for reasons that they cannot disclose. The decision of companies to subscribe to assurance or do not on their reports can reveal the aim of reporting; which in effect is for accountability or legitimacy.

d. Sustainability Framework

Another factor that has been argued to influence organizations' sustainability reporting is the presence of a sustainability framework. Studies such as Barlett (2012) and Hohnen (2012) describe the Global Reporting Initiative (GRI) framework as one of the most published sustainability frameworks. Wensen *et al.* (2011) note that organizations employ United Nations Global Compact (UNGC) sustainability framework. On the other hand, some organizations have other frameworks that are explicitly disclosed in their reports. A sustainability framework shows the organization's commitment to carry out business in a sustainable way. Organizations could focus on environment, employees, as well as their host community in their sustainability framework.

Studies such as Wilburn and Wilburn (2013), Gherardi *et al*. (2014) and Porte and Sampaio (2014) assess sustainability reporting of companies that employ the GRI guidelines. The findings of the studies were similar because human rights and environmental damage disclosures were not captured in the sustainability reports. The reports often convey the reporting entity (organization from which the reports emanate) in positive terms, which may not depict actual sustainability performance. A factor that could be responsible for this is that the GRI guidelines were not mandatory and thus there is a limit to which its contents can be subject to scrutiny. Also, companies employing the GRI framework may not be mature enough for its implementation. They could be lacking in their ability to properly define the material and relevant issues that should form the basis of reporting.

The methodology of studies such as Wilburn and Wilburn (2013), and Porte and Sampaio (2014) are characterized by the use of case study, limiting generalization of their research findings. However, the approach to assessing the role of the sustainability framework in influencing sustainability reporting helped to identify areas of strengths and weaknesses in an in-depth manner. This suggests the need for a research approach that is not limited to one organization.

Cahaya (2011) finds that an explicitly stated goal related to the pursuit of sustainability by organizations does not significantly determine social disclosures (labour related). Similarly, in the study of Buys and Van Niekerk (2014), although, companies within the financial services sector are using sustainability frameworks provided by GRI, they are not integrating sector-specific reporting guidelines. The approach of applying the GRI guidelines needed to be explained. Based on this finding, companies' disclosure and subscription to sustainability framework did not guarantee quality of sustainability reporting. This finding could be attributed to the manner in which the sustainability framework was designed. In other words, when the aspect of sustainability is not explicitly explained in the framework, there is tendency for managers to strive towards sustainability aspects that they perceive are more important or from which greater legitimacy could be obtained.

e. Managerial Perceptions of Determinants of Corporate Sustainability Reporting

The study of managerial perceptions of determinants of sustainability reporting has been described by Adams and Whelan (2009) as a tool for understanding how factors interrelate to impact on managers' perceptions. Employees' perceptions and attitudes can influence corporate sustainability reporting. According to Nakabiito and Udechukwu (2008), based on companies in Sweden, employees' attitudes underlie a particular reporting practice. Also, Ajzen (1991, as cited in Thoradeniya *et al.*, 2015) notes that attitude can determine how motivated the individual is to perform certain behaviour. The study by Thoradeniya *et al.* (2015) is based on companies in Sri Lanka. An assessment of German pharmaceutical companies by Adams (2002) reveals that managers' attitudes are capable of influencing the extent, quantity and quality of social and ethical reporting. Attitude towards sustainability reporting is indicated in the views towards reporting good and bad news (where

applicable), regulation, assurance or verification of social and environmental information supplied; perceived costs and benefits of reporting, among others. Some of these indicators of attitude have been employed by studies such as Nakabiito and Udechukwu (2008), Wallen and Wasserfaller (2008), Krongkaew-Arreya and Setthasakko (2013) to validate the influence of employee's attitude on sustainability reporting. The findings of Nakabiito and Udechukwu (2008), Wallen and Wasserfaller (2008) are based on Swedish companies. The study of Krongkaew-Arreya and Setthasakko (2013) are based on companies in Thailand.

Studies on managerial perceptions of corporate reports have also been carried out in Nigeria (Owolabi, 2001), Australia (Adams and McNicholas, 2007), Malaysia (Zulkifli *et al.,* 2007), New Zealand (Bebbington *et al.,* 2009), Bangladesh (Islam and Dellaportas, 2011) and Libya (Ahmad, 2014). There are more studies on the perception of accountants and business managers towards social and environmental disclosures (that is, separately) than sustainability disclosures. This assertion is based on outcomes of previous studies such as Bebbington *et al*. (1994), Owolabi (2001), Rowe and Wehrmeyer (2001), Adams (2002), Adams and McNicholas (2007), Belal and Owen (2007), and Adams and Whelan (2009). A possible reason for this is that sustainability reporting has evolved through the decades from what was known as reporting on social responsibility, social performance, environmental performance and 3ps (people, planet and profits), otherwise known as reporting on the triple bottom line. Ironically, even though accountants' and business managers' attitudes are positive towards social and environmental disclosures, the actual corporate disclosure behaviour towards these issues do not affirm this. This implies that there is inadequate serious approach by managers to corporate environmental accountability (Rowe and Wehrmeyer, 2001) and sustainability reporting (Williams *et al.*, 2010). This raises question of the reliability of the 'positive' attitudes indicated by decision makers in the face of other factors that can limit sustainability reporting behaviour.

Therefore, despite the positive attitudes accountants have towards social, environmental and sustainability reporting, there are low levels of actual disclosure and reporting practices in business organizations (Ahmad, 2014). In a study based on the perspective of accounting professionals, Zulkifli *et al.* (2007) has shown that

there are three aspects which should be considered before a business organization reaches a state of social and environmental accountability and reporting. They identified these aspects as: determinants arising from internal aspects of organizations, indirect drivers within the external environment of organizations and accounting orientation in a particular country. These determinants and drivers emanate from the following: business, political, social, cultural factors and the professional accountants orientation. However, there is minimal or non-existent involvement with social and environmental accounting, by accounting practitioners. This view is buttressed by the degree of skepticism on the ability of social and environmental accounting to provide appropriate measurements for its costs, since some costs though real are not easily quantified.

In their study, Islam and Dellaportas (2011) note that research on accountants' attitudes towards corporate social and environmental accounting in developing nations can be traced to the 1990s. In their study within the context of Bangladesh, accountants are favorably disposed towards social and environmental accounting. However, the favorable disposition does not translate to actual performance in reporting social and environmental issues because of the absence of professional support from the association of professional accountants in Bangladesh known as the Institute of Chartered Accountants of Bangladesh (ICAB), and high levels of societal power differential views on this issue. They also concluded that without international initiatives, accountants in Bangladesh are less likely to deal with sustainability issues. The findings of Islam and Dellaportas (2011) agree with Zulkifli *et al*. (2007) where orientation of the accounting in a particular country is an influential factor influencing social and environmental reporting.

The rationales that managers construct around institutional pressures in relation to sustainability reporting constitute an under explored area in research. Managerial attitudes and perceptions towards sustainability reporting have been described by Adams (2002) as one of the internal organizational factors that can influence the quantity and quality of information reported. Furthermore, managers of companies are corporate actors whose perceptions of reporting in terms of benefits and costs of reporting can influence the level of companies' engagement. Baele (2012) notes that companies where the chief executive officers perceive social responsibility reporting

to be more important engaged in more reporting than the CEOs that did not perceive such reporting as important. In the view of Mitra *et al*. (2015), the perceptions of managers about sustainability reporting influence the level of reporting. Managers also note that lack of legal framework and best practice guidance was responsible for low engagement of companies in sustainability reporting. This approach to studying corporate social reporting and related areas such as sustainability reporting and integrated reporting provides a forum to engage with decision makers in the companies. This can further enrich the findings from the analysis of secondary data, that is, annual reports and stand-alone sustainability reports of companies.

2.1.7 Empirical Studies on Corporate Sustainability Disclosures in Corporate Reports

The role of corporate reports in disseminating sustainability information has been noted in prior studies carried out in developed and less developed countries. In this study, the review of literature on the extent of sustainability disclosures in corporate reports was carried out by assessing the aspects of sustainability reporting as well as the areas that have received the most attention and those that have not, based on empirical findings.

The level of sustainability reporting should be on the increase with growing attention indicated by governments or stock exchanges (United Nations Sustainable Stock Exchanges Initiative, 2014). Examples of such companies are Germany, Brazil, Denmark, USA, France, South Africa, United Kingdom and Malaysia. In Germany, the first GRI report was published in year 2000 (Wensen *et al*., 2011). However, a study involving 30 major German companies selected from the Frankfurt Stock Exchange (also known as the DAX30) shows that the companies lagged behind in sustainability reporting. Overall, the aspects of sustainability reporting show those social, environmental and economic indicators score not more than 40 percent (Quick, 2008). Similarly, Schonbohm and Hofmann (2012) reveal that among German's 30 largest companies from the technology industry, there is no reporting of numbers and figures pertaining to the aspects of sustainability reporting. A limitation of this finding is that meaningful comparison of sustainability information cannot be made by interested users.

Based on sector analysis, Ching *et al.* (2013) find that industrial products sector have the highest mean economic and environmental indicators scores, while the services sector have the highest mean social indicators scores. Overall, economic indicators are highest in the sampled companies. The financial sector has the lowest mean scores for economic, environmental and social indicators. Interestingly, the sampled companies were trading on the Brazilian Stock Exchange. Perhaps, a reason for this finding is that as at 2011, the Brazilian Stock Exchange was yet to recommend that companies should indicate whether they publish sustainability or integrated reports. Ching *et al.* (2014), a study on Brazilian companies whose shares are quoted on the Brazilian and London Stock Exchanges respectively, find that companies in the infrastructure sector have the highest levels of reporting on sustainability. On the average, Brazilian companies listed on the London Stock Exchange have higher mean environmental scores when compared with those listed on the Brazilian Stock Exchange. A probable reason for this finding is that there are stricter disclosure requirements for companies listed on the London Stock Exchange.

Denmark has a regulatory requirement (Financial Statement Act) on corporate sustainability which mandates that companies report or explain why they do not report since 2009 (Klynveld Peat Marwick Goerdeler - KPMG, 2013; Baron, 2014). The extent of sustainability reporting in Denmark has been examined by KPMG (2013) and their study finds companies to have high levels of reporting even though more than 50 percent of the sampled companies do not use any sustainability reporting guideline such as the GRI guidelines. Similarly, in the study by Ioannou and Serafeim (2014), companies in Denmark do not adopt reporting guidelines. An implication of this finding is that the practice of sustainability reporting is imposed on companies, thus making companies strive to report. However, they could have disjointed reports if all they do is report on selected aspects of sustainability reporting.

For companies in the United States (USA) it is mandatory for them to comply with the Sustainability Accountability Standards and Climate Disclosure Standards (Baron, 2014). KPMG (2013) sound that there is an increase in sustainability reporting of the 100 largest companies in the USA from 2011 to 2013. Empirical findings of Patten and Zhao (2014) show that retail companies' CSR reporting of

environmental and social aspects of sustainability disclosures are more frequent in sustainability reports compared to other aspects such as economic and governance indicators. The findings of Patten and Zhao (2014) are based on companies in the retail industry. These companies have been described as having low environmental impact because they do not deal with manufacturing of goods.
In a study based on companies in the United Kingdom, Bennett *et al*. (2011) note that sustainability reporting is a voluntary disclosure practice. They argue that sustainability reporting is a response to the demand for companies to maintain their reputation and image in the society. In order to ascertain this proposition, interviews were conducted with various leading experts, decision-makers in business, government and members of the accounting profession. Since their study finds sustainability reporting for the companies to be voluntary, different priorities are given to reports on the aspects of performance indicators. For example, carbon emission, energy usage, water usage, waste, biodiversity are given priority by companies in their disclosures. Although, there is less emphasis on the reporting of social performance, companies disclose more on health and safety, diversity, procurement practices and supply chain. The United Kingdom companies use GRI guidelines in reporting and disclosing information on sustainability, and an overview of their study shows that companies with more sustainability disclosures are large companies, which have high public profile, and are faced with demands for accountability.

In Africa, the earliest evidence of sustainability reporting has been traced to South African companies. As shown in Wayne (2002), there is an increase in the sustainability disclosures in the financial reports of South African companies; 57 percent of the top 184 companies report on sustainability. The companies mostly report on governance and social aspects of sustainability reporting. Recently, Samkin (2012) reveals that the information in sustainability reports of sample companies for 2002 and 2009 respectively are in line with the Code of Corporate Governance. Sobhani *et al.* (2011) assert that sustainability disclosure lags behind for developing countries, compared to the level displayed in developed countries. Their study shows that sustainability disclosure across two banks in Bangladesh has increased over the past ten (10) years, but there are certain aspects of sustainability

disclosures that have not been reported especially those related to environmental performance.

Additional South African evidence pertaining to companies engaging in sustainability reporting shows that more than 90 percent of companies use the GRI guidelines (KPMG, 2013). Furthermore, Zyl (2013) finds an improvement in sustainability disclosures such as economic, environmental and social risk disclosures including plans to mitigate the risks. However, companies are deficient in the reporting of sustainability issues in the supply chain. Clayton *et al.* (2015) find companies with high environmental impact disclose more environmental information as performance indicators when compared with companies with low environmental impact. A notable feature in the reports of the sampled companies is that they release information that is material and significant to their stakeholders. The implication of these findings is that South African companies adhere to the G4 sustainability reporting guidelines. Since sustainability issues vary from one business to another, companies are should focus on issues that are material or have significant impact on their business.

In a Bangladesh based study, Nurunnabi (2016) states that climate change is one of the greatest problems the world is grappling with. Yet, in Bangladesh, an average of 2.23 percent of companies published climate change disclosures in their annual reports.

In Malaysia, studies such as Mohammed *et al.* (2010), McPhail and Maimunah (2012), Darus *et al.* (2013) and Abd-Mutalib *et al.* (2014) have examined sustainability reporting. Mohammed *et al.* (2010) examine the sustainability disclosures of selected Malaysian companies, and find that the companies researched were found to fall significantly on governance, social, environmental performance indicators. McPhail and Maimunah (2012) examine three areas of sustainability reporting namely human rights, sustainability and biofuel. In 83.3 percent of the sampled companies in a particular industrial sector (palm oil), the three aspects of reporting were conceptually disconnected. This disconnection was due to inadequate regulatory and governance mechanisms on sustainability reporting and human right laws. Community related disclosures rank higher than environmental aspects. The consumer goods sector have highest mean scores (Darus *et al.*, 2013).

Additional Malaysian evidence by Abd-Mutalib *et al*. (2014) shows that organizations have a tendency to engage in sustainability reporting, yet, they focus more on qualitative type of reporting. They also note that despite the mandatory intervention for companies to engage in sustainability reporting, 3 percent of the companies do not have sustainability reports as at 2011. Organizations report more frequently on social indicators of sustainability reporting, particularly those pertaining to workplace and community. Also, industrial sectors such as infrastructure, finance and plantation have higher levels of sustainability reporting than the hotel industry.

Larrinaga-Gonzalez and Perez-Chamorro (2008) find that public organizations are engaged in sustainability reporting. There is also evidence of organizational strategies and operational activities that support the disclosures. Morrison and Schulte (2009) find that 18 percent of companies report that they utilise the AA1000 principles in disclosing sustainability information. Their study is based on water disclosures, which is one of the crucial aspects of environmental sustainability reporting.

According to Frost *et al*. (2005), the overall levels of sustainability disclosures by companies in the Australian stock exchange are low, compared to what the GRI guidelines stipulate. Their conclusion is based mainly on the findings from physical reports and online information, but fewer quantities of sustainability disclosures are found in annual reports. The empirical evidence from Frost *et al*. (2005) is different from that of Guthrie and Farneti (2008) who finds more sustainability disclosures in annual reports. This difference may be as a result of the nature of companies (public sector organizations) sampled in Guthrie and Farneti (2008) as against those (companies listed on the AUX) sampled in the former. Farneti and Guthrie (2009) also state that sustainability disclosures are located in annual reports.

The study by Dong (2011) in China's mining and minerals industry finds that even though there is high concern for sustainability disclosures, companies' exhibit low level engagement with processes that could improve reporting. This finding is similar to the concern of James-Overheu and Cotter (2009) about inadequate details regarding implementation and monitoring, lack of stakeholder engagement and

comparative information for users who may want to determine the level of improvements in the performance indicators.

Based on classification of companies into sectors and their level of sustainability disclosures, there are mixed findings. In the oil and gas sector, studies (Asaolu *et al*., 2011; Nortje *et al.,* 2014; Ahmad *et al.*, 2016) decry that sustainability reporting in oil and gas companies is lagging behind in the area of performance-related environmental information. Nortje *et al*. (2014) note that the focus of companies in South Africa is on the social aspect of sustainability reporting such as health and safety, training, human rights disclosures and community development disclosures. Additionally, Ahmad *et al*. (2016) note that supply chain information is regularly missing from corporate sustainability reports. These findings have implications. Supply chain implications of business operations (for example, negative environmental impact identified within the supply chain) are crucial indicators of whether business operations in the supply chain pose risk to its continuity and value. Disclosure of supply chain practices could be in form of evaluation of suppliers based on environmental and social risks, evaluation of environmental and social risks arising from a company's supply of its products and services.

In comparative studies that juxtapose the level of sustainability reporting in environmentally-sensitive industries (such as oil and gas) with the reporting of companies in the financial services sector that are not environmentally-sensitive, companies in the former industries have more disclosures. Perhaps, these findings could be attributable to the environmental and social exposures of oil and gas companies which include high energy usage, accidents and spills arising from operations, Greenhouse gas emissions, pollution, water usage, rehabilitation and restoration of damaged land and other earth surface.

Studies (Tang and Chan, 2010; Klynveld Peat Marwick Goerdeler - KPMG, 2011) examine the level of sustainability reporting among consumer goods companies. Notable among the findings is that the mean score for sustainability reporting is lower for consumer goods sector compared to companies in other sectors (conglomerates, energy, financials, manufacturing, construction and utilities). Coverage of environmental and social aspects of sustainability reporting is also very low (Tang and Chan, 2010). The findings of KPMG (2011) on responsibility also

show that majority of the organizations are at an early stage in sustainability reporting. Some organizations also engage in reporting on all the aspects of sustainability reporting.

The financial services sector is also a player in sustainability reporting. Since the financial crisis that affected the companies within that sector, there have been changes to governance codes, disclosure requirements, and regulatory demands to incorporate sustainability issues in their corporate reporting. Owojori and Oluwagbuyi (2011) argue that corporate governance in the financial sector is important because of the sector's contribution to the nation's economy. Weber *et al.* (2014) also affirm that the financial sector strongly affects economic and sustainable development. Sustainability reporting in the financial services sector has been argued to be a result of the behaviour of banks, particularly concerning issues of governance and accountability, which made the society to lose confidence in them (Herzig *et al.*, 2012). Although, operations of companies in the financial services sector do not give rise to pollution and emission when compared to companies in environmentally-sensitive industries, they are potentially exposed to risk. Thus, by reporting on the environmental performance of their clients, they can minimize their own risk exposure.

Based on the Rio+20 document of the United Nations Environment Programme Finance Initiative (UNEP FI), financial institutions (including banks) have a role to promote the allocation of capital to those businesses operating more sustainably and consequently integrate material sustainability issues within the corporate reporting cycle. Relating to the banking sector, Lins *et al.* (2008) note that their socio-environmental impacts may not be strong but they can induce changes through the parties (clients and suppliers) that the banks interact with. On the other hand, companies in the oil and gas and manufacturing industries – consumer goods and industrial goods have direct and obvious socio-environmental impacts arising from their own business operations.

Studies such as Jeucken (2001), Kolk (2005), and Lins *et al.* (2008) on sustainability reporting in the financial services sector, show that companies are engaging at different levels. Some companies report quantitative sustainability indicators while others report in qualitative terms. The indicators that companies report include

environmental, community involvement and environmental risk assessment (Jeucken, 2001), sustainability dimensions of risks and opportunities relating to climate change, micro credits, project financing, asset management (Kolk, 2005), money laundering and Greenhouse gas emissions (Lins *et al.*, 2008). Alexius *et al.* (2013) find that 21 percent of Swedish banks integrate their sustainability reporting in their annual reports.

From the studies reviewed above, the current state of sustainability reporting is yet to reach full implementation in terms of the occurrence of its indicators in corporate communication media, that is, annual and stand-alone reports. One of the implications of this assertion is that even though there are guidelines, standards and codes that are available for organizations to use in sustainability reporting, the real push to report often stems from organizations. It is therefore necessary for organizations to identify with various sustainability indicators and focus on the ones that are most significant to their business. It is also necessary to assess sustainability reporting in Nigeria, to ascertain the level of what companies report. This could enable companies identify those areas they need to improve upon to actualize the goal of financial, environmental and social sustainability.

2.2 Review of Existing Relevant Theories

In this section, two relevant theories were reviewed namely new institutional theory and legitimacy theory.

2.2.1 New Institutional Theory

Based on institutional theory, business organizations exist within social structures, rules and norms that are capable of influencing their decision-making. The institutional theory emerged in the 70's explaining the dependence of business organizations on their environments. The new institutional theory has been used to proffer solutions to the lingering question of the institutional forces that influence the implementation of a particular reporting system.

New institutional theory posits that institutions operate in environments where other institutions operate. This environment is called the institutional environment. Thus, the behaviour of business organizations is influenced by the institutions within an environment, otherwise known as the wider society. Survival is one of the main

goals of businesses. There are two ways by which business survival can be measured. The first is economic survival and the other is to gain acceptance in the society. In order to be accepted in the society, businesses tend to establish legitimacy within the institutions in their business environment. Based on the new institutional theory, the institutions in the business environment influence the behaviour of business organizations through rules, norms, culture and other frameworks.

The concept of legitimacy as Emtairah and Mont (2008) note implies that there is a match between the actions of an organization and shared beliefs of society. Organizational actions include changing reporting practices to respond to societal expectations. These expectations stem from regulators, professional associations, industry members, trade unions, finance providers, host community, amongst others. The rules, norms and expectations of these institutional field members, and the manner in which companies respond to them are the focus of new institutional theory. Consequently, organizational practices (including reporting and disclosure) are not solely determined by the rational choice of corporate managers.

In the view of Powell and Colyvas (2008) organizations and their behaviours are shaped by institutional forces within the business environment. One of these behaviours is corporate reporting. The external environment shapes the internal aspects of business organizations, (including what is reported in form of corporate disclosures). These institutions include cognitive, normative and regulative structures that influence corporate behaviour. The cognitive institutions stem from beliefs and values, while normative institutions stem from what ought to be (norms). Regulative structures stem from what the business organization must do to avoid penalty or punishment for not subscribing to the demands or requirements of regulators.

There are many factors in the environment of business organizations that can influence what they report or disclose. In order to assess these factors, the researcher may choose to obtain secondary data from corporate annual reports, other corporate documents, or obtain primary data from business organizations to ascertain their views on the factors. Primary data is usually collected first hand by researchers.

According to Adams and Larrinaga-Gonzalez (2007), engaging with business organizations (where the researcher goes to obtain first hand information about the issue of study) has the ability to improve theory and practice of sustainability reporting because challenges involved in measuring and reporting information are discussed, particularly when survey instruments are used for data collection. Secondary data is also useful in measuring whether and how rules (coercive pressure), norms and affiliations (normative pressure), and other organizations influence corporate reporting.

DiMaggio and Powell (1983) state three isomorphic processes namely coercive, mimetic and normative, through which organizations become similar. Foundational studies (Meyer and Rowan, 1977; DiMaggio and Powell, 1983) are proponents of the assumptions of the new institutional theory. They advocate that there are coercive, normative and mimetic mechanisms through which pressures are exerted upon business organizations. Coercive pressure occurs through rules, regulations and laws. Businesses operate within the framework of these rules and regulations to allay punishments arising from non-compliance or enjoy rewards associated with compliance. In this study, the institutions that exert coercive pressure are SEC through the 2011 Code of Corporate Governance and CBN through the 2012 Sustainability Banking Principles.

Normative pressure is depicted by the influence of professional networks that allow new reporting practices to permeate business organizations. Professional networking with accounting firms may provide managers of business organizations with the necessary exposure to engage in more conventional forms of corporate reporting including sustainability reporting. According to Kolk and Margineantu (2009), accounting firms offer consulting services that extend beyond audit and assurance. These services include providing professional advice to business organizations on how to produce reports, engage stakeholders and deal with ethical issues influencing them in a professional manner. Big four accounting firms provide such services to business organizations. Another form of normative pressure is the education and training of key decision makers. In this study, normative pressure is measured by affiliation with professional accounting firm, education and training of key decision makers.

Business organizations may have a tendency to model their reporting practices in line with other business organizations in their environment, which they deem to be successful. The ‘other business organizations’ whose reporting practices are used as a model may not be aware of the influence of their reporting practices over other business organizations. Another source of mimetic pressure is close association with business organizations within the same organizational field or industrial sector. The greater the number of sustainability reporters in an industry, the greater the likelihood that a business will engage in such reporting practices. Therefore, business organizations within the same industry may have similar reporting practices overtime.

In a bid to align with norms of society or what is acceptable, and gain legitimacy from them, business organizations engage in sustainability reporting. Gaining legitimacy from the institutions in business environment ultimately leads to decoupling. Decoupling occurs when organizations demonstrate compliance with norms and values in society, by engaging in reporting practices, while the actual ways of working are not greatly affected. The actual processes through which sustainability reporting should pass through are board committees, sustainability reporting framework, assurance of report and stakeholder engagement. This study also examines whether organizational procedures are decoupled from the sustainability reporting practice.

In line with prior studies, this current study measures the decoupling of corporate sustainability reporting practice from organizational structures using stakeholder engagement, assurance, board of director committee and sustainability reporting framework. According to Manetti (2011), stakeholder engagement cannot be relegated in the sustainability reporting process because it defines the boundary of information disclosed in terms of significance and relevance to stakeholders identified in a business. In that study, identification or mapping of stakeholders is the first step to stakeholder engagement. The measures of stakeholder engagement include: stating how the engagement is carried out, frequency of engagement, organizations’ response to stakeholder needs, outcomes from stakeholder engagement adopted by business managers. Kaur and Lodhia (2014) also concur that stakeholder engagement is a crucial aspect in the sustainability reporting process

because it shows the significant sustainability issues raised by key stakeholders. GRI (2011) also note that the needs of stakeholders can be met when organizations engage with their stakeholders.

On the basis of the paragraphs above, there are two identified theories linked with each other namely new institutional theory and legitimacy theory. Damayanthi and Rajapakse (2013) argue that a combination of two theories at a point in time could aid in explaining factors influencing corporate reporting. They decry the use of one theory to explain corporate social reporting. Their study emphasizes the inter-connectedness of new institutional theory and legitimacy theory. This link shows that organizations engage in practices that are acceptable to the wider society or institutions in their environment in order to gain acceptance from them. This environment is also known as the organizational field and it is dominated by institutions that exert pressure directly or subtly on business organizations (including their disclosure and reporting practices). Suchman (1995) states that legitimacy is a perception of the desirability or appropriateness of the actions (disclosure practices) of business organizations within some socially construed norms, values and rationales. According to Garud *et al.* (2007), the new institutional theory emphasizes that institutions within organizational fields confer legitimacy to business organizations. In the view of Pfarrer *et al.* (2005) these institutions influence corporate disclosures formally and informally.

Employing the new institutional theory, Rautiainen (2010) stresses the influence of rational or institutional reasons in performance measurement adoption, use and change. The facts from the new institutional framework can be applied in the current study. This is because within the internal and external business environment, there are pressures that make managers adopt or ignore certain disclosure practices, which is ultimately revealed in what the companies report. Stemming from the use of new institutional and legitimacy theories in behavioural studies in accounting, researchers (Ratanajongkol *et al.,* 2006; Bebbington *et al*., 2009) aver that these theories can contribute to research on how a number of factors combine in the initiation of sustainability and social responsibility reporting. These studies also contribute to the research on whether and how coercive, normative and other forces are contributing to the practice of sustainability reporting. The new institutional

theory can also expand the focus of legitimacy theory (Scott, 2008; Damayanthi and Rajapakse, 2013), thus extending the debate on corporate disclosures.

According to Zhao (2011) different forces exist in organizational fields that can influence the sustainability reporting practices of organizations. Businesses can be categorized into different organizational fields based on regulators, industrial sector, professional bodies, consulting firms. The level of institutional pressure varies across the different organizational fields as well. The foundational studies (Meyer and Rowan, 1977; DiMaggio and Powell, 1983) upon which theorizing of new institutionalism are built state that business organizations are embedded in internal and external institutional environments respectively. Therefore, pressures from these sources can influence corporate reporting behaviour to incorporate information on sustainability. The decision of what to include in corporate reports is made by corporate actors such as top level management and directors.

Meyer and Rowan (1977), and Garud *et al*. (2007) note that depending on the organizational field, some corporate disclosure practices may be seen as proper, non-negotiable or expedient, making it difficult for corporate actors (managers and directors) to depart from. For example, where the provision of sustainability disclosures is seen as appropriate to shareholders, it may be impossible for managers who disclose this information to refrain from such disclosure practices. Ball and Craig (2010) advocate that new-institutional theory can increase understanding of response to sustainability issues by organizations. In sustainability reporting research, studies (Boesso and Kumar, 2007; Bice, 2011; Zhao, 2011; Goswami, 2012; Farneti and Rammal, 2013) have utilized the new institutional theory and argue that external context and internal dynamics of organizations shape disclosure practices.

Boesso and Kumar (2007) explore the factors that are influential to voluntary disclosure practices of Italian and United States companies. They discover that stakeholder management, importance of intangible assets, and market complexity were influential factors. Bice (2011) utilizes new institutional theory in a multi-level analysis of the social mechanisms, the industry, country of origin and communities. Zhao (2011) in the Chinese context uses new institutional theory to analyse reasons why Chinese companies initiate social and environmental reporting. Goswami and

Lodhia (2012) utilize a qualitative approach to determine the factors driving sustainability reporting practices. The most influencing factor that drives the local councils to adopt sustainability reporting practices is the South Australian state strategic plan (a coercive pressure). Coercive pressures are associated with higher sustainability disclosures provided in the annual reports which are in accordance with the Sector Supplement for Public Agencies (SSPA) guidelines of the GRI.

Jalaludin *et al*. (2011) examine the pressure that government and other parties in society have on the adoption of environmental management accounting in manufacturing companies in Malaysia. The most influential influence is normative and lies with the education and training that the accountants received. The new institutional theory has also been utilized by Sobhani and Amran (2012) in explaining the non-disclosure of crucial sustainability issues by two selected banks in Bangladesh. From a new institutional theory perspective, their study finds a number of factors that influence the non-disclosure of sustainability information by business organizations namely lack of sufficient resources, absence of reporting practice by other banks, lack of legal framework, lack of pressure from other concerns, absence of a sustainable corporate plan, shortage of manpower, lack of infrastructure and logistic support, and the cost involved. Their findings show similarity with a previous study undertaken by Belal and Cooper (2011) who seek to explore the most significant reasons for the absence of some eco-justice disclosures from social reports of business organizations in Bangladesh and come to the conclusion that there are many issues to contend with before business organizations can report (voluntarily) on corporate eco-justice performance. These issues are similar to the findings of a subsequent study by Sobhani and Amran (2012).

Farneti and Rammal (2013) also use the new institutional theory, and find that a number of internal and external drivers are responsible for sustainability reporting. These factors include prominent individuals in the organizations, the public agenda, media exposure. The new institutional theory has been shown to have greater explanatory power than the stakeholder and legitimacy theory. The theory also provides a better framework in explaining managerial reluctance behind corporate disclosures (Belal and Cooper, 2011; Sobhani and Amran, 2012).

Joseph and Taplin (2012) apply the institutional theory in order to explain sustainability reporting. Their study investigates the influence of Agenda 21 on sustainability disclosures on websites of Malaysian local authorities. Agenda 21 is an aftermath of the Rio De Janeiro Earth Summit in 1992 to foster improved sustainability performance through a community-based approach in Malaysia. They report that the adoption of the programme significantly influences local authorities' website sustainability disclosures.

Since corporate sustainability disclosures are voluntary, the discretion of managers is useful in the disclosure decision. The new institutional theory is relevant to the current study because it will shed light on the pressures that influence corporate sustainability disclosures and reporting. Also, this theory is relevant because it can decipher the response of companies to the field in order to ensure their legitimacy. This study examines the tenets of legitimacy theory because of its ability to reveal decoupling of organizational practice from the structures set up to give rise to such practice.

2.2.2 Legitimacy Theory

The earliest documentation on legitimacy theory can be traced to the study of Sethi (1975) who states that corporate social responsibility is that corporate behaviour that aligns with prevailing social norms, values and expectations (Swaen, 2002). The concept of social contract holds that the activities of business organizations should comply with social expectations. In the absence of this compliance society will withdraw the organizations' right to continue its operations. Business organizations operate within the boundary set by rules, regulations and societal norms. Where there is any perceived threat to the business as a result of violation of any rule and societal norm, sustainability disclosures are released by the companies. This implies that businesses that are prone to legitimacy problems tend to disclose more information in order to satisfy the public about their sustainability performance (Guo and Zhao, 2011).

Legitimacy theory posits that business organizations disclose their sustainability initiatives to legitimize their operations. The businesses that are prone to sustainability issues also report more information to minimize criticism from the

host community, address stakeholder expectations, build reputation and ultimately attract capital (Faisal *et al*., 2012). Sethi (1975) also indicates that the need for corporate social responsibility is linked to organizational quest for legitimacy in the presence or absence of legitimacy threats. Guo and Zhao (2011) on legitimacy theory identify a number of threats to legitimacy namely negative events and media exposure. According to Dobbs and Van Staden (2011), business organizations seek 'legitimacy' from important stakeholders by ensuring that their value system is in alignment with the values of the society that hosts the operations of the business. Sethi (1975) also discloses that legitimization is characterized by changes in the internal decision-making, changes in the perception of the external environment, and accountability mechanisms of the business organization. With respect to the third notion of legitimacy, corporate disclosures (mandatory/voluntary) are ways through which businesses can show that they support certain societal expectations.

The literature on legitimacy theory identifies two approaches to legitimacy namely reactive and proactive. The studies (Blacconiere and Patten, 1994; Guo and Zhao, 2011) undertaken from the reactive approach posit that negative social and environmental events are responsible for a company's social, environmental and sustainability disclosure. However, it is not in all cases that businesses have to perceive threats from negative events and media exposure before responding through corporate disclosures. The argument of the proactive school of legitimacy is that positive attitudes toward voluntary sustainability disclosures and attachment of positive values to such disclosures can signal existence of organizational legitimacy (Dobbs and Van Staden, 2011).

According to Dobbs and Van Staden (2011), absence of the factors identified as responsible for driving sustainability reporting such as stakeholder engagement, reporting frameworks and verification may reflect weak commitment to genuine accountability and offer support for legitimacy theory. Legitimacy theory has also been applied by Vourvachis (2008) who examines corporate voluntary disclosures of British Airways and Singapore Airlines in the light of some major social accidents namely Concorde crash north of Paris in year 2000 and the Singapore Airlines accident. The events marked an increase in the level of voluntary social disclosures (especially health and safety) by companies. More so, bad publicity arising from the

negative events could lead to increased attention from the media. Companies respond to this attention by increasing disclosure.

However, the existing use of legitimacy theory has been met with criticisms. According to Parker (2005), it overlaps with political economy theory and institutional theory. Deephouse and Carter (2005) argue that legitimacy theory is synonymous with reputational risk management theory and suggests that there is need for the name ‘legitimacy theory’ to be revisited. In the light of the previous arguments, Bebbington *et al.* (2008) concur that legitimacy theory can be reframed within institutional or resource-based conceptions of business organizations. Garcia-Ayuso and Larrinaga (2003) also utilize legitimacy theory to decipher the motivations for corporate environmental disclosures. Based on this theory, these disclosures are released to build or maintain corporate legitimacy.

There are more studies in foreign contexts that have applied legitimacy theory in relation to sustainability reporting. Also, there is a dearth of studies that have applied legitimacy theory to corporate sustainability reporting and disclosures in the Nigerian context. Also, from the literature it is not apparent that the existence of the criticisms of legitimacy theory has reduced the attention of researchers to contribute to the issue of sustainability reporting, rather, the researcher sees this unaddressed gap as a need to be met. Thus, examining the influences on corporate sustainability reporting from the lens of legitimacy theory was carried out in this study.

2.3 Conceptual Framework

In this section, the concept of sustainability reporting as well as the conceptual framework of this study is discussed.

2.3.1 Concept of Corporate Sustainability Reporting

According to Deegan and Rankin (2006), externalities caused by a business organization cannot be accurately measured, neither are they entirely recognized in financial accounting; also the likelihood of scarcity caused by resources used in the production process do not reflect in market prices of such resources. Consequently, financial accounting alone is inadequate to portray a holistic picture of organizational performance, except it takes cognizance of sustainability reporting. Also, Lozano (2008) proffers an integrational view of sustainability; and argues that

business organizations should consider social and environmental implications alongside economic impacts. This view has led to an evolving form of corporate reporting known as sustainability reporting.

Another perspective of sustainability is the notion of intergenerational-equity, which is a core principle required for the sustainable development of any company. This study does not intend to measure corporate sustainability from an integrational and/or inter-generational perspective, rather it measures sustainability reporting by observing the economic, environmental, social and governance indicators in annual reports and stand-alone sustainability reports, social responsibility reports and citizenship reports of companies.

Although at the time of the Brundtland report, ‘sustainability’ was a concept used within the domain of environmentalists and ecologists, the recent discourse on ‘sustainability’ has long left this realm because of its multi-disciplinary approach. Since the term ‘sustainability’ is often used in several disciplines, it is crucial to indicate that this study situates ‘sustainability’ in accounting and by extension corporate reporting, hence the term ‘corporate sustainability reporting’ (relating to companies). Sustainability reporting transcends environmental reporting because it includes reporting of social and economic impacts as well as governance approaches to managing the impacts. It provides a better platform for a communication with a wide range of business stakeholders. The MOU signed by International Federation of Accountants (IFAC) and International Integrated Reporting Council (IIRC) in October 2012 was to promote cooperation towards the enhancement of corporate reporting. According to Humphrey, O’Dwyer and Unerman (2014), this was the first MOU between the IIRC and any other institution pertaining to expanding frontiers in corporate reporting.

Now, from past studies reviewed, it is apparent that there is need for sustainability reporting based on four aspects which can contribute to its measurement. In order to achieve corporate sustainability, a business organization should show commitment in actualizing these four areas namely economic, environmental, social, and governance. Sustainability as an approach to business ensures that value is created for shareholders, and other business stakeholders, while managing risks that arise from economic, social and environmental issues. Corporate sustainability also

implies that a business organization contributes to sustainable economic development by working with internal stakeholders and external societal context, in order to improve the larger society. The emphasis of sustainability on economic, social and environmental dimensions is synonymous to Profit, People and Planet (the 3Ps). These 3Ps are also referred to the triple bottom line.

According to Soyka (2012), corporate sustainability is not just interest in the environment, corporate social responsibility or strategic philanthropy, but it is aware of the interests of stakeholders; which is ensuring economic viability, while maintaining a sustainable environment that is socially reasonable. Although there is no hard and fast rule stipulating how sustainability should be applied in business organizations, it is a principle that business organizations can apply to every aspect of their corporate life. However, sustainability issues can be incorporated into corporate practices such as operations, strategy and reporting. Hahn and Kuhnen (2013) note that sustainability disclosures can be found in corporate integrated, sustainability, social responsibility, environmental, social and annual reports. These reports show organizations' account of commitments and performance in economic, environmental, social and governance indicators.

Sustainability reporting has a broad focus compared with social responsibility reporting. According to Eccles and Krzus (2010), research on corporate social responsibility is usually preoccupied with the business community, while sustainability is engrossed with material issues that contribute to sustainable development. Laszlo (2003) stated that the contribution of organizations to sustainable development represents a potential source of hidden value or risk. Sisaye (2012) also buttresses the need for a company's accounting system to reflect changes in the business environment; stemming from the expectation of society and business stakeholders that they should behave more responsibly and contribute to sustainable development.

According to Soyka (2012), sustainability is not greening, corporate social responsibility, corporate responsibility or strategic philanthropy, rather it is based on the tenet that corporations face different expectations and pressures from stakeholders namely customers, suppliers, competitors, regulators, employees and shareholders. Companies that expect to succeed in the long-term will need to find

ways to understand and satisfy the expectations of their corporate stakeholders. Ernst&Young (2013) state that corporate reporting is expanding to incorporate a wider range of business stakeholders as a result of a variety of sustainability concerns, such as climate change, pollution, human rights issues and economic performance. The inclusion of these issues in corporate reporting is also due to the inability of traditional financial accounting to capture them in the assessment of financial performance of business organizations. Ballou *et al.* (2006) also note that sustainability reporting involves reporting financial and non-financial information that are relevant to operational, social and environmental activities as required by business stakeholders.
Studies (Klynveld Peat Marwick Goerdeler - KPMG, 2008; Muller, 2011) acknowledge that economic, environmental and social performances are features of sustainability reports. This form of reporting is driven by a growing recognition that an organization's performance can be depicted by economic, environmental, social and governance terms. These sustainability issues can materially affect a company's performance; therefore, it is essential that companies improve transparency and disclosure on them (to stakeholders), as part of improved corporate governance, and contribution to overall sustainable development.

The current state of sustainability reporting can be divided into two parts; namely voluntary and mandatory sustainability reporting. Voluntary sustainability reporting occurs when managers' according to their discretion decide what, how and when to disclose sustainability information, even, when on the other hand there are no mandatory requirements to do so. Mandatory sustainability reporting is one that is demanded by the national government or its delegated regulatory authority, such as Securities and Exchange Commission that oversees the activities of business organizations quoted on the stock market.

Based on Global Reporting Initiative (2011), economic indicators of sustainability reporting include revenue, costs arising from operations, cash outflows to capital providers in form of dividend, cash outflows to pay for taxes, community investments, cost of managing risks or opportunities posed by climate change, defined benefit plan obligations, government grants, tax relief and spending on local suppliers. The purpose of the economic indicators of sustainability reporting is to

measure the impact of organizations on the state of affairs of their local and international stakeholders. Specifically, the Global Reporting Initiative (GRI) recognizes two main aspects of impact with respect to economic indicators namely: capital flows from organizations to stakeholders and economic impacts of organizations at the national and international level. Financial reporting standards such as International Financial Reporting Standards (IFRS) play crucial roles in the measurement and reporting of economic transactions. For example, International Accounting Standards (IAS) 18 deals with revenue, IAS 2 is on operating costs, IAS 19 deals with employee wages and benefits, IAS 1 and 7 deal with payments to providers of capital, IAS 12 is about payments to government, IAS 19 deals with defined benefit plan obligations and IAS 20 deals with financial assistance received from government.

According to Deloitte Global Services Limited (2016a) on IAS 18, revenue is the total economic benefits received from the normal operating activities of a business and includes goods sold, services rendered, interest, royalties and dividends. This implies that a transaction that leads to monetary benefit or inflow to an organization can be described as revenue. Usually, operating costs includes raw materials, consumables, labour and other costs are deducted from revenue. Deloitte Global Services Limited (2016b) stated that IAS 19 is concerned with employee benefits which include short-term and long-term benefits.

Short-term benefits are wages, salaries, paid annual leave, profit-sharing and cash bonuses, and non-monetary benefits for employees of an organization. Post-employment employee benefit plans could be defined contribution or benefit plans. Defined contribution plans entails that the employer pays definite contributions into a separate fund which is expected to have adequate resources to off-set the entire benefits of employees who have served in current and prior periods. The employer is not liable to pay further contributions or make direct payments to employees in the absence of sufficient assets by the fund. On the other hand, in the case of defined benefit plans, an employer is under obligation to pay benefits to past and present employees. The benefits could cost more or less than expected; return on assets set aside to fund the benefits could differ from expectations. These risks are borne by the employer (IFRS Foundation education staff, 2013).

Based on Deloitte Global Services Limited (2016c), IAS 1 deals with dividend payment and it requires the disclosure of dividend proposed before the financial statement date which was not distributed to shareholders before that date. Based on Deloitte Global Services Limited (2016d) IAS 7 requires the disclosure of dividend paid to shareholders under Statement of Cash Flows. Other forms of capital include debt and it attracts interest. Although, the ability of a business to pay providers of capital is one of the indicators of sustainability reporting, it has been argued that payment of dividend while issuing new debt stock could reduce the availability of cash to pay existing debt holders of a business in event of financial distress (Healy and Palepu, 2001). Recent argument (EC staff consolidated version, 2010) shows that disclosures on payments to providers of capital helps to ensure a business is adequately managing its capital and predicting claims on future cash flows by providers of capital to the business.

Environmental indicators of sustainability include environmental indicators such as renewable (non-renewable) materials, recycled materials, fuel/electricity consumption, electricity sold, energy conservation, water, greenhouse gas emissions, organic pollutants, waste, spills, environmental protection, assessment of suppliers and clients based on environmental risks (Global Reporting Initiative, 2013a). According to the Department for Environment, Food and Rural Affairs (2006), environmental indicators of sustainability reporting are those disclosures that show the manner in which a company measures, manages and communicates its environmental performance. These indicators could pose risk to the long-term value of a business. Environmental indicators can be grouped under direct and indirect impacts. Direct environmental impacts arise from business operations while indirect impacts arise from the supply chain.

Tol (2009) notes that climate change is the mother of all externalities, and this makes it more susceptible to change compared to any kind of environmental problem. Climate change affects places, including businesses, and the livelihoods of people. It is one of the results of carbon emissions and pollution. There is a need for the issue of carbon emission to be addressed by businesses due to its economic, environmental and social implications. The economic effects of climate change were based on some indices such as extent of global warming, sea level rise, changes in

rainfall. The economic effects of climate change were based on physical impacts of each of these indices and a price was given to each physical impact and it was added up.

The concern of studies such as Carroll (2009), and Doran and Quinn (2009) has been to ascertain the risks and opportunities emanating from climate change, financial implications such risks, opportunities, and costs incurred to manage the risks or opportunities. The implication of approaching climate change disclosures from these perspectives is to forestall the occurrence of financial risks arising from inadequate management of climate change and other environmental issues. According to Thistlethwaite (2015), since the 1989 Exxon Valdez spill, there has been establishment of the link between a company's environmental performance and financial risk. Consequently, climate change risk disclosure is essential for companies to improve their financial stability as they provide information on potential risks generated by investment in areas of their operations exposed to climate change impacts. It is also important for companies to improve accountability in the area of sustainability by providing information that providers of capital can utilize in aligning their investments with companies seeking to reduce their exposure to climate change.

In the oil and gas sector, there are several environmental impacts associated with upstream and downstream activities. Some of these impacts are oil spills, gas flaring and venting, discharges of chemical wastes, water contamination, soil and sediment contamination, destruction of farmland and marine environment (Ite *et al.*, 2013). Oil spills have been found to be a source of environmental issues and occur when liquid petroleum hydrocarbon arising from human activity diffuse into land and marine areas. They also release harmful substances into the environment. Egbe and Thompson (2010) state that oil spills can be categorized into four namely minor, medium, major and catastrophic spills. The difference between the four groups lies in the volume of the spills. When more than 250 barrels of oil are discharged in offshore or coastal waters, a major oil spill is said to have occurred. On the other hand, a catastrophic oil spill occurs when there is a pipeline rupture or storage tank failure which is detrimental to public health.

Another aspect of sustainability reporting includes social indicators. According to Otusanya *et al.* (2012), anti-social practices of organizations have economic and political implications on countries. These anti-social practices have overriding effect on a country's Gross Domestic Product (GDP). These social practices relate to employees, governance, host community, corruption, suppliers and supply chain, amongst other business stakeholders. The Center for Corporate Citizenship and Ernst&Young LLP (2013) note that these practices also pose risks that might have significant financial impacts on their business value. However, managing these risks could help reduce their financial implications, thus, resulting in higher market returns for investors. The issue of corporate social practices is a source of sustainability because businesses that have good return on capital employed but fail to manage the risks associated with social practices could have their returns lose value with time.

Social indicators of sustainability reporting show the organizational performance in reducing the risks associated with inadequate training of employees on health and safety, local community development programmes, stakeholder engagement, anti-corruption policies and procedures, assessment of suppliers based on impacts on society and identification of negative impacts on society in the supply chain. These risks could further lead to costs such as insurance, medical, compensation for lives lost, legal, and could further affect the goodwill of the organization.

Governance indicators of sustainability reporting show the board of directors' approach to improving environmental, social and economic performance of organizations. The governance disclosures include structure, composition and competencies of the board of directors, highest governance body's role in strategy setting, tenure and conflicts of interest of board members, remuneration (fixed pay, bonuses, allowances), role of the board in management of sustainability impacts, role of the board in risk management, whistle blowing mechanisms (Global Reporting Initiative, 2013a).

2.3.2 Conceptual Framework of the Study

Based on the new institutional theory, the institutions in the environment of business organizations (Securities and Exchange Commission, Central Bank of Nigeria, Financial institutions, Big Four accounting firms, Successful organizations within

the industry and Business organizations within the Industry) can pressure business organizations to engage in corporate reporting of sustainability information. In a bid to align with these institutions in the environment, business organizations may engage the practice of reporting without a change in the structures that should improve accountability. A model of this conceptual view is given in Figure 2.1.

In line with the new institutional and legitimacy theories, a conceptual framework was developed. Thus, this study examines whether and how organizational field pressures (SEC Code of Corporate Governance, CBN Sustainability Reporting Principles, Reporting Practices of other organizations in the industry that are successful, size, relationship with big four accounting firms, relationship with foreign financial institutions, foreign presence, industry affiliation, membership of external bodies that govern sustainability reporting such as UNEP, UNGC and IPIECA, influence corporate sustainability reporting. It further examines whether sustainability reporting practice is decoupled (separated) from structures in business organizations.

Figure 2.1 shows that in the environment of business organizations, there are pressures such as the SEC Code of Corporate Governance, CBN Sustainability Reporting Principles, Reporting Practices of other organizations in the industry that are successful, size, relationship with big four accounting firms, relationship with foreign financial institutions, foreign presence, industry affiliation, membership of external bodies that govern sustainability reporting such as UNEP, UNCG and IPIECA.

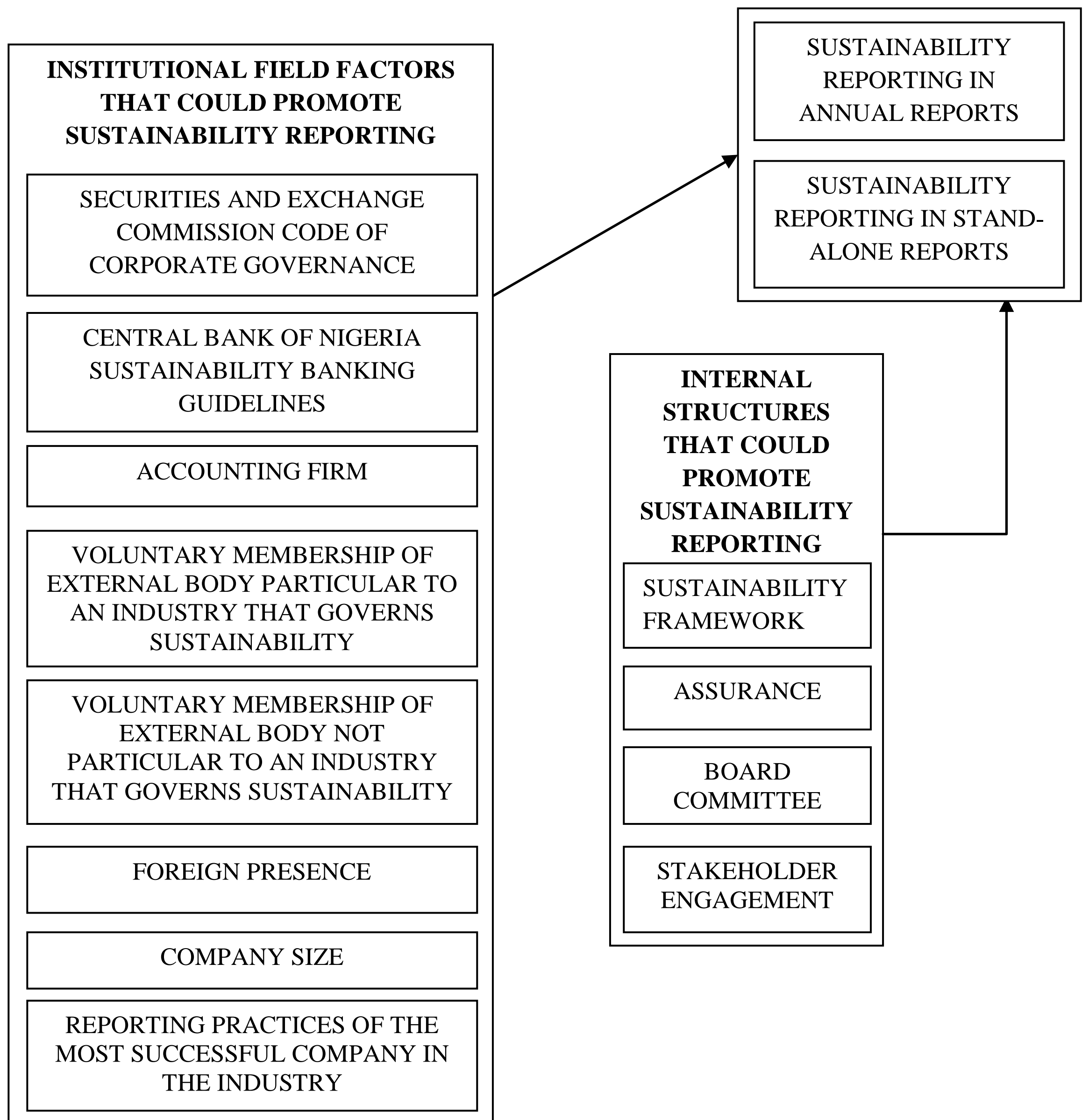

Figure 2.1: Conceptual Framework of Sustainability Reporting, Organizational Field and Internal Organizational Structures

Source: Researcher (2017)

Based on Scott (2001), the behaviour of individuals (managers) and organizations are strongly influenced by various networks and interactions. Conceptually, the new institutional theoretical framework addresses the role of forces in the organizational field in understanding the behaviour of organizations and individuals with respect to corporate sustainability reporting. Also, the new institutional theory proposes that managers align with external influences on corporate disclosure practices in order to gain legitimacy from the society. Legitimacy, in the view of Dobbs and Van Staden (2011) is the absence of any real effort toward accountability as a reason for certain corporate disclosures. In their opinion, accountability can be depicted when the disclosures go through formalized systems. When business organizations want to gain legitimacy their reporting practices may be decoupled (separated) from their structures. In this study, the measures of these organizational structures are stakeholder engagement, sustainability reporting framework, assurance and board of director committee supervision. These factors are within the internal control of business organizations. Researchers (Adams, 2002; Haider, 2010) have emphasized the role of the organizational context of business organizations in the development of social and ethical reporting and accountability towards same. Sustainability reporting covers social and ethical reporting; it is important to know how it develops from an institutional perspective.

There are a number of prior studies in sustainability reporting of business organizations in developed economies such as United States of America, United Kingdom, Spain, amongst others. Some studies have been carried out in less developed countries like Nigeria. However, an assessment of the evolution of sustainability reporting shows that it evolved from social reporting and environmental reporting. In Nigeria, studies on environmental reporting have been conducted. However, there is dearth of studies on sustainability reporting. The influences of factors in the organizational field have also not been assessed in the Nigerian context. Also, earlier studies examining the factors influencing corporate transparency in relation to social and environmental reporting issues have employed economic based theories such as political economy and stakeholder theory. However, scholars (Adams, 2002; Adams and McNicholas, 2007) have called for more robust studies that explore the organizational and organizational field levels in relation to corporate reporting. At the organizational field level, they advocated that

studies can examine how members in this field view sustainability reporting and how these organizational field members contribute to the institutionalization of sustainability reporting.

In order to measure the influence of the organizational field on corporate sustainability reporting practice in Nigeria, quantitative and qualitative research methods were used. Quantitative approach entails capturing the quantity of sustainability reporting on a disclosure index from 0 to 1. Furthermore, the nature of sustainability reporting by companies before and after the dates of SEC Code of Corporate Governance 2011 and Central Bank of Nigeria Sustainability Banking Principles 2012 are examined. According to Covaleski *et al.* (1996), interpretive approach to research depends on organizational theories. New institutional and legitimacy theories are examples of theories upon which interpretive perspective to research can be applied. Interpretivist approach draws from qualitative research methods and key decision makers within business organizations were required to provide their perceptions of members of in the business environment. The reports communicated to external users or stakeholders by business organizations are often pre-determined by key decision makers that operate within the organization. Ajinkya *et al.* (2003) revealed that managers may have incentives to disclosure or not. This can be attributed to a distinct set of internal, external constraints, and business uncertainties (Moorthy *et al.*, 2012). There is no one optimal corporate disclosure and reporting framework for companies because of their distinct perspectives about the pressures they are faced with in the business environment.

According to Adams (2002), the main social reporting theories (stakeholders, legitimacy and political economy) used to explain corporate social, environmental and sustainability disclosures have only been able to provide partial explanation. This lacuna has drawn the attention of researchers to offer new insights into the discourse on sustainability reporting. In the view of Baker and Bettner (1997), even though accounting research makes increasing use of interpretive and critical perspectives, the studies using this perspective are not common. Tregidga *et al.* (2012) point out that interpretive perspective to corporate reporting is not new. Studies that identify and seek to explain the drivers and motivation for sustainability reporting argue that interpretive approach can best explain these drivers (O’Dwyer,

2002; Buhr, 2002; Belal and Owen, 2007; Farneti and Guthrie, 2009; Bebbington *et al*., 2009; Dobbs and Van Staden, 2011).

In the context of corporate disclosure and reporting, this approach to research is concerned with the interpretations and meanings that corporate actors have about a particular phenomena. Tregidga *et al.* (2012) further posit that interpretive approaches allow the internal and external contexts to be linked. The context of what is reported and decision to disclose is very important in understanding the information contained in sustainability reports and decision to disclose sustainability information. Adams (2002) emphasizes that corporate disclosures are within a general and internal organizational context and that this context affects the behaviour and motive towards and the content of the corporate disclosures. Lehman (2011) provides a succinct description of interpretive research and emphasizes that local and specific factors must be considered when designing accounting and reporting systems.

Studies (Adams, 2002; Kaspersen, 2013; Krongkaew-Arreya and Setthasakko, 2013) are foundational in the interpretive approach to research on sustainability reporting. A departure from the popular theories such as stakeholder and signaling to research on sustainability reporting may provide room for greater improvement on what companies report. For business organizations to be more accountable for their ethical, social and environmental impacts, Adams (2002) examined the reporting (internal) environment. The internal environment also comprised attitude towards aspects of reporting. Kaspersen (2013) posits that an understanding of the systems and processes that support corporate disclosures is crucial to contribute to research aimed at determining the reporting environment, role of stakeholder engagement and motives for including (or excluding) certain impacts of organizational operations. The approaches of Kaspersen (2013) include in-depth case study and engagement with organizational members. Krongkaew-Arreya and Setthasakko (2013) argue that in-depth studies on business organizations can enhance the practice of sustainability reporting and improve actual sustainability performance.

According to Lehman (2011), research in accounting can respond to social, environmental and other sustainability challenges such as energy, greenhouse gas emissions, pollution, waste, water usage, employee benefits, safety, stakeholder

engagement, anti-corruption procedures, using interpretive approach. Tregidga *et al.* (2007) particularly note that no substantial research has been carried out regarding the process and environment of reporting, information contents and relevance of the reports. Legitimacy theory has been used by prior studies to decipher the sustainability reporting process noting that companies engage in sustainability disclosures to maintain their right to operate within the society. Tregidga *et al.* (2007) further argues that research on the process and context and interpretations of information disclosed is needed if organizational legitimacy is to be seriously addressed. The researcher that does not adopt this stance to SES reporting may stand the danger of conforming to the reporting benchmark set by the business organization, whether the disclosures portray corporate accountability or not.

The factors driving sustainability reporting are numerous and it may be impracticable to cover all of them in a single study. Therefore, the interpretive approach to the study of sustainability reporting will be carried out on the specific variables in the process and context of reporting as indicated by decision makers in business organizations. Hibbitt (1998) affirms that researchers working within the interpretive paradigm are concerned with gaining understanding of the process which takes place in the social world from the perspective of the human actors contained therein.

An interpretive research approach may be the solution to the organizational inertia and the lack of involvement of accountants inhibiting changes towards corporate sustainability behaviour (Macve, 2000; Adams and Larrinaga-Gonzalez, 2007). In the view of Adams and McNicholas (2007), adequate knowledge of managers in integrating sustainability issues in decision making is important in overcoming the hurdles faced by organizations' implementation of sustainability reporting. Consequently, interpretive studies can ultimately serve as pointers to how the change towards sustainability reporting can occur. Thoradeniya *et al.* (2015) voiced that the social pressures and behavioural control of decision makers can influence sustainability reporting. The focus of interpretive approach to research is to assess the perception of decision makers about the presence or absence of factors that influence or slow down implementation of certain behaviour (Ajzen, 2005). The social pressures and behavioural control can be found within the organization's

environment and the decision makers' perception of these factors can contribute largely to their behavioural intentions regarding sustainability reporting.

2.3.3 Gap in the Literature

Studies such as Belal and Cooper (2011), Joseph and Taplin (2012), and Sobhani and Amran (2012) have used new institutional theory to assess the determinants of sustainability reporting. There have also been studies such as Garcia-Ayuso and Larrinaga (2003), Vourvachis (2008) and Dobbs and Van Staden (2011) that use legitimacy theory to explain sustainability reporting. However, the inter-connection between new institutional theory and legitimacy theory as noted by Damayanthi and Rajapakse (2013) show that organizations engage in practices that are acceptable and deemed as appropriate to the wider society or institutions in their organizational field to gain their acceptance. In response to engaging in reporting practices that are deemed as appropriate to the wider society, reporting practices may be decoupled or separated from organizational processes. Damayanthi and Rajapakse (2013) employ the use of new institutional and legitimacy theories to explain corporate reporting, and argued that a combination of the two theories at a point in time could better explain factors influencing corporate reporting. However, whether institutional field factors and internal structures influence sustainability reporting in a single study has not yet been fully explored in the Nigerian context. In order to cover this gap in the literature, this study extends analysis to examine whether institutional field factors and internal organizational factors are responsible for sustainability reporting.

One of the problems faced by previous studies is in devising an appropriate method to investigate how improvements in the reporting performance in terms of quality and quantity can be achieved. Uwuigbe (2011) employs longitudinal approach to establish the relationship between voluntary disclosures on one hand and a number of corporate characteristics namely firm size, age, leverage, profitability. Fewer studies have examined how corporate management's perceptions directly influence corporate disclosures. Arguments of Cormier *et al*. (2004) in understanding managers' perceptions about corporate disclosures could reveal how corporate actors react to sustainability issues and explain why certain information are provided or not by business organizations.

Consequently, planning a research approach to develop a framework of determinants of sustainability reporting is of utmost importance in this study. The researcher also sought to understand the perceptions of organizational actors (Saunders *et al*., 2007) towards corporate sustainability reporting. This is because it is possible that they interpret their roles in sustainability reporting in line with the meanings they give these roles. Hence, the researcher has to go beyond information in corporate reports to business managers in order to comprehend their views on sustainability reporting. The researcher deduces that the interpretivism research philosophy is important because what corporate business organizations report is a product of a particular set of circumstances and individuals, what they interpret and understand (Saunders *et al*., 2007) to make up sustainability reporting. Salzmann *et al.* (2005) point to the need for future studies to assess individual arguments and the corresponding success factors and barriers to sustainability reporting. The interpretive approach is used with assessing determinants of sustainability reporting from companies' institutional field and reporting process. In addition to exploring the determinants of sustainability reporting in Nigeria, this study also measured the actual sustainability disclosure in annual reports or stand-alone reports using a disclosure index.

A summary of the literature review is provided in Table 2.1a and Table 2.1b.

Table 2.1a: Summary of Theories and Literature Reviewed on Determinants of Corporate Sustainability Reporting

Variables	Predicted Signs by the Theories	Mostly Reported in Empirical Literature	Empirical Evidence	Critique
Size	+ (New Institutional theory)	+	Cormier and Magnan (2003), Quick (2008) De Villiers *et al.* (2014)	The subject matter of the study of Cormi (2003) was on environmental reporting, incorporating other sustainability reporti Quick (2008) did not assess how size in other variables influence sustainability r
Regulation	+ (New Institutional Theory)	-	Kuhn *et al.* (n.d.), Bell and Lundblad (2011)	Regulation cannot be assessed as a deter sustainability reporting in isolation beca need for monitoring and guidance from regulators. Hence, there is a need to con assess sustainability reporting beyond th mandatory reporting guidelines were int
Accounting Firm	+ (New Institutional Theory)	+	Barako (2007), Lan *et al.* (2013), Fernandez-Feijoo *et al.* (2016)	Accounting firm variable could have bee include Big four, medium and small firm assist in deciphering the influence of eac sustainability disclosures.
Membership of Governance Bodies	+ (New Institutional Theory)	+	Adeniyi (2016), Weber *et al.* (2016)	The studies were based on financial insti there was no empirical analysis to deter manner in which membership of govern particular to any industrial sector influen sustainability reporting.
Reporting of the Most Successful	+ (New Institutional Theory)	+	Aerts *et al.* (2006), De Villiers and Alexander (2010)	Industry leadership is not only a functio measures of industry leadership are reve profitability and market share.

Source: Compiled from Literature Review (2017)

Table 2.1b: Summary of Theories and Literature Reviewed on Determinants of Corporate Sustainability Reporting

Variables	Predicted Signs by the Theories	Mostly Reported in Empirical Literature	Empirical Evidence	Critique
Foreign Presence	+ (New Institutional Theory)	-	Amran and Devi (2008), Asaolu *et al*. (2011)	Foreign affiliation cannot be ass isolation because there are other combine with foreign presence sustainability reporting.
Stakeholder Engagement	+ (Legitimacy Theory)	-	Murguia and Bohling, (2013), Brandt (2015)	The studies assessed the extent engagement without incorporati factors in the reporting process assurance and board committee
Sustainability Framework	+ (Legitimacy Theory)	-	Cahaya (2011)	The presence of factors measuri of the sustainability reporting p guarantee high level sustainabil There is a need for clear explan sustainability issues in a compa framework.
Assurance	+ (Legitimacy Theory)	-	Zhou (2010), Faisal *et al*. (2012), The Association of Chartered Certified Accountants and Net Balance Foundation (2012), Sam and Tiong (2015)	Assurance is expensive for com influence of assurance on sustai reporting should not be examine This is because larger companie more financial resources for ass compared to smaller companies
Board Committee	+ (Legitimacy Theory)	+	Rubbens *et al*. (2002), Ricart *et al*. (2005), Hassan (2010), Eccles *et al*. (2012), Rankin *et al*. (2011), Amran *et al*. (2014), Tamoi *et al*. (2014)	There were no other reporting p other than board committee. In the area of methodology, the measured the presence of sustai reporting without assessing the reports.

Source: Compiled from Literature Review (2017)

CHAPTER THREE
METHODOLOGY

3.0 Preface

This chapter is made up of the layout of the methods that are employed in executing the objectives of the current study. The chapter begins by explaining the research philosophy and approach which determined the choice of methods that are used in carrying out this study. The chapter also includes description of the research design, research methods, study population, sample size, sampling technique, data gathering method, sources of data, instruments for data collection, description of questionnaire, validity and reliability of instruments, its data analysis, instruments of data analysis, model specification, and model estimation technique. More so, the variables in the model that were used in this study were explained.

3.1 Research Design

This study achieved its objectives by employing a longitudinal research design. This is because longitudinal research design involves repeated observations of the same units (companies in this study) over a period of time (2010 to 2014). This study also employed survey research design to extract data from corporate respondents on the factors influencing sustainability reporting. The dependent variable is the quantity of sustainability reporting in corporate annual reports and stand-alone reports. The measurement technique for the dependent variable (sustainability reporting) is a 56 item sustainability reporting index adapted from Global Reporting Initiative (2011). In line with prior studies such as Meek *et al.* (1995), Faisal *et al.* (2012) and Cyriac (2013), sustainability reporting is calculated in this study as a dichotomous equally weighted index. All the disclosure items are equally weighted and each of the 56 expected items present in corporate reports are attributed a score of ‘1’ and a score of ‘0’ is given to imply the absence of the disclosure.

A disclosure index is used to ascertain the level of inclusion of such information in annual reports or sustainability reports. The disclosure index is made up of a list of sustainability reporting indicators. This approach to measuring the dependent variable is not new to the sustainability reporting literature as it has been used in

prior studies such as Dilling (2016). In this study there are four (4) indicators of sustainability reporting namely economic, environmental, social and governance. Based on the view of Joseph (2010), the disclosure index method reduces the problem of double counting in the content analysis method. According to Scaltrito (2015), the content analysis method is concerned with the number of words and sentences on particular information while disclosure index entails measuring the level of information reported in corporate reports using a set of pre-determined elements.

The essence of the survey of corporate actors was to determine their perceptions on the importance of factors within the Nigerian context that influence sustainability reporting and the performance attached to such factors. The corporate respondent was selected from either investor relations, corporate reporting, finance department, environmental or sustainability department of the companies in line with previous studies such as Adams (2002), Buhr (2002), O'Dwyer (2002), Adams (2004), Adams and Larrinaga-Gonzalez (2007), Adams and McNicholas (2007), Belal and Owen (2007), Nakabiito and Udechukwu (2008), Wallen and Wasserfaller (2008), Adams and Whelan (2009), Bebbington *et al.* (2009), Farneti and Guthrie (2009), Dobbs and Van Staden (2011) and Kaspersen (2013). By relying on the judgment and perception of key decision makers in business organizations, Cormier *et al.* (2004) advocate that understanding the influence of managers' views on environmental disclosures could assist regulators in charting courses towards change in such disclosures and shed light into the reporting process. Also, more insight can be derived from studies that seek to decipher the perception of corporate actors towards the factors responsible for corporate sustainability reporting. This survey evidence was necessary to complement quantitative information gathered from annual reports of business organizations in line with prior studies such as Adams (2002), and Bebbington *et al.* (2009), seeking to provide evidence of the factors that contribute to the initiation of various forms of voluntary reporting.

3.2 Study Population

The study population was made up of listed companies in the oil and gas, industrial goods, consumer goods and banking sectors in Nigeria. According to data accessed from the listed companies' Directory of the Nigerian Stock Exchange (2015), there

are fifteen (15) universal banks, twenty four (24) companies in the industrial goods sector, twenty eight (28) companies in the consumer goods sector and fourteen (14) oil and gas companies; these sums up to a total of eighty one (81) companies.

Table 3.1 shows the market segmentation on the main board of the Nigerian Stock Exchange. According to the Nigerian Stock Exchange (NSE) (2015), the financial services, consumer goods, industrial goods and oil and gas sectors contribute 40 percent, 29 percent, 20 percent and 5 percent respectively to the NSE's market segmentation. Since these sectors contribute the largest based on market segmentation of the NSE, it is important to assess how their reporting practices incorporate sustainability reporting.

The population for the survey consists of 81 companies representing the number of companies in the financial services, consumer goods, industrial goods and oil and gas sectors on the NSE. According to the Nigerian Stock Exchange (2015), the companies in the consumer goods sector produce and manufacture consumables used by different categories of individuals and which are not used for further production. They are also known as finished goods. They include companies involved in manufacturing of automobiles/auto parts, household durable goods, textiles and apparel, food, beverage and tobacco products.

The industrial goods sector is made up of business organizations that are involved in manufacturing and distributing goods used in engineering, building, electricity industry and other industries for large-scale industrial and consumption purposes. In this sector goods are produced for commercial purposes. The oil and gas sector includes business organizations operating in the upstream and downstream petroleum industry. Companies in this sector also explore, produce, market, refine, transport petroleum products, and other consumable fuels. The banking sector includes business organizations that provide financial services and are engaged in providing services as lenders of financial resources. This study focuses on business organizations that are listed on the NSE because their corporate annual reports are published.

The inclusion of business organizations in the banking sector which is a part of the financial services sector stems from Brennan and Solomon (2008) who point out the

need for corporate accountability to stakeholders by organizations in the financial service sector. As at 2011, there was also a GRI sustainability reporting guideline for business organizations in the financial services sector. Also, the business organizations in this sector can demonstrate how they also influence their clients to be accountable in terms of sustainability issues. Therefore, more research into this extended accountability is needed on business organizations in the financial services sector. As previously argued in the literature, the business organizations in the financial services sector are not directly prone to sustainability issues, rather, through their activities and operations with other businesses, they can be held accountable for their sustainability impacts.

Table 3.1: Market Segmentation on the Main Board of the Nigerian Stock Exchange

Sector	Contribution to the Nigerian Stock Exchange (NSE)
Financial Services	40%
Consumer Goods	29%
Industrial Goods	20%
Oil and Gas	5%

Source: The Nigerian Stock Exchange (NSE) (2015)

3.3 Sampling Technique and Size

Sample size for this study is determined using the Yamane (1967) formula as cited in Puszczak *et al.* (2013). The formula is stated as follows:

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

where

n is the sample size

N is the population size

e is the level of precision (given as 5% in this study)

This formula is used because it provides a scientific explanation for the computation of the sample size employed in this study.

3.3.1 Sample Size - Secondary Data

Based on the formula above, a population of eighty one results in a sample size of sixty seven companies. Applying purposive sampling technique to the sample size, the sample size is 9 companies in the oil and gas sector, 11 companies in the industrial goods sector, 20 companies in the consumer goods sector and 14 companies in the banking sectors. According to Ilker *et al.* (2016), purposive sampling technique entails concentrating on people with particular features who can provide information on a research subject. In this study, purposive sampling technique was used because companies were selected using a number of criteria. In assessing sustainability reporting, this study had criteria for inclusion of business organizations in the sample. The criteria are: exclusion of companies that were delisted from the Nigerian Stock Exchange (NSE), exclusion of companies with incomplete annual reports (where only financial performance was presented and reported) and exclusion of companies whose shares were not listed on the NSE in year 2010.

3.3.2 Sample Size for Survey

The population of eighty one (81) companies was used to determine the size of the sample. Applying convenience sampling technique to the sample size, the sample size is 14 oil and gas companies, 24 industrial goods companies, 28 consumer goods companies and 15 banks. These companies were selected from the banking, oil and gas, consumer goods and industrial goods sectors of the Nigerian Stock Exchange (NSE). The list of companies in the banking sector, oil and gas sector, consumer goods and industrial goods sectors from the NSE was used to locate the companies.

The convenience sampling technique was used in the survey. According to Ilker *et al.* (2016), convenience sampling involves selecting persons who were easily accessible, available at a given time and willing to participate to respond to a survey. The corporate members who responded to the survey were selected using convenience sampling.

Table 3.2: Computation of Usable Annual Reports

	2014
Total Companies in Banking Sector	15
Less: Unfiled annual reports	1
Less: Not listed as at 2010	-
Less: Delisted during the years under consideration	-
Usable annual reports	14
Total Companies in the Oil and Gas sector	14
Less: Unfiled annual reports	2
Less: Not listed as at 2010	2
Less: Delisted during the years under consideration	1
Usable annual reports	9
Total Companies in the Consumer Goods Sector	28
Less: Unfiled annual reports	3
Less: Not listed as at 2010	3
Less: Delisted during the years under consideration	2
Usable annual report	20
Total Companies in the Industrial Goods Sector	24
Less: Unfiled annual reports	5
Less: Not listed as at 2010	5
Less: Delisted during the years under consideration	3
Usable annual report	11
Total Usable Annual Reports	54

Source: Researcher's Compilation (2017)

3.4 Data Gathering Method

3.4.1 Sources of Data

In order to actualize the objectives outlined in chapter one of this study, both primary and secondary data were employed. Primary data was collected using questionnaires and administered to decision makers in selected business organizations. Secondary data was collected from annual reports (or where available, stand alone sustainability reports) of companies in the oil and gas, industrial goods, consumer goods and banking sectors in Nigeria. Also, secondary data was collected from internet materials of business organizations that were included in the sample size. Samples of the questionnaires and the disclosure index used in this study are available in Appendix II and I respectively.

3.4.2 Research Instrument

This section contains a description of the research instrument used to collect primary data and secondary data from the business organizations.

a. Research Instrument for Primary Data – Questionnaire

Based on the research objectives which the current study sought to actualize, information was gathered from decision makers within business organizations using questionnaire. The views and perceptions of corporate actors can only be available when collected from them using survey. Prior studies such as Owolabi (2001), Cormier *et al.* (2004), Aerts *et al.* (2006), Owolabi (2007), and Belal and Owen (2007) affirm the appropriateness of primary data in assessing the views and perceptions of issues using questionnaire. The questions in the questionnaire were designed based on factors that are responsible for corporate sustainability reporting identified in the literature review.

The views of corporate actors in business organizations were collected through questionnaires. The rationale for including their views in this study is based on new institutional theory, which posits that managers create rationales about the pressures influencing corporate reporting and these rationales can influence the actual reporting practice. These information producers were required to ascertain the pressures influencing sustainability reporting, while estimating the quantity of information that these pressures could generate.

The questionnaire is designed to ascertain the views of decision makers on the importance of factors in the organizational field that influence sustainability reporting. In the first section of the questionnaire, respondents are required to rate the factors on a scale of Extremely Important, Important, Slightly Important and Not Important.

In the second section of the questionnaire, corporate respondents are required to rate the performance of the aforementioned factors on a scale Strongly Agree, Agree, Disagree and Strongly Disagree. The third section of the same questionnaire requires corporate respondents to rate the level of sustainability reporting of their organization on a scale of high, medium and low. Also, respondents are required to indicate which industry their organization belongs, their department, highest academic qualification, professional qualification, number of years spent in that organization. The first, second and third sections of the questionnaire pertain to hypothesis four.

b. Research Instrument for Secondary Data - Sustainability Reporting Index

In determining the presence of sustainability reporting, the disclosure occurrence method of content analysis technique was applied to the information in corporate reports and sustainability reports. According to Joseph and Taplin (2011), there are two ways of applying content analysis technique. These mechanisms are disclosure occurrence and disclosure abundance method. These methods are used to ascertain the content of corporate disclosures. The disclosure abundance method entails counting pages, words, or sentences on a checklist of disclosure items. The demerit of this method is that it can lead to double counting when a particular item on the checklist of disclosure items is counted twice or more because it occurs more than once in the actual report. The disclosure occurrence method recognizes the presence of disclosure in the corporate report as ‘1’ and the absence of disclosure as ‘0’; after which the total disclosure is determined. It can also result in a more predictable measurement of sustainability reporting. Based on the review of literature, varying indicators have been used to measure sustainability reporting (Bennett *et al*., 2011; Michelon and Parbonetti, 2012; Schonbohm and Hofmann, 2012; Ching *et al*., 2013; Ching *et al*., 2014; Global Reporting Initiative, 2013a). After examining the various

measures of sustainability reporting used previously, the researcher concluded that a modified version of the GRI guidelines can be used in this study as disclosure index (see Appendix I).

3.5 Validity and Reliability of Research Instrument

This section explains the validity and reliability of the questionnaires and the reporting index.

a. Validity and Reliability of Sustainability Reporting Index

The validity and reliability of the disclosure index was carried out in this study. According to Joseph (2010), the disclosure of at least one item in the disclosure index by at least one organization showed that all the items in the index were relevant. A pilot study of the content of sustainability reporting of ten (10) percent of the population was carried out. Based on the total population of 81 companies, 8 companies were engaged in this pilot study for the purpose of ascertaining whether their 2010 and 2014 corporate reports featured items in the reporting index. The company reports involved in the pilot study were those pertaining to the following namely: 7-Up Bottling Company, Dangote Flour Mills Plc, Ashaka Cement Plc, Beta Glass Plc, Diamond Bank Plc, FCMB Group Plc, BECO Petroleum Plc and Conoil Plc. The results of the pilot study showed that at least 6 out of 56 items were reported on the disclosure index of the companies.

b. Validity and Reliability of Questionnaire

The instrument referred to in this section is the questionnaire. The test of validity and reliability of the questionnaire was carried out in this study. In line with prior study by Awang and Mohammad (2015), the validity and reliability of the questionnaire was carried out. Content validity was used to assess the validity of the questionnaire. Cronbach's alpha coefficient was used to measure the reliability of the questionnaire. Content validity of the questionnaire was carried out by circulating five (5) copies of the questionnaire to scholars (researchers) with interest in corporate reporting.

In this study, reliability of the scale developed to assess the factors influencing sustainability reporting was ascertained using Cronbach's alpha which was computed using IBM Statistical Package for Social Sciences (SPSS). The computed

Cronbach's alpha coefficient for the factors influencing sustainability reporting scale of 44 items was 0.941. In order to test for reliability of the scale used to gather data used in this study, Cronbach's alpha test was conducted on the 50 items in the questionnaire. The Cronbach's alpha coefficient was 0.903, and this implied very good internal consistency of the scale based on Pallant (2011). This coefficient is higher than the prescribed 0.7 value.

3.6 Methods of Data Analysis

3.6.1 Method of Data Analysis for Survey

Preliminary data analysis refers to use of descriptive statistics in interpretation of data. These descriptive statistics include frequencies, means and standard deviation. On the other hand, advanced data analysis entails the use of statistical tools to test the hypotheses. The data for hypothesis four (H_{04}) was subjected to Direct Oblimin rotated principal components factor analysis. Factor analysis is deemed to be most useful for this hypothesis because the entire factors identified in the literature needed to be summarized (Pallant, 2011). This is to ascertain the factors influencing sustainability reporting. Also, factor analysis can identify the relationship(s) among the independent variables based on earlier studies such as Cormier *et al.* (2004), Aerts *et al*. (2006) and Owolabi (2007). Also, the suitability of factor analysis in this study is confirmed by a Kaiser-Meyer-Olkin (KMO) value of not less than 0.6 as prescribed by Kaiser (1970, as cited in Pallant, 2011). According to Pallant (2011), the KMO value is a measure of sampling adequacy.

Based on Pallant (2011), in assessing the factorability of the primary data, Barlett's test of sphericity value was determined. IBM Statistical Package for Social Sciences (SPSS) version 17 used the eigenvalue of greater than one (>1) criterion for factor extraction. This is in line with prior studies that have employed principal component analysis in data analysis. The Scree plot was also used to determine the factors that were retained. In line with prior studies components above the major change in the plot were retained.

3.6.2 Method of Data Analysis for Secondary Data

Data collected using the disclosure index was subjected to preliminary and advanced analysis. Preliminary data analysis refers to use of descriptive statistics in

interpretation of data. These descriptive statistics include frequencies, means and standard deviation. On the other hand, advanced data analysis entails the use of statistical tools to test the hypotheses. The data for hypothesis one (H_{01}) was analysed using repeated measures Analysis of Variance (ANOVA). Repeated measures ANOVA was used in analyzing the data for hypothesis one because it was necessary to ascertain the variation in sustainability reporting across the five time periods ending in 2014. Repeated measures ANOVA is appropriate because each company in the sample of this study was measured on the same disclosure index on five occasions.

The data for hypotheses two (H_{02}) and three (H_{03}) was analysed using regression. Regression was used in analyzing the data for hypotheses 2 and 3. Pooled Ordinary Least Square (OLS), Fixed Effects and Random Effects were the forms of regression carried out in this study. This is necessary to identify the regression model with the highest explanatory power. The Hausman specification test for testing whether Fixed Effects model is more appropriate than Random Effects model was used. Torres-Reyna (2007) states that when the P-value of the Hausman specification test is less than 5 percent, the Fixed Effects model result is more appropriate than the Random Effects model.

3.6.3 Model Specification

From review of literature, a company's sustainability reporting can be affected by several generic factors. So, it is necessary to investigate the influence of institutional field factors and internal organizational process on a company's sustainability reporting. Following the hypotheses earlier stated in chapter one, regression models are formulated to capture the influence of institutional field factors and internal organizational process on sustainability reporting.

A functional relationship between sustainability reporting and institutional field factors is shown in the following implicit equation:

$$SRI = f(SECCGC, CBNSBP, ACCTF, MEGBPI, MEGBNPI, FORPR, SZE, ROMS) \quad (1)$$

where

SRI: Sustainability Reporting Indicators which is summation of observed economic, environmental, social and governance indicators in corporate reports

SECCGC: Take value 1 where Securities and Exchange Commission Code of Corporate Governance has been introduced, 0 otherwise

CBNSBP: Take value 1 where Central Bank of Nigeria Sustainability Reporting Guidelines has been introduced, 0 otherwise

ACCTF: Take value 1 where Big Four is the auditor of the company's financial statement, 0 otherwise

MEGBPI: Take value 1 where the company is a member of External Governance Bodies that are particular to the industry it belongs to, 0 otherwise

MEGBNPI: Take value 1 where the company is a member of External Governance Bodies that are not particular to the industry it belongs to, 0 otherwise

FORPR: Take value 1 where the company is an affiliate of a foreign based company, 0 otherwise

SZE: Total assets of company

ROMS: Reporting of Most Successful Company in an industry

The relationship between sustainability reporting and the institutional field factors can be re-written as follows:

$$SRI_{it} = f(SECCGC_{it}, CBNSBP_{it}, ACCTF_{it}, MEGBPI_{it}, MEGBNPI_{it}, FORPR_{it}, SZE_{it}, ROMS_{it}, \varepsilon_{it}) \quad (2)$$

where

i: company

t: time

with

i: 1,…,N

t: 1,…,T

ε_{it}: error terms

The Panel Data Model showing the functional relationship between the dependent and independent variables developed in line with new institutional theory is depicted in equation 2. According to Gujarati (2004), the technique of dummy variable can be

extended to panel data. Also, the independent variables in this study are a mix of qualitative and quantitative regressors. According to Gujarati (2004), regression models containing a mix of qualitative and quantitative variables are called Analysis of Covariance (ANCOVA) models. In line with Allison (2009), fixed effects model can be used in estimating a dependent variable (on a scale) and predictor variables (with a mix of quantitative and qualitative attributes). In Allison (2009), the predictor variables were mainly dummy variables. This makes panel data analysis suitable in the current study.

This study used panel data to examine the influence of institutional field and reporting process factors on sustainability reporting of companies in Nigeria. According to Gujarati and Porter (2009), panel data is useful for the following reasons:

i. The combination of time series and cross-sectional observation makes data more informative and enhances variability of results;
ii. Panel data can assess the patterns of change;
iii. Panel data can measure effects that simply cannot be observed in pure cross-sectional or time series; and
iv. Panel data can also be used to enrich empirical analysis in ways that may not be possible with either cross-sectional or time series.

The Panel data equation can be depicted as follows:

$$y_{it} = \alpha_i + + \beta_{ij} x_{it} + \varepsilon_{it} \quad (3)$$

where:
y_{it} : vector of dependent variable, such that (y_{it}) = (SRI)
x_{it} : vector of explanatory variables, such that (x_{it}) = (SECCGC, CBNSBP, ACCTF, MEGBPI, MEGBNPI, FORP, SZE, ROMS)
i = 1,…,54
j = 1,…,8
t = 2010 – 2014
The vector of dependent variable (y_{it}) is sustainability reporting indicators to be determined, while (x_{it}) is vector of the explanatory variables, that is, factors that can

influence sustainability reporting. The parameters (β_{ij}) are the various coefficients of the explanatory variables that were obtained when the model was fitted into the data. The constant term (α_i) represents the intercept of the equations while (ε_{it}) is the error term that captures variables not included and expected to be identically distributed with zero mean and constant variance.

Equation (2) is the explicit form of the model and if a linear relationship is assumed, then it can be written explicitly as follows:

$$SRI_{it} = \alpha_i + \beta_1 SECCGC_{it} + \beta_2 CBNSBP_{it} + \beta_3 ACCTF_{it} + \beta_4 MEGBPI_{it} + \beta_5 MEGBNPI_{it} + \beta_6 FORPR_{it} + \beta_7 SZE_{it} + \beta_8 ROMS_{it} + \varepsilon_{it} \quad (4)$$

α: constant

β: coefficient variable

Furthermore, the Generalized Linear Model Equation for individual companies i: 1,….., N observed at several time periods t = 1,….., T is stated as follows:

$$SRI_{it} = \alpha_i + \beta_1 SECCGC_{it} + \beta_2 CBNSBP_{it} + \beta_3 ACCTF_{it} + \beta_4 MEGBPI_{it} + \beta_5 MEGBNPI_{it} + \beta_6 FORPR_{it} + \beta_7 SZE_{it} + \beta_8 ROMS_{it} + \varepsilon_{it} \quad (5)$$

where

ε_{it} is a composite error term which is assumed uncorrelated with the explanatory variables of all past, current and future time periods of the same company.

This composite error term is made up of two components, Z_i, which is the cross-section, or individual-specific error component, and μ_{it}, which is the combined time series and cross-section error component.

To estimate Equation (5), the fixed and random effects were required. However, the Hausman test was estimated to determine the most efficient technique between fixed and random effect.

A priori Expectations:

$\beta_1 > 0; \beta_2 > 0; \beta_3 > 0; \beta_4 > 0; \beta_5 > 0; \beta_6 > 0; \beta_7 > 0; \beta_8 > 0; \beta_9 > 0$

In line with Gujarati (2004) to avoid falling into the dummy variable trap, n-1 dummy variable categories were used in the regression.

From the literature a company's sustainability reporting can be affected by their reporting process. So, it is necessary to investigate the influence of factors in the reporting process on a company's sustainability reporting. Following the hypotheses previously formulated, regression models were employed to capture the influence of the reporting process on sustainability reporting.

A functional relationship between sustainability reporting and reporting process factors is shown in the following equation:

$$SRI = g(ASUR, SUSFR, BODC, STKE) \tag{6}$$

where

SRI: Sustainability Reporting Indicators

ASUR: Take value 1 where there is independent verification of sustainability report, 0 otherwise

SUSFR: Take value 1 where Sustainability Reporting Framework was referred to in the annual report, 0 otherwise

BODC: Take value 1 where there is Board Committee on Sustainability, 0 otherwise

STKE: Count Variable consisting of Mention of stakeholders, Frequency of Stakeholder engagement and media of stakeholder engagement

The relationship between sustainability reporting and the reporting process factors can be re-written implicitly as follows:

$$SRI_{it} = g(ASUR_{it}, SUSFR_{it}, BODC_{it}, STKE_{it}, \rho_{it}) \tag{7}$$

where

i: company

t: time

with

i: 1,…….,N

t: 1,…….,T

ρ_{it}: error terms

Equation (7) is stated in Panel data form.

The Panel data equation can be depicted as follows:

$$y_{it} = \theta_i + \lambda_{ij} x_{it} + \varepsilon_{it} \quad (8)$$

where:

y_{it} : vector of dependent variable, such that $(y_{it}) = (SRI)$

x_{it} : vector of explanatory variables, such that $(x_{it}) = (ASUR_{it}, SUSFR_{it}, BODC_{it}, STKE_{it})$

$i = 1,\ldots\ldots., 54$

$j = 1,\ldots\ldots\ldots, 4$

$t = 2010 – 2014$

The vector of dependent variable (y_{it}) is sustainability reporting indicators to be determined, while (x_{it}) is vector of the predictor variables, that is, reporting process factors that can influence sustainability reporting. The parameters (λ_{ij}) are the various coefficients of the explanatory variables that were obtained when the model was fitted into the data.

The constant term (θ_i) represents the intercept of the equations while (ρ_{it}) is the error term that captures variables not included and expected to be identically distributed with zero mean and constant variance.

Equation (7) is the implicit form of the model and if a linear relationship is assumed, then it can be written as follows:

$$SRI_{it} = \theta_i + \lambda_1 ASUR_{it} + \lambda_2 SUSFR_{it} + \lambda_3 BODC_{it} + \lambda_4 STKE_{it} + \rho_{it.} \quad (9)$$

where

θ: constant

λ: coefficient variable

ρ: error term

Furthermore, the Generalized Linear Model Equation for individual companies i: 1,……, N observed at several time periods t = 1,……, T is stated as follows:

$$SRI_{it} = \theta_i + \lambda_1 ASUR_{it} + \lambda_2 SUSFR_{it} + \lambda_3 BODC_{it} + \lambda_4 STKE_{it} + \rho_{it} \quad (10)$$

where

ρ_{it} is a composite error term which is assumed uncorrelated with the explanatory variables of all past, current and future time periods of the same company.
This composite error term is made up of two components, Z_i, which is the cross-section, or individual-specific error component, and μ_{it}, which is the combined time series and cross-section error component.

To estimate Equation (10), the fixed and random effects were required. However, the Hausman test was estimated to determine the most efficient technique between fixed and random effect.
A priori expectations:

$\lambda_1 > 0; \lambda_2 > 0; \lambda_3 > 0; \lambda_4 > 0$

Method of Estimation

In order to actualize the objectives of this study, the regression model took the form of Pooled Ordinary Least Square (OLS) model, Panel Fixed Effects Model and Random Effects Model. This was necessary to identify the regression model with the highest explanatory power. First, the data was subjected to Pooled ordinary least square regression. In the pooled regression, the data pertaining to the companies were pooled together and the regression model was run, ignoring the cross-section and time series nature of the data. Another weakness of pooled regression is that it does not distinguish between the various companies included in the regression and neglects the heterogeneity that may exist among them.

According to Basso (2012), it is fair to assume that the fixed effects model is more important because it considers exogenous effects on a model. The Panel fixed effects model also eliminates unobserved time-invariant company effects and makes it possible for all potential error reasons to be included in the model. The Fixed Effect Model allows for heterogeneity among the companies by allowing each to have its own intercept value. Although, each company has its own intercept value, this intercept does not vary with time. Therefore, the intercept is time invariant. Also, in the fixed effects model, the independent variables do not have random nature. Allison (2009) noted that with fixed effects model, the effects of time invariant characteristics are controlled for whether such characteristics are measured or not.

Fixed effects model helps to control for omitted variable bias by having the individual companies serve as their own controls. Fixed effects model use only within-individual differences, irrespective of the differences between individual companies. In Random Effects Model, the companies have a common mean value for the intercept.

The difference between fixed effects model and random effects model according to Clark and Linzer (2012) is that fixed effects model produces unbiased estimates of the coefficients, but the coefficients can be subject to high variability based on the sample. Although, random effects model rarely produces biased estimates of the coefficients, it can lead to coefficients that are closer (on the average) to the true value in any sample. This implies that fixed effects model may produce estimates that are highly sample-dependent. Another difference between fixed effects model and random effects model is that fixed effects model requires the estimation of a parameter for each coefficient on the unit dummy variable and reduces the model's explanatory power and increases standard errors of the coefficient estimates. Conversely, the random effects model estimates only the mean and standard deviation of the distribution of unit effects and not a set of dummy variables.

In the view of Clark and Linzer (2012), the incorporation of the theoretical assumptions into the choice of a model can be tedious. Thus, the Hausman specification test is used to testing whether the Fixed Effects model is more appropriate than the Random Effects model. This is done by detecting violation of the assumption that the predictor variables are orthogonal to the unit effects. In this study, Hausman specification test was computed for each model. According to Torres-Reyna (2007), based on the Hausman specification test, where the P-value is less than 5 percent, the Fixed-Effects model is appropriate and where the P-value is more than 5 percent, the Random-Effects model is appropriate.

Although, Clark and Linzer (2012) argue that the absence of a significant difference in the Hausman test does not follow that the random effects estimation of the coefficients is unbiased and is more appropriate than the fixed effects estimation of the coefficients. Furthermore, a random effects biased estimator can be preferable to a fixed effects unbiased estimator in a circumstance that the random effects biased estimator provides enough reduction of the variance. Thus, the Hausman

specification test may be inconclusive in choosing the most appropriate model between fixed effects and random effects model. Under this circumstance, Clark and Linzer (2012) advocate for simulation analysis to determine the conditions that a fixed effects or random effects model provides unbiased coefficient estimates.

3.6.4 Operationalisation of Variables

There are three main constructs in this study, namely, corporate sustainability reporting, institutional field and internal organizational factors. Corporate sustainability reporting is the dependent variable while factors and internal organizational structures are independent variables. In order to measure these constructs, it was necessary to define them operationally.

a. The Dependent Variable - Sustainability Reporting

Sustainability reporting can be embedded in corporate annual reports or stand-alone reports. Specifically, within the context of this study, the indicators of corporate sustainability reporting are shown in Appendix 1. These indicators are grouped into four categories namely: economic, environmental, social and governance.

The content analysis methodology was employed in this study. Companies were scored on the disclosure index made up of sustainability reporting indicators adapted from Global Reporting Initiative (2011).

Mathematically, the sustainability reporting index can be computed as follows:

$$ESRI = (EECI + EENI + ESCI + EGVI) \quad (11)$$

$$SRI = \frac{(OECI + OENI + OSCI + OGVI)}{ESRI} \quad (12)$$

where

ESRI: Expected Sustainability Reporting Indicators

EECI: Expected Economic Indicators

EENI: Expected Environmental Indicators

ESCI: Expected Social Indicators

EGVI: Expected Governance Indicators

SRI: Sustainability Reporting Index
OECI: Observed Economic Indicators
OENI: Observed Environmental Indicators
OSCI: Observed Social Indicators
OGVI: Observed Governance Indicators

The indicators of sustainability reporting were in corporate annual reports or stand-alone corporate citizenship, responsibility and sustainability reports. The sustainability reporting index data computed were obtained from any of the aforementioned reports of business organizations across oil and gas, banking, industrial goods and consumer goods sectors of the Nigerian Stock Exchange (NSE). The dependent variable (sustainability reporting) was determined as follows. First, the researcher read through the different aspects of sustainability reporting. Then, annual reports and stand-alone sustainability reports were read thoroughly. The presence of information based on the categories described in this chapter was determined. A score of '1' was given where the information is present and '0' if otherwise. The presence or absence of measures of sustainability reporting was recorded in an excel spreadsheet and the total sustainability score was computed. For each company, it is expected that there are fifty six (56) items of disclosures representing sustainability reporting. Therefore, the sustainability reporting index is the observed sustainability score (as derived from the annual reports) divided by the expected sustainability reporting score which is 56. The sustainability reporting score for every company in this study is between 0 and 56.

b. The Independent Variables

The independent variables are expounded below.

Securities and Exchange Commission Code of Corporate Governance 2011

The Securities and Exchange Commission (SEC) is the body responsible for regulating public limited liability companies whose shares are traded on the floor of the stock exchange in Nigeria. Based on new institutional theory, the SEC is one of the coercive pressures. State agencies such as the SEC in Nigeria have issued the code of corporate governance in 2003 and an amended version in 2011. According to SEC (2011), the code is not a rigid set of rules, but it is to facilitate proper

corporate practices. The code also defines minimum set of standards of corporate governance expected of public limited liability companies whose securities are listed. For example, changes were made to the Securities and Exchange Commission code of corporate governance 2003 which led to the emergence of the 2011 code. One of the aspects of the 2011 code of corporate governance is Section D which is on sustainability disclosures. As a result of this shift in their operating environment, business organizations may perceive pressure to change their corporate reporting behaviour.

The SEC code of corporate governance is measured using the introduction of the Code. It is measured using '1' after the introduction of the revised code and'0' otherwise.

Central Bank of Nigeria Sustainability Reporting Guidelines 2012

The Central Bank of Nigeria (CBN) is the body responsible for regulating financial institutions (especially banks) in Nigeria. The CBN is an agency of the State. Based on institutional theory, the CBN is one of the coercive pressures because when they issue rules, regulations and guidelines, business organizations (banks) are expected to follow suit. In 2012, sustainability banking principles were issued to financial institutions in Nigeria. This expectation for business organization translates to coercive pressure on their corporate practices.

The CBN sustainability banking principles (SBP) is measured using the introduction of the SBP. It is measured using '1' after the introduction of the SBP and'0' otherwise.

Accounting Firms

The accounting profession has a public interest role in promoting the debate and supporting the development of sustainability reporting and assurance standards. Accounting firms provide sustainability services to clients (including business organizations). These services include prioritizing sustainability risks and opportunities, measuring and managing sustainability, reporting on sustainability management and performance (Deloitte, 2015). From a new institutional theory perspective, affiliation with a Big four accounting firm that provides services on

sustainability to clients generally and audits and provides assurance on the focal firms' financial statements may lead to more corporate disclosures on sustainability. The affiliation with assurance providers may pose normative pressure on the business organization. Accounting firm is measured using '1' where the financial statement auditor is a big four accounting firm and '0' otherwise.

Membership of External Governance Bodies Particular to an Industry

Based on new institutional theory, a company's membership of external governance bodies particular to an industry such as United Nations Environment Programme Finance Initiative (for financial institutions), global oil and gas industry association for environmental and social issues (for oil and gas companies), can influence their sustainability reporting.

Membership of external governance bodies particular to an industry is measured '1' where a company is a member of global oil and gas industry association for environmental and social issues, United Nations Environment Programme Finance Initiative and '0' otherwise. The list of members of United Nations Environment Programme Finance Initiative was obtained from United Nations Environment Programme Finance Initiative (2015). The list of members of global oil and gas industry association for environmental and social issues was obtained from Global oil and gas industry association for environmental and social issues (2015).

Membership of External Governance Bodies Not Particular to an Industry

From a new institutional theory perspective, a company's membership of external governance bodies not particular to an industry such as United Nations Global Compact, can influence their sustainability reporting.

The list of members of United Nations Global Compact was obtained from United Nations Global Compact (2015). Membership of external governance bodies not particular to an industry is measured '1' where a company is a member of United Nations Global Compact and '0' otherwise.

Foreign Presence

Based on new institutional theory, a company's foreign affiliation can influence their sustainability reporting.

Foreign presence was determined from websites of the company. Foreign presence was measured using '1' where the company has affiliation outside Nigeria and '0' where the company does not have affiliation outside Nigeria.

Company Size

Larger companies have more stakeholders in their organizational field. Thus, they are susceptible to scrutiny from more stakeholders in the business environment. Also, larger companies are more visible to a broader range of stakeholders. Therefore, there is tendency for them to seek legitimacy from more stakeholders who control the resources they require for business operations. Based on institutional theory, business organizations have a wider spectrum of stakeholders to prove their legitimacy and conform to values that are deemed acceptable by society.
Company size was determined using total assets. Company size was obtained from the corporate annual reports of companies. This variable was logged to normalise the values.

Reporting of the Most Successful Business Organization in the Industry

Based on new institutional theory, the higher the most successful business organization in an industry reports on sustainability, the tendency for other business organizations in that industry to follow their trail. Success is measured in terms of profit.
The profit of companies was ranked from largest to smallest. The reporting of the company with the largest profit was determined. This variable was obtained from corporate annual reports.

Assurance

The independent verification of a stand-alone sustainability report is known as assurance. This can be done by an accounting firm or by a consulting firm. Assurance of sustainability report is necessary to negate the opinion of users of sustainability reports that the sustainability activities of business organizations are green washed or for public relations.
Assurance was measured using '1' where a company subscribes to assurance for its sustainability reporting and '0' otherwise. This variable was obtained from corporate reports of companies.

Sustainability Framework

A number of sustainability frameworks have been reviewed in the literature. In this study, the frameworks that business organizations can depend upon to report on sustainability include Central Bank of Nigeria's sustainability banking principles (for banks), ISO 14001 Environmental Management System (EMS) guidelines, Global Reporting Initiative (GRI) guidelines, Communication on Progress format of the United Nations Global Compact, United Nations Global Compact Principles and United Nations Environment Programme Finance Initiative (UNEP FI).

This variable was obtained from corporate annual reports of companies. It was measured using '1' where a company refers to a sustainability framework in its corporate report and '0' otherwise.

Board Committee on Sustainability

Board committees have an oversight role to play in the financial reporting process as well as in reporting on sustainability issues (economic, environmental, social and governance impacts on one hand and performance metrics on these issues). The members of the board of directors of a business organization that oversee sustainability issues could be in one or more of the following board committees namely risk management (environment risk, social risk), social responsibility and sustainability. In this study board committee on sustainability is measured by the presence of at least one of the above committees.

This variable was obtained from corporate annual reports of companies. It was measured using '1' where a company has board committee on sustainability on its board of directors, and '0' otherwise.

Stakeholder Engagement

Stakeholder engagement is a crucial aspect of sustainability reporting. In this study, the use of the word 'stakeholders' in place of 'shareholders' in corporate reports is vital for any meaningful communication on sustainability issues. The frequency of stakeholder engagement and method of stakeholder engagement is used to measure stakeholder engagement.

This variable was obtained from corporate annual reports of companies. It was measured using the presence of a statement in corporate annual reports that identifies stakeholders, the method of stakeholder engagement and frequency of

stakeholder engagement. So, reference to identification of stakeholders is measured as ‘1’. Reference to the frequency of stakeholder engagement and the previous disclosure on identification of stakeholders is measured as ‘2’ and reference to the media of stakeholder engagement and the two previous disclosure items is given a score of ‘3’.

The independent variables employed in this study and their sources are presented in Table 3.3. Table 3.4 shows the source of the dependent variable and independent variables employed in this study.

Table 3.3: Independent Variables (Institutional Field Factors) and Sources of Information

Variables	Acronym	Indicator	Source of Information
Securities and Exchange Commission Code of Corporate Governance	SECCGC	Introduction of Securities and Exchange Commission Code of Corporate Governance (revised in 2011) Dummy variable: Take value 1 where Securities and Exchange Commission Code of Corporate Governance has been introduced, 0 otherwise	Year of Revision of Securities and Exchange Commission Code of Corporate Governance (2011)
Central Bank of Nigeria Sustainability Banking Principles	CBNSBP	Introduction of Central Bank of Nigeria Sustainability Banking Principles (introduced in 2012) Dummy variable: Take value 1 where Central Bank of Nigeria Sustainability Banking Principles has been introduced, 0 otherwise	Year of Introduction of Central Bank of Nigeria Sustainability Banking Principles (2012)
Accounting Firm	ACCTF	The accounting firm that audits financial statements Dummy variable: 1 where big four audits financial statements and 0 otherwise	2010 to 2014 Corporate Annual Reports
Membership of Governance Bodies Particular to the Industry	MEGBPI	Membership of United Nations Environment Programme Finance Initiative, global oil and gas association Dummy variable: Value 1 where the company is a member of External Governance Bodies that are particular to the industry it belongs to, 0 otherwise	Websites of Governance Bodies (Global oil and gas industry association for environmental and social issues (2015, United Nations Environment Programme Finance Initiative, 2015)
Membership of Governance Bodies Not Particular to the Industry	MEGBNPI	Membership of United Nations Global Compact Dummy variable: Value 1 where the company is a member of External Governance Bodies that are not particular to the industry it belongs to, 0 otherwise	Websites of Governance Body (United Nations Global Compact, 2015)
Foreign Operation	FORPR	Presence of foreign operation Dummy variable: Value 1 where the company is an affiliate of a foreign based company, 0 otherwise	2010 to 2014 Corporate Annual Reports and Company websites
Reporting of the most successful company in the industry	ROMS	The sustainability reporting of the most successful (profitable) company in the industry in a year	2010 to 2014 Corporate Annual Reports and Sustainability Reports
Size	SZE	Total assets	2010 to 2014 Corporate Annual Reports

Source: Compiled by Researcher (2017)

Table 3.4: Dependent and Independent Variables (Reporting Process Factors) and Sources of Information

Variables	Acronym	Indicator	Source of Information
Assurance	ASUR	Presence of third party verification of information on sustainability Dummy Variable: value 1 where there is independent verification of sustainability report, 0 otherwise	2010 to 2014 Corporate Annual Reports, Sustainability Reports, Citizenship Reports
Sustainability Framework	SUSFR	Presence of any sustainability framework Dummy Variable: Value 1 where Sustainability Reporting Framework was referred to in the annual report, 0 otherwise	2010 to 2014 Corporate Annual Reports, Corporate website, Sustainability Reports, Citizenship Reports
Board of Director Sustainability Committee	BODC	Presence of board committee on sustainability, social responsibility, environmental risk management Dummy Variable: Take value 1 where there is Board Committee on Sustainability or Related Issues, 0 otherwise	2010 to 2014 Corporate Annual reports, Sustainability Reports, Citizenship Reports
Stakeholder Engagement	STKE	The summation of mention of stakeholders, frequency of stakeholder engagement and media of stakeholder engagement Count Variable	2010 to 2014 Corporate Annual report, Sustainability Reports, Citizenship Reports
Sustainability Reporting	SR	As given in Appendix I	2010 to 2014 Corporate Annual Reports, Sustainability Reports, Citizenship Reports

Source: Compiled by Researcher (2017)

CHAPTER FOUR
RESULTS

4.0 Preface

This chapter presents the results of data collected from survey of factors influencing sustainability reporting from the perspective of corporate respondents, corporate annual reports and factors that are observable in the organizational field and internal reporting process. This chapter also focuses on the preliminary and advanced analysis of data pertaining to hypotheses formulated in chapter one.

4.1 Data Analysis

The data analyses for this study have been presented based on the order of hypotheses namely: analysis of secondary data from corporate annual reports, factors that are observable in the organizational field and internal organizational factors, analysis of survey of the importance and performance of factors influencing sustainability reporting.

4.1.1 Secondary Data Analysis - Preliminary

Prior to the descriptive stage of data analysis for secondary data, the data was checked for possible out-of-range values on any of the variables by using the summary statistics in Stata software to obtain descriptive statistics particularly minimum and maximum values for all variables in this study. No out-of-range values were found. The purpose of descriptive stage of data analysis is to describe the characteristics of the study sample as identified in the research methods, check the variables for any possible violation of the assumptions underlying the statistical techniques used to address the research questions, and address specific research questions. The descriptive statistics of data from annual reports and corporate websites are shown in Tables 4.1, 4.2 and 4.3.

Table 4.1 provides descriptive statistics for the variables employed in the analyses of institutional field and reporting process factors influencing sustainability reporting. Specifically, Table 4.1 shows the mean, standard deviation, minimum and maximum values of each of the variables (sustainability reporting indicators, securities and exchange commission code of corporate governance, central bank of Nigeria

sustainability reporting guidelines, accounting firm, membership of external governance bodies particular to an industry, membership of external governance bodies not particular to an industry, foreign presence, size, reporting of the most successful, assurance, sustainability framework, and board committee on sustainability stakeholder engagement) for the 54 companies that make up the sample companies for secondary data. The data in Table 4.1 was collected from annual reports of companies, websites of both governance bodies (IPIECA, UNEP FI and UNGC) and sample companies. In this study, based on the disclosure index, a score of fourteen (14) is expected for economic indicators of sustainability reporting. A score of fifteen (15) is expected for environmental and governance indicators respectively. A score of twelve (12) is expected for social indicators of sustainability reporting. The maximum sustainability reporting indicator score is 56, the minimum score is 0 and the mean sustainability reporting score is 24.85. Thus, out of 56 maximum score, on the average, companies in this study reported less than average or 44.4 percent of the sustainability reporting indicators. Company size is logged in order to normalize the value.

Table 4.1: **Summary Statistics of Data from Annual Reports and Company Websites**

S/No.	Description	**Value**			
1	Number of Sample Companies	54			
2	Number of Observations	270			
		Mean	**Std. Dev.**	**Min.**	**Max.**
3	Sustainability Reporting (mean)	24.85	14.40	0	56
4	Securities and Exchange Commission Code of Corporate Governance	.8	.401	0	1
5	Central Bank of Nigeria sustainability reporting guidelines	.6	.491	0	1
6	Accounting firm	.789	.409	0	1
7	Membership of external governance bodies particular to an industry	.122	.328	0	1
8	Membership of external governance bodies not particular to an industry	.122	.328	0	1
9	Foreign presence	.441	.497	0	1
10	Company size	24.24	3.66	0	28.98
11	Reporting of most successful	38.57	11.69	20	56
12	Assurance	.059	.237	0	1
13	Sustainability framework	.263	.441	0	1
14	Board committee on Sustainability	.248	.433	0	1
15	Stakeholder engagement	.896	.882	0	3

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The summary statistics of the variables for the banking sector are shown in Table 4.2. There are 14 sample companies in the banking sector. The mean sustainability reporting indicator score for companies in the banking sector is 31.44, the minimum reporting score is 0 and the maximum reporting score is 48. The maximum score is 1 for securities and exchange code of corporate governance, central bank of Nigeria sustainability banking principles, accounting firm, membership of external governance bodies particular to an industry, membership of external governance bodies not particular to an industry, assurance, sustainability framework and board committee on sustainability. The maximum score of stakeholder engagement variable is 3; the minimum score is 0 while the mean stakeholder engagement score is 1.26. For the banking sector, the mean of company size is 27.57, the minimum and maximum scores are 25.60 and 28.98 respectively. Company size is logged in order to normalize the value.

Table 4.2: Summary Statistics of Variables for Banking Sector

S/No.	Description	Value			
1	Number of Sample Companies	14			
2	Number of Observations	70			
		Mean	**Std. Dev.**	**Min.**	**Max.**
3	Sustainability Reporting	31.44	9.14	0	48
4	Securities and Exchange Commission Code of Corporate Governance	.8	.40	0	1
5	Central Bank of Nigeria sustainability reporting guidelines	.6	.49	0	1
6	Accounting firm	.96	.20	0	1
7	Membership of external governance bodies particular to an industry	.26	.44	0	1
8	Membership of external governance bodies not particular to an industry	.1	.30	0	1
9	Foreign presence	.64	.48	0	1
10	Company size	27.57	.81	25.60	28.98
11	Reporting of most successful	34.2	6.29	25	41
12	Assurance	.07	.26	0	1
13	Sustainability framework	.61	.49	0	1
14	Board committee on Sustainability	.27	.48	0	1
15	Stakeholder engagement	1.26	.83	0	3

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The summary statistics of the variables for the oil and gas sector are shown in Table 4.3. There are 14 sample companies in the banking sector. The mean sustainability reporting indicator score for companies in the oil and gas sector is 26.31, the minimum reporting score is 6 and the maximum reporting score is 56. The maximum score is 1 for securities and exchange code of corporate governance, central bank of Nigeria sustainability banking principles, accounting firm, membership of external governance bodies particular to an industry, membership of external governance bodies not particular to an industry, assurance, sustainability framework and board committee on sustainability. The maximum score of stakeholder engagement variable is 3, the minimum score is 0 while the mean stakeholder engagement score is 1.11. For the oil and gas sector, the mean of company size is 22.88, the minimum and maximum scores are 0 and 27.10 respectively.

The summary statistics of the variables for the consumer goods sector are shown in Table 4.3. There are 20 sample companies in the consumer goods sector. The mean sustainability reporting indicator score for companies in the consumer goods sector is 20.46, the minimum reporting score is 0 and the maximum reporting score is 55. The maximum score is 1 for securities and exchange code of corporate governance, central bank of Nigeria sustainability banking principles, accounting firm, membership of external governance bodies particular to an industry, membership of external governance bodies not particular to an industry, assurance, sustainability framework and board committee on sustainability. The maximum score of stakeholder engagement variable is 3, the minimum score is 0 while the mean stakeholder engagement score is .68. For the consumer goods sector, the mean of company size is 23.23, the minimum and maximum scores are 0 and 26.58 respectively.

The summary statistics of the variables for the industrial goods sector are shown in Table 4.3. There are 11 sample companies in the industrial goods sector. The mean sustainability reporting indicator score for companies in this sector is 23.25, the minimum reporting score is 0 and the maximum reporting score is 48. The maximum score is 1 for securities and exchange code of corporate governance, central bank of Nigeria sustainability banking principles, accounting firm,

membership of external governance bodies not particular to an industry, foreign presence, sustainability framework and board committee on sustainability. The maximum score of stakeholder engagement variable is 2, the minimum score is 0 while the mean stakeholder engagement score is .65. For the consumer goods sector, the mean of company size is 22.96, the minimum and maximum scores are 20.25 and 27.59 respectively.

Table 4.3: Summary Statistics of Variables for Oil and Gas, Consumer Goods and Industrial Goods Sectors

Description	Oil and Gas Sector				Consumer Goods				Industr	
	Value				Value				Va	
Number of Sample Companies	9				20					
Number of Observations	45				100				1	
	Mean	**Std. Dev.**	**Min.**	**Max.**	**Mean**	**Std. Dev.**	**Min.**	**Max.**	**Mean**	**Std. Dev.**
Sustainability Reporting	26.31	14.31	6	56	20.46	15.78	0	55	23.25	14.36
Securities and Exchange Commission Code of Corporate Governance	.8	.40	0	1	.8	.40	0	1	.8	.40
Central Bank of Nigeria sustainability reporting guidelines	.6	.50	0	1	.6	.49	0	1	.6	.49
Accounting firm	.76	.43	0	1	.67	.47	0	1	.82	.39
Membership of external governance bodies particular to an industry	.33	.48	0	1	0	0	0	0	0	0
Membership of external governance bodies not particular to an industry	.11	.32	0	1	.16	.37	0	1	.09	.29
Foreign presence	.44	.50	0	1	.29	.46	0	1	.45	.50
Company Size	22.88	5.40	0	27.10	23.23	3.12	0	26.58	22.96	2.14
Reporting of most successful	35	13.25	20	56	48.6	10.12	29	55	28.8	1.18
Assurance	.11	.32	0	1	.06	.24	0	1	0	0
Sustainability framework	.27	.45	0	1	.08	.27	0	1	.15	.36
Board committee on Sustainability	.56	.50	0	1	.15	.36	0	1	.15	.36
Stakeholder engagement	1.11	1.01	0	3	.68	.89	0	3	.65	.62

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 14 banks were assessed based on the economic indicators in Table 4.4. In year 2010, 93 percent of the companies reported on revenues, while 100 percent of the companies in the years 2011, 2012, 2013 and 2014 respectively reported on revenues. In year 2010, 93 percent of the companies reported on the operating costs, while 100 percent of the companies in the years 2011, 2012, 2013 and 2014 respectively reported on operating costs.

In year 2010, 93 percent of the companies reported on employee wages and benefits, while 100 percent of the companies in the years 2011, 2012, 2013 and 2014 respectively reported on employee wages and benefits. In year 2010, 93 percent of the companies reported on payments to providers of capital, while 100 percent of the companies in the years 2011 and 2012 reported on payments to providers of capital. 93 percent of the companies in year 2013 reported on payments to providers of capital, while 86 percent of the companies in year 2014 reported on payments to providers of capital.

In 2010, 93 percent of the companies reported on payments to government, while 100 percent of the companies in the years 2011, 2012, 2013 and 2014 respectively reported on payments to government. In 2010, 93 percent of the companies reported on community investments, while 100 percent of the companies in the years 2011, 2012 and 2013 respectively reported on community investments. 93 percent of the companies in the year 2014 reported on community investments.

In 2010 and 2011, 14 percent of the companies reported on risks and opportunities posed by climate change, while 43 percent of the companies in the year 2012 reported on risks and opportunities posed by climate change. 64 percent of the companies in year 2013 reported on risks and opportunities posed by climate change, while 50 percent of the companies in year 2014 reported on risks and opportunities posed by climate change.

In year 2010 and 2011, 14 percent of the companies reported on financial implications of the risk or opportunity posed by climate change, while 50 percent of the companies in year 2012 reported on financial implications of the risk or opportunity posed by climate change. However, 57 percent of the companies in year 2013 reported on financial implications of the risk or opportunity posed by climate

change, while 43 percent of the companies in year 2014 reported on financial implications of the risk or opportunity posed by climate change.

In year 2010 and 2011, 14 percent of the companies reported on costs of actions taken to manage the risks and opportunity, while 21 percent of the companies in the years 2012 and 2013 reported on financial implications of the risk or opportunity posed by climate change. However, 28 percent of the companies in year 2014 reported on financial implications of the risk or opportunity posed by climate change.

In year 2010, 79 percent of the companies reported on value of defined benefit plan obligations, while 100 percent of the companies in years 2011, 2012 and 2013 respectively reported on value of defined benefit plan obligations. However, 93 percent of the companies in year 2014 reported on value of defined benefit plan obligations. In year 2010, 79 percent of the companies reported on mode of settling the defined benefit plan obligations (Liability), while 93 percent of the companies in the years 2011, 2012 and 2013 respectively reported on mode of settling the defined benefit plan obligations (Liability). However, 86 percent of the companies in the year 2014 reported on mode of settling the defined benefit plan obligations (Liability). In year 2010, 79 percent of the companies reported on percentage of salary contributed by the employer and employee, while 93 percent of the companies in year 2011 reported on percentage of salary contributed by the employer and employee. However, 86 percent of the companies in years 2012, 2013 and 2014 respectively reported on percentage of salary contributed by the employer and employee.

In year 2010, no companies reported on financial assistance received from government, while 21 percent of the companies in years 2011, 2012 and 2013 respectively reported on financial assistance received from government. However, 28 percent of the companies in year 2014 reported on financial assistance received from government. In year 2010, 2011, 2012 and 2013, 7 percent of the companies reported on spending on local suppliers at significant locations of operations. However, 14 percent of the companies in year 2014 reported on spending on local suppliers at significant locations of operations.

Table 4.4: Number of companies engaging in Reporting Economic Indicators in the Banking sector

		Years				
S/No.	**Economic Indicators**	2010	2011	2012	2013	2014
1	Revenue	13	14	14	14	14
2	Operating costs	13	14	14	14	14
3	Employee wages and benefits	13	14	14	14	14
4	Payments to Providers of Capital	13	14	14	13	12
5	Payments to Government	13	14	14	14	14
6	Community Investments	13	14	14	14	13
7	Climate change - risks and opportunities	2	2	6	9	7
8	Climate change - Financial Implications of risks and opportunities	2	2	7	8	6
9	Climate change - Costs of actions taken to manage risks or opportunities	2	2	3	3	4
10	Value of Defined Benefit Plan obligations	11	14	14	14	13
11	Mode of Settling the Defined Benefit Plan Obligations (Liability)	11	13	13	13	12
12	Percentage of salary contributed by the employer and employee	11	13	12	12	12
13	Financial assistance received from government	0	3	3	3	4
14	Amount spent on local suppliers at significant locations of operations	1	1	1	1	2

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 14 banks were assessed based on the environmental indicators in Table 4.5. In year 2010, 7 percent of the companies reported on renewable and non-renewable materials used, while 21 percent of the companies in year 2011 reported on renewable and non-renewable materials used. 28 percent of the companies in year 2012 reported on renewable and non-renewable materials used, while 57 percent of the companies in year 2013 reported on renewable and non-renewable materials used. However, 50 percent of the companies in year 2014 reported on renewable and non-renewable materials used.

In year 2010, no company reported on materials used that are from recycled materials used to manufacture the organization's product and services, while 21 percent of the companies in year 2011 reported on materials used that are from recycled materials used to manufacture the organization's product and services. 28 percent of the companies in year 2012 reported on materials used that are from recycled materials used to manufacture the organization's product and services, while 36 percent of companies in years 2013 and 2014 reported on materials used that are from recycled materials used to manufacture the organization's product and services.

In years 2010 and 2011, 7 percent of companies reported on fuel/electricity/heating/cooling consumptions, while 21 percent of the companies in years 2012 and 2013 reported on fuel/electricity/heating/cooling consumptions. However, 43 percent of the companies in year 2014 reported on fuel/electricity/heating/cooling consumptions. In year 2010, no company reported on electricity/heating/cooling/steam sold, while 14 percent of the companies in year 2011 reported on electricity/heating/cooling/steam sold. However, 7 percent of the companies in year 2012 reported on electricity/heating/cooling/steam sold, while 28 percent of the companies in year 2013 reported on electricity/heating/cooling/steam sold. 43 percent of the companies in year 2014 reported on electricity/heating/cooling/steam sold.

In year 2010, 7 percent of the companies reported on reduction in energy consumption due to conservation, while 36 percent of the companies in year 2011 reported on reduction in energy consumption due to conservation. 64 percent of the

companies in year 2012 reported on reduction in energy consumption due to conservation. 71 percent of the companies in year 2013 reported on reduction in energy consumption due to conservation, and 79 percent of the companies in year 2014 reported on reduction in energy consumption due to conservation.

In the years 2010 and 2011 no company reported on water withdrawn for operations, while 14 percent of the companies in the years 2012 and 2013 reported on water withdrawn for operations. However, 7 percent of the companies in the year 2014 reported on water withdrawn for operations.

In the years 2010 and 2011, no company reported on water recycled and reused, while 7 percent of the companies in year 2012 reported on water recycled and reused. However, 21 percent of companies in year 2013 reported on water recycled and reused, and 7 percent of the companies in year 2014 reported on water recycled and reused.

In years 2010 and 2011, no company reported on gross direct greenhouse gas emissions, while 28 percent of the companies in the year 2012 reported on gross direct greenhouse gas emissions. However, 43 percent of the companies in year 2013 reported on gross direct greenhouse gas emissions, while 7 percent of the companies in year 2014 reported on gross direct greenhouse gas emissions.

In the years 2010, 2011, 2012, 2013 and 2014 respectively no company reported on organic pollutants.

In the year 2010, no company reported on water discharge and quality of water discharged, while 7 percent of the companies in years 2011 and 2012 reported on water discharge and quality of water discharged. However, 28 percent of the companies in year 2013 reported on water discharge and quality of water discharged, while 7 percent of the companies in year 2014 reported on water discharge and quality of water discharged. In year 2010, no company reported on the waste and disposal method, while 7 percent of the companies in year 2011 reported on the waste and disposal method. However, 36 percent of the companies in years 2012 and 2013 reported on the waste and disposal method, while 28 percent of the

companies reported on the waste and disposal method. In the years 2010, 2011, 2012, 2013 and 2014 respectively no company reported on number and volume of spills. In the years 2010, 2011, 2012 no company reported on environmental protection expenditures, while 7 percent of the companies in years 2013 and 2014 reported on environmental protection expenditures. In the year 2010, 14 percent of the companies reported on assessment of suppliers on the basis of environmental risks, while 7 percent of the companies in year 2011 reported on assessment of suppliers on the basis of environmental risks. 50 percent of the companies in year 2012 reported on assessment of suppliers on the basis of environmental risks. However, 36 percent of companies in year 2013 reported on assessment of suppliers on the basis of environmental risks, while 28 percent of the companies in year 2014 reported on assessment of suppliers on the basis of environmental risks.

In the year 2010 and 2011, 14 percent of the companies reported on assessment of clients on the basis of environmental risks, while 64 percent of the companies in years 2012 and 2013 reported on assessment of clients on the basis of environmental risks. However, 57 percent of the companies in year 2014 reported on assessment of clients on the basis of environmental risks.

Table 4.5: Number of companies engaging in Reporting Environmental Indicators in the Banking sector

		Years				
S/No.	**Environmental Indicators**	2010	2011	2012	2013	2014
1	Renewable and non-renewable materials used	1	3	4	8	7
2	Recycled materials used to manufacture the organization's product and services	0	3	4	5	5
3	Fuel/electricity/heating/cooling/steam consumption	1	1	3	3	6
4	Electricity/heating/cooling/steam sold	0	2	1	4	3
5	Reduction in energy consumption due to conservation	1	5	9	10	11
6	Water withdrawn for operations	0	0	2	2	1
7	Water recycled and reused	0	0	1	3	1
8	Gross direct Greenhouse gas Emissions	0	0	4	6	1
9	Organic Pollutants	0	0	0	0	0
10	Water discharge and quality of water discharged	0	1	1	4	1
11	Waste and method of disposal	0	1	5	5	4
12	Number and volume of spills	0	0	0	0	0
13	Environmental protection expenditures	0	0	0	1	1
14	Assessment of suppliers on the basis of environmental risks	2	1	7	5	4
15	Assessment of clients on the basis of environmental risks	2	2	9	9	8

Source: Researcher’s Compilation from Corporate Reports (2010-2014)

The corporate reports of 14 banks were assessed based on the economic indicators in Table 4.6. In 2010, 93 percent of the companies reported on governance structure and composition, while 100 percent of the companies in years 2011, 2012 and 2013 respectively reported on governance structure and composition. However, 93 percent of the companies in 2014 reported on governance structure and composition. In 2010, 71 percent of the companies reported the competencies of members of the highest governance body, while in year 2011, 79 percent of the companies respectively reported on the competencies of members of the highest governance body. However, 86 percent of the companies in years 2012 and 2014 respectively reported the competencies of members of the highest governance body, while 93 percent of the companies in year 2013 reported the competencies of members of the highest governance body.

93 percent of the companies in years 2010 and 2014 reported the composition of executive and non-executive directors on the board, while 100 percent of the companies in years 2011, 2012 and 2013 reported on the composition of executive and non-executive directors on the board. 71 percent of the companies in year 2010 reported on the tenure on the governance body, while 93 percent of the companies in years 2011, 2012 and 2014 respectively reported on the tenure on the governance body. However, 100 percent of the companies in year 2013 reported on the tenure on the governance body.

64 percent of the companies in year 2010 reported on the nature of each director's other significant positions and commitments, while 79 percent of the companies in year 2011 reported on the nature of each director's other significant positions and commitments. However, 86 percent of the companies in year 2012 reported on the nature of each director's other significant positions and commitments, while 93 percent of the companies in year 2013 reported on the nature of each director's other significant positions and commitments. 86 percent of the companies in year 2014 reported on the nature of each director's other significant positions and commitments. 93 percent of the companies in years 2010, 2011, 2012 and 2013 respectively reported on stakeholder representation on the board of directors, while 86 percent of the companies in year 2014 reported on stakeholder representation on the board of directors.

93 percent of the companies in years 2010 and 2014 respectively reported on whether the chair of the board is also an executive officer, while 100 percent of the companies in years 2011, 2012 and 2013 respectively reported on whether the chair of the board is also an executive officer. 93 percent of the companies in years 2010, 2011, 2012 and 2014 respectively reported cross-board membership and related party disclosures, while 100 percent of the companies in years 2013 reported cross-board membership and related party disclosures.

21 percent of the companies in year 2010 reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities, while 86 percent of the companies in years 2011, 2012 and 2013 respectively reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities. However, 71 percent of the companies in year 2014 reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities.

In 2010, none of the companies reported on the committee that reviews and approves the organization's sustainability report and ensures that all material aspects are covered, while 7 percent of the companies in year 2011 reported on the committee that reviews and approves the organization's sustainability report and ensures that all material aspects are covered. 21 percent of the companies in years 2012 and 2013 respectively reported on the committee that reviews the organization's sustainability report and ensures that all material aspects are covered. However, 36 percent of the companies in year 2014 reported on the committee that reviews the organization's sustainability report and ensures that all material aspects are covered.

In years 2010 and 2014 respectively, 93 percent of the companies reported on the highest governance body in risk management, while 100 percent of the companies in years 2011, 2012 and 2013 respectively reported on the highest governance body in risk management. In years 2010 and 2014 respectively, 93 percent of the companies reported on remuneration for the highest governance body, while 100 percent of the companies in years 2011, 2012 and 2013 respectively reported on remuneration for the highest governance body.

In years 2010 and 2012 respectively, 79 percent of the companies reported on their code of conduct, while 71 percent of the companies in year 2011 reported on their code of conduct. However, 86 percent of the companies in years 2013 and 2014 respectively reported on their code of conduct.

In years 2010 and 2014 respectively, 86 percent of the companies reported on their mechanisms for matters bothering on integrity, while 71 percent of the companies in years 2011 and 2012 respectively reported on their mechanisms for matters bothering on integrity. However, 79 percent of the companies in year 2013 reported on their mechanisms for matters bothering on integrity.

In years 2010, 2012 and 2014 respectively, 86 percent of the companies reported on whistle blowing mechanisms or hotlines, while 71 percent of the companies in year 2011 reported on whistle blowing mechanisms or hotlines. However, 79 percent of the companies in year 2013 reported on whistle blowing mechanisms or hotlines.

Table 4.6: Number of companies engaging in Reporting Governance Indicators in the Banking sector

		Years				
S/No.	**Governance Indicators**	2010	2011	2012	2013	2014
1	Governance structure and composition	13	14	14	14	13
2	Competencies of members of the highest governance body	10	11	12	13	12
3	Composition of Board directors	13	14	14	14	13
4	Directors' Tenure	10	13	13	14	13
5	Directors' other significant positions and commitments	9	11	12	13	12
6	Stakeholder representation	13	13	13	13	12
7	Chairman is an Executive Officer	13	14	14	14	13
8	Conflicts of interest – cross-board membership and related party disclosures	13	13	13	14	13
9	Board's role in identifying and managing economic, social and environmental impacts	3	12	12	12	10
10	Committee that incorporates material aspects in sustainability report	0	1	3	3	5
11	Highest governance body in risk management	13	14	14	14	13
12	Directors' and Executive Remuneration	13	14	14	14	13
13	Organization's code of conduct and code of ethics	11	10	11	12	12
14	Mechanisms for seeking advice on Integrity Issues	12	10	10	11	12
15	Whistle blowing mechanisms or hotlines	12	10	12	11	12

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 14 banks were assessed based on the economic indicators in Table 4.7. In years 2010 and 2014 respectively, 93 percent of the companies reported on benefits provided to full-time employees, while 100 percent of the companies in years 2011, 2012 and 2013 respectively reported on benefits provided to full-time employees.

In years 2010 and 2011 respectively, 7 percent of the companies reported on lost day rate, absentee rate and work-related fatalities for the workforce, while 14 percent of the companies in years 2012, 2013 and 2014 respectively reported on lost day rate, absentee rate and work-related fatalities for the workforce.

In years 2010 and 2014, 93 percent of the companies reported on health, safety, and employee training, while 100 percent of the companies in years 2011, 2012 and 2013 reported on health, safety and employee training.

In year 2010, 50 percent of the companies reported on representation of men, women and diversity in governance bodies, while 93 percent of the companies in years 2011 and 2014 respectively reported on representation of men, women and diversity in governance bodies. 100 percent of the companies in years 2012 and 2013 respectively reported on representation of men, women and diversity in governance bodies.

In year 2010, 7 percent of the companies reported on equal remuneration of women and men, while 14 percent of the companies in years 2011, 2012, 2013 and 2014 respectively reported on equal remuneration of women and men. In years 2010 and 2011 respectively, no companies reported on child labour, while 21 percent of the companies in year 2012 reported on child labour. However, 14 percent of the companies in years 2013 and 2014 respectively reported on child labour.

In years 2010 and 2014 respectively, 93 percent of companies reported on local community development programmes, while 100 percent of companies in years 2011, 2012 and 2013 reported on local community development programmes.

In years 2010, 2011 and 2012 respectively, 93 percent of the companies reported on stakeholder engagement plans, while 100 percent of the companies in year 2013

reported on stakeholder engagement plans. However, 86 percent of the companies in year 2014 reported on stakeholder engagement plans.

In year 2010, 43 percent of the companies reported on anti-corruption policies and procedures, while 86 percent of the companies in the years 2011 and 2012 respectively reported on anti-corruption policies and procedures. However, 79 percent of the companies in years 2013 and 2014 respectively reported on anti-corruption policies and procedures. In year 2010, 14 percent of the companies reported on political financial and in-kind contributions made directly and indirectly by the organization, while 36 percent of the companies in years 2011, 2012 and 2013 respectively reported on political financial and in-kind contributions made directly and indirectly by the organization. However, 21 percent of the companies in year 2014 reported on political financial and in-kind contributions made directly and indirectly by the organization.

In year 2010, 7 percent of the companies reported on suppliers and clients subject to assessments for impacts on society, while 28 percent of the companies in year 2011 reported on suppliers and clients subject to assessments for impacts on society. However, 71 percent of the companies in year 2012 reported on suppliers and clients subject to assessments for impacts on society, while 64 percent of the companies in year 2013 reported on suppliers and clients subject to assessments for impacts on society. 57 percent of the companies in year 2014 reported on suppliers and clients subject to assessments for impacts on society. In years 2010, 2011 and 2013 respectively, 7 percent of the companies reported on actual and potential negative impacts on society identified in the supply chain, while 14 percent of the companies in years 2012 and 2014 respectively reported on actual and potential negative impacts on society identified in the supply chain.

Table 4.7: Number of companies engaging in Reporting Social Indicators in the Banking sector

		Years				
S/No.	**Social Indicators**	2010	2011	2012	2013	2014
1	Benefits to full-time employees	13	14	14	14	13
2	Injury/injury rate/occupational diseases rate	1	1	2	2	2
3	Health and Safety employee training	13	14	14	14	13
4	Representation of men and women in governance bodies	7	13	14	14	13
5	Equal remuneration of men and women	1	2	2	2	2
6	Child labour	1	1	3	2	2
7	Local community development programmes	13	14	14	14	13
8	Stakeholder engagement plans	13	13	13	14	12
9	Anti-corruption policies and procedures	6	12	12	11	11
10	Political financial and other kinds of contributions made by the organization	2	5	5	5	3
11	Suppliers and clients subject to assessments for impacts on society	1	4	10	9	8
12	Potential negative impacts on society identified in the supply chain	1	1	2	1	2

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 9 oil and gas companies were assessed based on the economic indicators in Table 4.8. Out of the 9 observed cases, 100 percent respectively reported on revenue, operating costs, employee wages and benefits, payments to providers of capital, payments to government and community investments from years 2010 to 2014.

In 2010, 11 percent of the companies in the years 2010, 2011, 2013 and 2014 respectively reported on risks or opportunity posed by climate change, while 22 percent of the companies in year 2012 reported on risks or opportunity posed by climate change.

In 2010, 11 percent of the companies in the years 2010, 2011, 2013 and 2014 respectively reported on the financial implications of the risk or opportunity posed by climate change, while 22 percent of the companies in year 2012 reported on the financial implications of the risk or opportunity posed by climate change.

In 2010, 11 percent of the companies in the years 2010, 2011, 2013 and 2014 respectively reported on the costs of actions taken to manage the risk and opportunity posed by climate change, while 22 percent of the companies in year 2012 reported on the costs of actions taken to manage the risk and opportunity posed by climate change.

In 2010, 56 percent of the companies reported on the estimated value of defined benefit plan obligations (liabilities), while 78 percent of the companies in year 2011 reported on the estimated value of defined benefit plan obligations (liabilities). However, 67 percent of the companies in years 2012 and 2013 reported on the estimated value of defined benefit plan obligations (liabilities); and 89 percent of the companies in year 2014 reported on the estimated value of defined benefit plan obligations (liabilities).

In 2010, 56 percent of the companies reported on whether the defined benefit plan obligations (liabilities) will be settled by the organization's resources or a separate fund, while 78 percent of the companies in year 2011 reported on whether the defined benefit plan obligations (liabilities) will be settled by the organization's

resources or a separate fund. 67 percent of the companies in years 2012 and 2013 reported on whether the defined benefit plan obligations (liabilities) will be settled by the organization's resources or a separate fund. However, 89 percent of the companies in year 2014 reported on whether the defined benefit plan obligations (liabilities) will be settled by the organization's resources or a separate fund.

In 2010, 56 percent of the companies reported on the percentage of salary contributed to the defined benefit plan by the employer and employee, while 78 percent of the companies in year 2011 reported on the percentage of salary contributed to the defined benefit plan by the employer and employee. However, 67 percent of the companies in years 2012 and 2013 reported on the percentage of salary contributed to the defined benefit plan by the employer and employee, while 78 percent of the companies in year 2014 reported on the percentage of salary contributed to the defined benefit plan by the employer and employee.

In 2010, no company reported on assistance received from government (for instance, tax relief, tax credit, subsidies, investment grants, research and development grants, awards, royalty holidays, financial incentives, presence of government in the shareholding structure). However, 11 percent of the companies in years 2011, 2012 and 2014 respectively reported on assistance received from government (for instance, tax relief, tax credit, subsidies, investment grants, research and development grants, awards, royalty holidays, financial incentives, presence of government in the shareholding structure). 22 percent of the companies in year 2013 reported on assistance received from government (for instance, tax relief, tax credit, subsidies, investment grants, research and development grants, awards, royalty holidays, financial incentives, presence of government in the shareholding structure).

In years 2010, 2011, 2013 and 2014 respectively, 11 percent of the companies reported on spending on local suppliers at significant locations of operations, while in year 2012, 22 percent of the companies reported on spending on local suppliers at significant locations of operations.

Table 4.8: Number of Companies Reporting Economic Indicators in the Oil and Gas Sector

		Years				
S/No.	**Economic Indicators**	2010	2011	2012	2013	2014
1	Revenue	9	9	9	9	9
2	Operating costs	9	9	9	9	9
3	Employee wages and benefits	9	9	9	9	9
4	Payments to Providers of Capital	9	9	9	9	9
5	Payments to Government	9	9	9	9	9
6	Community Investments	9	9	9	9	9
7	Climate change - risks and opportunities	1	1	2	1	1
8	Climate change - Financial Implications of risks and opportunities	1	1	2	1	1
9	Climate change - Costs of actions taken to manage risks or opportunities	1	1	2	1	1
10	Value of Defined Benefit Plan obligations	5	7	6	6	8
11	Mode of Settling the Defined Benefit Plan Obligations (Liability)	5	7	6	6	8
12	Percentage of salary contributed by the employer and employee	5	7	6	6	7
13	Financial assistance received from government	0	1	1	2	1
14	Amount spent on local suppliers at significant locations of operations	1	1	2	1	1

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 9 oil and gas companies were assessed based on the economic indicators in Table 4.9. In 2010, 11 percent of the companies reported on renewable and non-renewable materials used. In 2011, 2012 and 2013, 22 percent of companies reported on renewable and non-renewable materials used. However, in 2014, 33 percent of companies reported on renewable and non-renewable materials used. In 2010, 11 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services. In 2011, 2012 and 2013, 22 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services. However, in 2014, 33 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services.

In 2010 and 2011 respectively, 11 percent of companies reported on fuel consumption from renewable energy, electricity/heating/cooling/steam consumption. However, in 2012, 2013 and 2014 respectively 22 percent of companies reported on fuel consumption from renewable energy, electricity/heating/cooling/steam consumption. In 2010 and 2011 respectively, 11 percent of the companies reported on electricity/heating/cooling/steam sold/project funded. However, in 2012, 2013 and 2014 respectively, 22 percent of the companies reported on electricity/heating/cooling/steam sold/project funded.

In 2010, 11 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency. In 2011, 2012 and 2013 respectively, 22 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency. However, in 2014, 33 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency. In 2010 and 2011 respectively, 11 percent of the companies reported on water withdrawal by source, while in 2012, 2013 and 2014 respectively, 22 percent of the companies reported on water withdrawal by source.

In 2010 and 2011 respectively, 11 percent of the companies reported on water recycled, while in 2012, 2013 and 2014 respectively, 22 percent of the companies reported on water recycled. In 2010, 2011 and 2014 respectively, 11 percent of the companies reported on gross direct greenhouse gas emissions, while in 2012 and 2013 respectively, 22 percent of the companies reported on gross direct greenhouse

gas emissions. In 2010, 2011 and 2014 respectively, 11 percent of the companies reported on organic pollutants, while in 2012 and 2013 respectively, 22 percent of the companies reported on organic pollutants.

In 2010 and 2011 respectively, 11 percent of the companies reported on water discharged, while in 2012, 2013 and 2014 respectively, 22 percent of the companies reported on water discharged. In 2010, 11 percent of the companies reported on waste and disposal method, while in 2011, 2012, 2013 and 2014 respectively, 22 percent of the companies reported on waste and disposal method.

In 2010, 2011 and 2014 respectively, 11 percent of the companies reported on the number of spills, but in 2012 and 2013 respectively, 22 percent of the companies reported on the number of spills. In 2010 and 2011 respectively, 11 percent of the companies reported on environmental protection expenditures, but in 2012, 2013 and 2014 respectively, 22 percent of the companies reported on environmental protection expenditures.

In 2010, 2011 and 2014 respectively, 11 percent of the companies reported on assessment of suppliers on the basis of environmental risks. However, in 2012 and 2013, 22 percent of the companies reported on assessment of suppliers on the basis of environmental risks. In 2010, 2011 and 2014 respectively, 11 percent of the companies reported on assessment of clients on the basis of environmental risks, while in 2012 and 2013, 22 percent of the companies reported on assessment of clients on the basis of environmental risks.

Table 4.9: Number of Companies Reporting Environmental Indicators in the Oil and Gas Sector

		Years				
S/No.	**Environmental Indicators**	2010	2011	2012	2013	2014
1	Renewable and non-renewable materials used	1	1	2	1	1
2	Recycled materials used to manufacture the organization's product and services	1	2	2	2	3
3	Fuel/electricity/heating/cooling/steam consumption	1	1	2	2	2
4	Electricity/heating/cooling/steam sold	1	1	2	2	2
5	Reduction in energy consumption due to conservation	1	2	2	2	3
6	Water withdrawn for operations	1	1	2	2	2
7	Water recycled and reused	1	1	2	2	2
8	Gross direct Greenhouse gas Emissions	1	1	2	2	1
9	Organic Pollutants	1	1	2	2	1
10	Water discharge and quality of water discharged	1	1	2	2	2
11	Waste and method of disposal	1	2	2	2	2
12	Number and volume of spills	1	1	2	2	1
13	Environmental protection expenditures	1	1	2	2	2
14	Assessment of suppliers on the basis of environmental risks	1	1	2	2	1
15	Assessment of clients on the basis of environmental risks	1	1	2	2	1

Source: Researcher’s Compilation from Corporate Reports (2010-2014)

The corporate reports of 9 oil and gas companies were assessed based on the governance indicators in Table 4.10. In 2010 and 2011 respectively, 78 percent of the companies reported on governance structure and composition, while 67 percent of the companies in 2012 and 2013 respectively reported on governance structure and composition. However, 89 percent of the companies in year 2014 reported on governance structure and composition.

In 2010 and 2011 respectively, 67 percent of the companies reported the competencies of members of the highest governance body, while in 2012 and 2013 respectively, 56 percent of the companies respectively reported on the competencies of members of the highest governance body. However, 89 percent of the companies in 2014 reported the competencies of members of the highest governance body.

78 percent of the companies in year 2010 reported the composition of executive and non-executive directors on the board, while 78 percent of the companies in year 2011 reported on the composition of executive and non-executive directors on the board. 67 percent of the companies in year 2012 reported the composition of executive and non-executive directors on the board. However, 67 percent of the companies in year 2013 reported the composition of executive and non-executive directors on the board; and 78 percent of the companies in year 2014 reported the composition of executive and non-executive directors on the board.

56 percent of the companies in year 2010, 2011, 2012 and 2013 respectively reported on the tenure on the governance body, while 78 percent of the companies in year 2014 reported on the tenure on the governance body.

56 percent of the companies in year 2010 reported on the nature of each director’s other significant positions and commitments, while 67 percent of the companies in year 2011 reported on the nature of each director’s other significant positions and commitments. 56 percent of the companies in year 2012 and 2013 reported on the nature of each director’s other significant positions and commitments, while 78 percent of the companies in year 2014 reported on the nature of each director’s other significant positions and commitments.

33 percent of the companies in year 2010 reported on stakeholder representation on the board of directors, while 56 percent of the companies in 2011 reported on stakeholder representation on the board of directors. 67 percent of the companies in year 2012 and 2013 reported on stakeholder representation on the board of directors, while 78 percent of the companies in year 2014 reported on stakeholder representation on the board of directors. 78 percent of the companies in year 2010 and 2011 reported on whether the chair of the board is also an executive officer, while 67 percent of the companies in years 2012 reported on whether the chair of the board is also an executive officer. However, 78 percent of the companies in year 2013 and 2014 reported on whether the chair of the board is also an executive officer.
78 percent of the companies in year 2010 and 2011 respectively reported cross-board membership and related party disclosures, while 67 percent of the companies in years 2012 and 2013 respectively reported cross-board membership and related party disclosures. However, 78 percent of the companies in year 2014 reported cross-board membership and related party disclosures. 56 percent of the companies in year 2010 and 2011 respectively reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities, while 67 percent of the companies in years 2012 and 2013 reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities. However, 56 percent of the companies in year 2014 reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities.

In 2010 and 2011 none of the companies reported on the committee that reviews and approves the organization's sustainability report and ensures that all material aspects are covered. However, 11 percent of the companies in years 2012, 2013 and 2014 reported on the committee that reviews and approves the organization's sustainability report and ensures that all material aspects are covered.

In year 2010, 67 percent of the companies reported on the highest governance body in risk management, while 78 percent of the companies in year 2011 reported on the highest governance body in risk management. However, 67 percent of the

companies in years 2012, 2013 and 2014 reported on the highest governance body in risk management.

In year 2010, 67 percent of the companies reported on remuneration for the highest governance body, while 78 percent of the companies in year 2011 reported on remuneration for the highest governance body. 67 percent of the companies in year 2012 and 2013 reported on remuneration for the highest governance body. However, 78 percent of the companies in year 2014 reported on remuneration for the highest governance body.

In year 2010, 67 percent of the companies reported on their code of conduct, while 56 percent of the companies in years 2011 reported on their code of conduct. 44 percent of the companies in year 2012 reported on their code of conduct. 56 percent of the companies in year 2013 reported on their code of conduct. However, 78 percent of the companies in year 2014 reported on their code of conduct. In years 2010 and 2011, 67 percent of the companies reported on their mechanisms for matters bothering on integrity, while 56 percent of the companies in years 2012 and 2013 respectively reported on their mechanisms for matters bothering on integrity. However, 78 percent of the companies in year 2014 reported on their mechanisms for matters bothering on integrity.

In year 2010, 78 percent of the companies reported on whistle blowing mechanisms or hotlines, while 67 percent of the companies in year 2011 reported on whistle blowing mechanisms or hotlines. However, 56 percent of the companies in year 2012 and 2013 reported on whistle blowing mechanisms or hotlines, while 78 percent of the companies in year 2014 reported on whistle blowing mechanisms or hotlines.

Table 4.10: Number of Companies Reporting Governance Indicators in the Oil and Gas Sector

		Years				
S/No.	**Governance Indicators**	2010	2011	2012	2013	2014
1	Governance structure and composition	7	7	6	6	8
2	Competencies of members of the highest governance body	6	6	5	5	8
3	Composition of Board directors	7	7	6	6	7
4	Directors' Tenure	5	5	5	5	7
5	Directors' other significant positions and commitments	5	6	5	5	7
6	Stakeholder representation	3	5	6	6	7
7	Chairman is an Executive Officer	7	7	6	7	7
8	Conflicts of interest – cross-board membership and related party disclosures	7	7	6	6	7
9	Board's role in identifying and managing economic, social and environmental impacts	5	5	6	6	5
10	Committee that incorporates material aspects in sustainability report	0	0	1	1	1
11	Highest governance body in risk management	6	7	6	6	6
12	Directors' and Executive Remuneration	6	7	6	6	7
13	Organization's code of conduct and code of ethics	6	5	4	5	7
14	Mechanisms for seeking advice on Integrity Issues	6	6	5	5	7
15	Whistle blowing mechanisms or hotlines	7	6	5	5	7

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 9 oil and gas companies were assessed based on the governance indicators in Table 4.11. In year 2010, 78 percent of the companies reported on benefits provided to full-time employees, while 67 percent of the companies in year 2011 reported on benefits provided to full-time employees. 78 percent of the companies in years 2012 and 2013 reported on benefits provided to full-time employees. However, 89 percent of the companies in year 2014 reported on reported on benefits provided to full-time employees.

In year 2010, 22 percent of the companies reported on lost day rate, absentee rate and work-related fatalities for the workforce, while 33 percent of the companies in years 2011 and 2012 reported on lost day rate, absentee rate and work-related fatalities for the workforce. However, 44 percent of the companies in years 2013 and 2014 reported on reported on lost day rate, absentee rate and work-related fatalities for the workforce.

In years 2010, 2011, 2012, 2013 and 2014 respectively 89 percent of the companies reported on health, safety, and employee training.

In year 2010, 33 percent of the companies reported on representation of men, women and diversity in governance bodies, while 44 percent of the companies in year 2011 reported on representation of men, women and diversity in governance bodies. However, 56 percent of the companies in years 2012, 2013 and 2014 reported on representation of men, women and diversity in governance bodies.

In years 2010, 2011 and 2012, 11 percent of companies reported on equal remuneration of women and men. However, 22 percent of the companies in years 2013 and 2014 respectively reported on equal remuneration of women and men.

In years 2010 and 2011, 11 percent of companies reported on child labour. 22 percent of the companies in years 2012 and 2013 reported on child labour, while 11 percent of the companies in year 2014 reported on child labour.

In year 2010, 78 percent of companies reported on local community development programmes, while 89 percent of companies in years 2011, 2012, 2013 and 2014 respectively reported on local community development programmes.

In year 2010, 44 percent of the companies reported on stakeholder engagement plans, while 78 percent of the companies in year 2011 reported on stakeholder engagement plans. 67 percent of the companies in year 2012 and 2013 reported on stakeholder engagement plans, while 78 percent of the companies in year 2014 reported on stakeholder engagement plans.

In year 2010, 22 percent of the companies reported on anti-corruption policies and procedures, while 44 percent of the companies in the year 2011 reported on anti-corruption policies and procedures. 56 percent of the companies in year 2012 reported on anti-corruption policies and procedures. However, 67 percent of the companies in years 2013 and 2014 reported on anti-corruption policies and procedures.

In year 2010, 33 percent of the companies reported on political financial and in-kind contributions made directly and indirectly by the organization, while 11 percent of the companies in year 2011 reported on political financial and in-kind contributions made directly and indirectly by the organization. 22 percent of the companies in year 2012 reported on political financial and in-kind contributions made directly and indirectly by the organization. 33 percent of the companies in year 2013 reported on political financial and in-kind contributions made directly and indirectly by the organization; and 11 percent of the companies in year 2014 reported on political financial and in-kind contributions made directly and indirectly by the organization.

In years 2010 and 2011, 11 percent of companies reported on suppliers and clients subject to assessments for impacts on society, while 22 percent of the companies in year 2012 and 2013 reported on suppliers and clients subject to assessments for impacts on society. However, 11 percent of the companies in year 2014 reported on suppliers and clients subject to assessments for impacts on society.

In year 2010 and 2011, 11 percent of companies reported on actual and potential negative impacts on society identified in the supply chain, while 22 percent of the companies in year 2012 and 2013 reported on actual and potential negative impacts on society identified in the supply chain. However, 11 percent of the companies in years 2014 reported on actual and potential negative impacts on society identified in the supply chain.

Table 4.11: Number of Companies Reporting Social Indicators in the Oil and Gas Sector

		Years				
S/No.	**Social Indicators**	2010	2011	2012	2013	2014
1	Benefits to full-time employees	7	6	7	7	8
2	Injury/injury rate/occupational diseases rate	2	3	3	4	4
3	Health and Safety employee training	8	8	8	8	8
4	Representation of men and women in governance bodies	3	4	5	5	5
5	Equal remuneration of men and women	1	1	1	2	2
6	Child labour	1	1	2	2	1
7	Local community development programmes	7	8	8	8	8
8	Stakeholder engagement plans	4	7	6	6	7
9	Anti-corruption policies and procedures	2	4	5	6	6
10	Political financial and other kinds of contributions made by the organization	3	1	2	3	1
11	Suppliers and clients subject to assessments for impacts on society	1	1	2	2	1
12	Potential negative impacts on society identified in the supply chain	1	1	2	2	1

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 20 consumer goods companies were assessed based on the economic indicators in Table 4.12. Out of the 20 observed cases, 13 to 19 companies reported on revenue from 2010 to 2014, there was a rise in reporting on revenue from 2010 to 2014. 14 to 20 companies reported on operating costs from 2010 to 2014. There was a rise in reporting on operating costs from 2010 to 2014. 14 to 20 companies reported on employee wages and benefits from 2010 to 2014. This signified a rise in reporting on employee wages and benefits from 2010 to 2014. 12 to 19 companies reported on payments to providers of capital from 2010 to 2014. This signified a rise in reporting on payments to providers of capital from 2010 to 2014. 14 to 20 companies reported on payments to government from 2010 to 2014; and this signified a rise in reporting on payments to government from 2010 to 2014. 10 to 18 companies reported on community investments from 2010 to 2014; and this signified a rise in reporting on community investments from 2010 to 2014. In 2010, no company reported on risks or opportunity posed by climate change. There was a rise in reporting risks or opportunity posed by climate change from 2010 to 2012 as 4 companies reported. However in 2014, only 2 companies reported on risks or opportunity posed by climate change. It can be deduced that very few companies engage in reporting on the risks and opportunity posed by climate change in the consumer goods sector of the Nigerian Stock Exchange (NSE).

In 2010, no company reported on the financial implications of the risk or opportunity posed by climate change. There was a rise in reporting the financial implications of the risk or opportunity posed by climate change in 2012 as 4 companies reported. However in 2014, only 1 company reported on the financial implications of the risk or opportunity posed by climate change. It can be deduced that very few companies engage in reporting on the financial implications of the risk and opportunity posed by climate change in the consumer goods sector of the Nigerian Stock Exchange (NSE).

In 2010, no company reported on the costs of actions taken to manage the risk and opportunity posed by climate change. There was a rise in reporting the costs of actions taken to manage the risk and opportunity posed by climate change in 2012 as 4 companies reported. However in 2014, only 1 company reported on the costs of actions taken to manage the risk or opportunity posed by climate change. It can be

deduced that very few companies engage in reporting on the costs of actions taken to manage the risk and opportunity posed by climate change in the consumer goods sector of the Nigerian Stock Exchange (NSE).

In 2010, 7 companies reported on the estimated value of defined benefit plan obligations (liabilities). There was a rise in reporting from 2010 to 2014. By 2014, 14 companies reported on the estimated value of defined benefit plan obligations (liabilities).

In 2010, 8 companies reported on whether the defined benefit plan obligations (liabilities) will be settled by the organization's resources or a separate fund. However, as at 2014, a total of 13 companies reported on whether the defined benefit plan obligations (liabilities) will be settled by the organization's resources or a separate fund.

In 2010, 8 companies reported on the percentage of salary contributed to the defined benefit plan by the employer and employee. By 2014, a total of 11 companies reported on the percentage of salary contributed to the defined benefit plan by the employer and employee.

In 2010, 3 companies reported on assistance received from government (for instance, tax relief, tax credit, subsidies, investment grants, research and development grants, awards, royalty holidays, financial incentives, presence of government in the shareholding structure). By 2014, 9 companies reported on assistance received from government (for instance, tax relief, tax credit, subsidies, investment grants, research and development grants, awards, royalty holidays, financial incentives, presence of government in the shareholding structure).

In 2010, no company reported on spending on local suppliers at significant locations of operations. In 2013, 3 companies reported on spending on local suppliers at significant locations of operations. In 2014, no company reported on spending on local suppliers at significant locations of operations.

Table 4.12: Number of Companies Reporting Economic Indicators in the Consumer Goods Sector

		Years				
S/No.	**Economic Indicators**	2010	2011	2012	2013	2014
1	Revenue	13	18	19	19	19
2	Operating costs	14	19	20	20	20
3	Employee wages and benefits	14	19	20	20	20
4	Payments to Providers of Capital	12	17	17	17	19
5	Payments to Government	14	19	20	20	20
6	Community Investments	10	17	18	17	18
7	Climate change - risks and opportunities	0	2	4	3	2
8	Climate change - Financial Implications of risks and opportunities	0	2	4	3	1
9	Climate change - Costs of actions taken to manage risks or opportunities	0	2	4	3	1
10	Value of Defined Benefit Plan obligations	7	11	12	14	14
11	Mode of Settling the Defined Benefit Plan Obligations (Liability)	8	11	12	13	13
12	Percentage of salary contributed by the employer and employee	8	11	11	12	11
13	Financial assistance received from government	3	5	9	8	9
14	Amount spent on local suppliers at significant locations of operations	0	2	3	3	0

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 20 consumer goods companies were assessed based on the environmental indicators in Table 4.13. In 2010, no company reported on renewable and non-renewable materials used. In 2011, 15 percent of companies reported on renewable and non-renewable materials used. In 2012, 25 percent of companies reported on renewable and non-renewable materials used. In 2013, 20 percent of companies reported on renewable and non-renewable materials used. In 2014, 15 percent of companies reported on renewable and non-renewable materials used. There was a rise in reporting on renewable and non-renewable materials used in 2011 and 2013. However, there was a fall in reporting on renewable and non-renewable materials used in 2014.

In 2010, 5 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services. In 2011, 20 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services. In 2012, 30 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services. In 2013, 30 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services. In 2014, 20 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services. There was a rise in reporting on materials used that are from recycled materials used to manufacture the organization's product and services in 2011, 2012 and 2013. However, there was a fall in the number of companies that engaged in such reporting in 2014.

In 2010, no company reported on fuel consumption from renewable energy, electricity/heating/cooling/steam consumption. Meanwhile, there was an increase in reporting on fuel consumption from 2011 to 2013. 20 percent of companies reported on fuel consumption from renewable energy in 2011, electricity/heating/cooling/steam consumption. However in 2012, 25 percent of the companies reported on fuel consumption from renewable energy, electricity/heating/cooling/steam consumption, while 30 percent of the companies reported on fuel consumption from renewable energy, electricity/heating/cooling/steam consumption in 2013. In 2014, 20 percent of the

companies reported on fuel consumption from renewable energy, electricity/heating/cooling/steam consumption.

In 2010, 5 percent of the companies reported on electricity/heating/cooling/steam sold/project funded. In 2011, 15 percent of the companies reported on electricity/heating/cooling/steam sold/project funded. In 2012, 25 percent of the companies reported on electricity/heating/cooling/steam sold/project funded. In 2013, 15 percent of the companies reported on electricity/heating/cooling/steam sold/project funded. In 2014, 15 percent of the companies reported on electricity/heating/cooling/steam sold/project funded. There was a rise in reporting electricity/heating/cooling/steam sold/project funded in 2012. However, the number of companies engaging in reporting electricity/heating/cooling/steam sold/project funded fell in 2013 and 2014.

In 2010, 5 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency. In 2011, 20 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency. In 2012, 25 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency. In 2013, 25 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency. In 2014, 30 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency.

In 2010, 5 percent of the companies reported on water withdrawal by source. In 2011, 20 percent of the companies reported on water withdrawal by source. In 2012, 25 percent of the companies reported on water withdrawal by source. In 2013, 25 percent of the companies reported on water withdrawal by source. In 2014, 15 percent of the companies reported on water withdrawal by source.

In 2010, 5 percent of the companies reported on water recycled. In 2011, 20 percent of the companies reported on water recycled. In 2012, 25 percent of the companies reported on water recycled. In 2013, 25 percent of the companies reported on water recycled. In 2014, 20 percent of the companies reported on water recycled.

In 2010, 5 percent of the companies reported on gross direct greenhouse gas emissions. In 2011, 15 percent of the companies reported on gross direct greenhouse gas emissions. In 2012, 25 percent of the companies reported on gross direct greenhouse gas emissions. In 2013, 25 percent of the companies reported on gross direct greenhouse gas emissions. In 2014, 20 percent of the companies reported on gross direct greenhouse gas emissions.

In 2010, 2011 and 2014 respectively, no company reported on organic pollutants. In 2012, 5 percent of the companies reported on organic pollutants. In 2013, 5 percent of the companies reported on organic pollutants.

In 2010, no company reported on water discharged. In 2011, 10 percent of the companies reported on water discharged. In 2012, 20 percent of the companies reported on water discharged. In 2013, 20 percent of the companies reported on water discharged. In 2014, 5 percent of the companies reported on water discharged.

In 2010, 5 percent of the companies reported on waste and disposal method. In 2011, 20 percent of the companies reported on waste and disposal method. In 2012, 25 percent of the companies reported on waste and disposal method. In 2013, 25 percent of the companies reported on waste and disposal method. In 2014, 20 percent of the companies reported on waste and disposal method.

In 2010, no company reported on the number of spills. In 2011, 10 percent of the companies reported on the number of spills. In 2012, 15 percent of the companies reported on the number of spills. In 2013, 10 percent of the companies reported on the number of spills. In 2014, 5 percent of the companies reported on the number of spills.

In 2010, no company reported on environmental protection expenditures. In 2011, 10 percent of the companies reported on environmental protection expenditures. In 2012, 15 percent of the companies reported on environmental protection expenditures. In 2013, 15 percent of the companies reported on environmental protection expenditures. In 2014, 10 percent of the companies reported on environmental protection expenditures.

In 2010, no company reported on assessment of suppliers on the basis of environmental risks. In 2011, 10 percent of the companies reported on assessment of suppliers on the basis of environmental risks. In 2012, 20 percent of the companies reported on assessment of suppliers on the basis of environmental risks. In 2013, 25 percent of the companies reported on assessment of suppliers on the basis of environmental risks. In 2014, 10 percent of the companies reported on assessment of suppliers on the basis of environmental risks.

In 2010, no company reported on assessment of clients on the basis of environmental risks. In 2011, 10 percent of the companies reported on assessment of clients on the basis of environmental risks. In 2012, 20 percent of the companies reported on assessment of clients on the basis of environmental risks. In 2013, 20 percent of the companies reported on assessment of clients on the basis of environmental risks. In 2014, 10 percent of the companies reported on assessment of clients on the basis of environmental risks.

Table 4.13: Number of Companies Reporting Environmental Indicators in the Consumer Goods Sector

		Years				
S/No.	**Environmental Indicators**	2010	2011	2012	2013	2014
1	Renewable and non-renewable materials used	0	3	5	4	3
2	Recycled materials used to manufacture the organization's product and services	1	4	6	6	4
3	Fuel/electricity/heating/cooling/steam consumption	0	4	5	6	4
4	Electricity/heating/cooling/steam sold	1	3	5	3	3
5	Reduction in energy consumption due to conservation	1	4	5	5	6
6	Water withdrawn for operations	1	4	5	5	3
7	Water recycled and reused	1	4	5	5	4
8	Gross direct Greenhouse gas Emissions	1	3	5	5	4
9	Organic Pollutants	0	0	1	1	0
10	Water discharge and quality of water discharged	0	2	4	4	1
11	Waste and method of disposal	1	4	5	5	4
12	Number and volume of spills	0	2	3	2	1
13	Environmental protection expenditures	0	2	3	3	2
14	Assessment of suppliers on the basis of environmental risks	0	2	4	5	2
15	Assessment of clients on the basis of environmental risks	0	2	4	4	2

Source: Researcher’s Compilation from Corporate Reports (2010-2014)

The corporate reports of 20 consumer goods companies were assessed based on the governance indicators in Table 4.14. In 2010, 50 percent of the companies reported on governance structure and composition. 60 percent of the companies in 2011 and 2012 respectively reported on governance structure and composition. 80 percent of the companies in 2013 reported on governance structure and composition. 70 percent of the companies in 2014 reported on governance structure and composition.

In 2010, 20 percent of the companies reported the competencies of members of the highest governance body. In 2011 and 2012, 35 percent of the companies respectively reported on the competencies of members of the highest governance body. 50 percent of the companies in 2013 and 2014 reported the competencies of members of the highest governance body.

35 percent of the companies in year 2010 reported the composition of executive and non-executive directors on the board. 60 percent of the companies in year 2011 reported on the composition of executive and non-executive directors on the board. 55 percent of the companies in year 2012 reported the composition of executive and non-executive directors on the board. 80 percent of the companies in year 2013 reported the composition of executive and non-executive directors on the board. 70 percent of the companies in year 2014 reported the composition of executive and non-executive directors on the board.

25 percent of the companies in year 2010 reported on the tenure on the governance body. 40 percent of the companies in year 2011 reported on the tenure on the governance body. 50 percent of the companies in year 2012 and 2014 reported on the tenure on the governance body. 65 percent of the companies in year 2013 reported on the tenure on the governance body.

20 percent of the companies in year 2010 reported on the nature of each director's other significant positions and commitments. 35 percent of the companies in year 2011 reported on the nature of each director's other significant positions and commitments. 30 percent of the companies in year 2012 reported on the nature of each director's other significant positions and commitments. 50 percent of the companies in year 2013 and 2014 respectively reported on the nature of each director's other significant positions and commitments.

30 percent of the companies in year 2010 reported on stakeholder representation on the board of directors. 45 percent of the companies in 2011 and 2012 respectively reported on stakeholder representation on the board of directors. 65 percent of the companies in year 2013 reported on stakeholder representation on the board of directors. 55 percent of the companies in year 2014 reported on stakeholder representation on the board of directors. 55 percent of the companies in year 2010 reported on whether the chair of the board is also an executive officer. 65 percent of the companies in years 2011 and 2012 respectively reported on whether the chair of the board is also an executive officer. 85 percent of the companies in year 2013 reported on whether the chair of the board is also an executive officer. 75 percent of the companies in year 2014 reported on whether the chair of the board is also an executive officer.

35 percent of the companies in year 2010 reported cross-board membership and related party disclosures. 50 percent of the companies in years 2011 and 2012 respectively reported cross-board membership and related party disclosures. 60 percent of the companies in year 2013 reported cross-board membership and related party disclosures. 65 percent of the companies in year 2014 reported cross-board membership and related party disclosures. 15 percent of the companies in year 2010 reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities. 45 percent of the companies in years 2011 and 2012 reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities. 50 percent of the companies in year 2013 reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities. 20 percent of the companies in year 2014 reported on the board's role in identifying and managing economic, social and environmental impacts, risks and opportunities.

In 2010, none of the companies reported on the committee that reviews and approves the organization's sustainability report and ensures that all material aspects are covered. 10 percent of the companies in years 2011, 2012 and 2014 reported on the committee that reviews and approves the organization's sustainability report and ensures that all material aspects are covered. 15 percent of the companies in year

2013 reported on the committee that reviews the organization's sustainability report and ensures that all material aspects are covered.

In year 2010, 50 percent of the companies reported on the highest governance body in risk management. 55 percent of the companies in year 2011 reported on the highest governance body in risk management. 60 percent of the companies in year 2012 reported on the highest governance body in risk management. 85 percent of the companies in year 2013 reported on the highest governance body in risk management. 75 percent of the companies in year 2014 reported on the highest governance body in risk management.

In year 2010, 50 percent of the companies reported on remuneration for the highest governance body. 55 percent of the companies in year 2011 reported on remuneration for the highest governance body. 60 percent of the companies in year 2012 reported on remuneration for the highest governance body. 75 percent of the companies in year 2013 reported on remuneration for the highest governance body. 65 percent of the companies in year 2014 reported on remuneration for the highest governance body.

In year 2010, 15 percent of the companies reported on their code of conduct. 30 percent of the companies in years 2011 and 2012 respectively reported on their code of conduct. 35 percent of the companies in year 2013 reported on their code of conduct. 55 percent of the companies in year 2014 reported on their code of conduct.

In year 2010, 15 percent of the companies reported on their mechanisms for matters bothering on integrity. 25 percent of the companies in years 2011 and 2012 respectively reported on their mechanisms for matters bothering on integrity. 30 percent of the companies in years 2013 and 2014 respectively reported on their mechanisms for matters bothering on integrity.

In year 2010, 10 percent of the companies reported on whistle blowing mechanisms or hotlines. 30 percent of the companies in years 2011, 2012 and 2013 respectively reported on whistle blowing mechanisms or hotlines. 40 percent of the companies in year 2014 reported on whistle blowing mechanisms or hotlines.

Table 4.14: Number of Companies Reporting Governance Indicators in the Consumer Goods Sector

		Years				
S/No.	**Governance Indicators**	2010	2011	2012	2013	2014
1	Governance structure and composition	10	12	12	16	14
2	Competencies of members of the highest governance body	4	7	7	10	10
3	Composition of Board directors	7	12	11	16	14
4	Directors' Tenure	5	8	10	13	10
5	Directors' other significant positions and commitments	4	7	6	10	10
6	Stakeholder representation	6	9	9	13	11
7	Chairman is an Executive Officer	11	13	13	17	15
8	Conflicts of interest – cross-board membership and related party disclosures	7	10	10	12	13
9	Board's role in identifying and managing economic, social and environmental impacts	3	9	9	10	4
10	Committee that incorporates material aspects in sustainability report	0	2	2	3	2
11	Highest governance body in risk management	10	11	12	17	15
12	Directors' and Executive Remuneration	10	11	12	15	13
13	Organization's code of conduct and code of ethics	3	6	6	7	11
14	Mechanisms for seeking advice on Integrity Issues	1	5	5	6	6
15	Whistle blowing mechanisms or hotlines	2	6	6	6	8

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 20 consumer goods companies were assessed based on the social indicators in Table 4.15. In year 2010, 50 percent of the companies reported on benefits provided to full-time employees. 55 percent of the companies in year 2011 reported on benefits provided to full-time employees. 60 percent of the companies in year 2012 reported on benefits provided to full-time employees. 80 percent of the companies in year 2013 reported on benefits provided to full-time employees. 75 percent of the companies in year 2014 reported on reported on benefits provided to full-time employees.

In year 2010, 5 percent of the companies reported on lost day rate, absentee rate and work-related fatalities for the workforce. 25 percent of the companies in years 2011 and 2012 reported on lost day rate, absentee rate and work-related fatalities for the workforce. 35 percent of the companies in year 2013 reported on reported on lost day rate, absentee rate and work-related fatalities for the workforce. In year 2014, 15 percent of the companies reported on lost day rate, absentee rate and work-related fatalities for the workforce.

In year 2010, 50 percent of the companies reported on health, safety, and employee training. 55 percent of the companies in years 2011 and 2012 reported on health, safety and employee training. 75 percent of the companies in year 2013 reported on health, safety, and employee training. 70 percent of the companies in year 2014 reported on health, safety, and employee training.

In year 2010, 5 percent of the companies reported on representation of men, women and diversity in governance bodies. 25 percent of the companies in year 2011 reported on representation of men, women and diversity in governance bodies. 30 percent of the companies in years 2012 and 2013 reported on representation of men, women and diversity in governance bodies. 25 percent of the companies in year 2014 reported on representation of men, women and diversity in governance bodies.

In year 2010, no companies reported on equal remuneration of women and men. 10 percent of the companies in years 2011, 2012, 2013 and 2014 respectively reported on equal remuneration of women and men.

In year 2010, no companies reported on child labour. 15 percent of the companies in years 2011, 2012 and 2013 respectively reported on child labour. 5 percent of the companies in year 2014 reported on child labour.

In year 2010, 40 percent of companies reported on local community development programmes. 55 percent of companies in years 2011 and 2012 reported on local community development programmes. 70 percent of companies in year 2013 reported on local community development programmes. 60 percent of companies in year 2014 reported on local community development programmes.

In year 2010, 25 percent of the companies reported on stakeholder engagement plans. 50 percent of the companies in year 2011 reported on stakeholder engagement plans. 45 percent of the companies in year 2012 reported on stakeholder engagement plans. 50 percent of the companies in year 2013 reported on stakeholder engagement plans. 35 percent of the companies in year 2014 reported on stakeholder engagement plans.
In year 2010, 5 percent of the companies reported on anti-corruption policies and procedures. 40 percent of the companies in the years 2011 and 2012 reported on anti-corruption policies and procedures. 45 percent of the companies in year 2013 reported on anti-corruption policies and procedures. 35 percent of the companies in year 2014 reported on anti-corruption policies and procedures.

In year 2010, 25 percent of the companies reported on political financial and in-kind contributions made directly and indirectly by the organization. 45 percent of the companies in years 2011 and 2012 reported on political financial and in-kind contributions made directly and indirectly by the organization. 55 percent of the companies in years 2013 and 2014 reported on political financial and in-kind contributions made directly and indirectly by the organization.

In year 2010, no companies reported on suppliers and clients subject to assessments for impacts on society. 15 percent of the companies in year 2011 reported on suppliers and clients subject to assessments for impacts on society. 20 percent of the companies in year 2012 reported on suppliers and clients subject to assessments for impacts on society. 25 percent of the companies in year 2013 reported on suppliers and clients subject to assessments for impacts on society.10 percent of the

companies in year 2014 reported on suppliers and clients subject to assessments for impacts on society.

In year 2010, no companies reported on actual and potential negative impacts on society identified in the supply chain. 10 percent of the companies in year 2011 reported on actual and potential negative impacts on society identified in the supply chain. 15 percent of the companies in years 2012 and 2013 reported on actual and potential negative impacts on society identified in the supply chain. 10 percent of the companies in year 2014 reported on actual and potential negative impacts on society identified in the supply chain.

Table 4.15: Number of Companies Reporting Social Indicators in the Consumer Goods Sector

S/No.		Years				
	Social Indicators	2010	2011	2012	2013	2014
1	Benefits to full-time employees	10	11	12	16	15
2	Injury/injury rate/occupational diseases rate	1	5	5	7	3
3	Health and Safety employee training	10	11	11	15	14
4	Representation of men and women in governance bodies	1	5	6	6	5
5	Equal remuneration of men and women	0	2	2	2	2
6	Child labour	0	3	3	3	1
7	Local community development programmes	8	11	11	14	12
8	Stakeholder engagement plans	5	10	9	10	7
9	Anti-corruption policies and procedures	1	8	8	9	7
10	Political financial and other kinds of contributions made by the organization	5	9	9	11	11
11	Suppliers and clients subject to assessments for impacts on society	0	3	4	5	2
12	Potential negative impacts on society identified in the supply chain	0	2	3	3	2

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 11 industrial goods companies were assessed based on the economic indicators in Table 4.16. Out of the 11 observed cases, 100 percent respectively reported on revenue, operating costs, employee wages and benefits, payments to providers of capital, payments to government and community investments in year 2014. There was an improvement in reporting on revenue, operating costs, employee wages and benefits, payments to providers of capital, payments to government and community investments from 2010 to 2014.

There was an increase in reporting risks or opportunity posed by climate change and the financial implications of the risks and opportunities posed by climate change from 9 percent in year 2010 to 18 percent in year 2014. The costs of actions taken to manage the risks or opportunities posed by climate change was reported by 9 percent of the companies in year 2010 and 18 percent of the companies in year 2014. There was an increase in reporting on the estimated value of defined benefit plan obligations (liabilities) from 55 percent in year 2010 to 91 percent in year 2014. There was an increase in reporting on the mode of settling the defined benefit plan obligations (liabilities) from 55 percent in year 2010 to 91 percent in year 2014. There was an increase in reporting on the percentage of salary contributed by the employer and employee from 45 percent in year 2010 to 82 percent in year 2014.

There was an increase in reporting on financial assistance received from government from 18 percent in year 2010 to 36 percent in year 2014. There was no company that reported on spending on local suppliers in years 2010 and 2011 respectively. In years 2012 and 2013 respectively, 9 percent of the companies reported on spending on local suppliers. However, in year 2014, no company reported on spending on local suppliers.

Table 4.16: Number of Companies Reporting Economic Indicators in the Industrial Goods Sector

		Years				
S/No.	**Economic Indicators**	2010	2011	2012	2013	2014
1	Revenue	10	11	11	11	11
2	Operating costs	10	11	11	11	11
3	Employee wages and benefits	10	11	11	11	11
4	Payments to Providers of Capital	10	11	11	11	11
5	Payments to Government	10	11	11	11	11
6	Community Investments	10	11	10	10	11
7	Climate change - risks and opportunities	1	2	2	2	2
8	Climate change - Financial Implications of risks and opportunities	1	2	2	2	2
9	Climate change - Costs of actions taken to manage risks or opportunities	1	1	2	2	2
10	Value of Defined Benefit Plan obligations	6	7	7	8	10
11	Mode of Settling the Defined Benefit Plan Obligations (Liability)	6	7	7	8	10
12	Percentage of salary contributed by the employer and employee	5	6	7	8	9
13	Financial assistance received from government	2	2	3	3	4
14	Amount spent on local suppliers at significant locations of operations	0	0	1	1	0

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 11 industrial goods companies were assessed based on the environmental indicators in Table 4.17. There was an increase in reporting on renewable and non-renewable materials used from 9 percent in year 2010 to 18 percent in year 2014. In years 2010 and 2011 respectively, 18 percent of the companies reported on materials used that are from recycled materials used to manufacture the organization's product and services. In years 2012 and 2013, 27 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services. In 2014, 18 percent of companies reported on materials used that are from recycled materials used to manufacture the organization's product and services.

In 2010 and 2011 respectively, 9 percent of companies reported on fuel consumption from renewable energy, electricity/heating/cooling/steam consumption. In 2012, 2013 and 2014 respectively 18 percent of companies reported on fuel consumption from renewable energy, electricity/heating/cooling/steam consumption. In 2010, 2012 and 2014 respectively, 18 percent of the companies reported on electricity/heating/cooling/steam sold/project funded. In 2011 and 2013 respectively, 9 percent of the companies reported on electricity/heating/cooling/steam sold/project funded. In 2010, 2011 and 2012 respectively, 18 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency. In 2013 and 2014 respectively, 27 percent of the companies reported on reduction in energy consumption as a result of conservation and efficiency.

There was an increase in reporting on water withdrawn for operations from 0 percent in 2010 to 18 percent in year 2014. There was an increase in reporting on water recycled and reused from 0 percent in 2010 to 9 percent in 2014. In 2010, 0 percent of the companies reported on water recycled and reused. In 2014, 9 percent of the companies reported on water recycled and reused. There was a reduction in reporting greenhouse gas emissions from 27 percent in year 2010 to 9 percent in year 2014. There was a reduction in reporting organic pollutants from 18 percent in 2010 to 9 percent in year 2014. There was an increase in reporting on water discharge from 0 percent in year 2010 to 9 percent in year 2014. There was a reduction in reporting on waste and disposal method from 27 percent in year 2010 to 18 percent in year 2014.

There was an increase in reporting on the number of spills from 0 percent to 9 percent in 2014. There was a reduction in reporting on environmental protection expenditures from 27 percent in year 2010 to 18 percent in year 2014. In year 2010, 9 percent of the companies reported on assessment of suppliers on the basis of environmental risks. In year 2014, 18 percent of the companies reported on assessment of suppliers on the basis of environmental risks. In year 2010, no company reported on assessment of clients on the basis of environmental risks. In year 2014, 18 percent of the companies reported on assessment of clients on the basis of environmental risks.

Table 4.17: Number of Companies Reporting Environmental Indicators in the Industrial Goods Sector

		Years				
S/No.	**Environmental Indicators**	2010	2011	2012	2013	2014
1	Renewable and non-renewable materials used	1	2	2	2	2
2	Recycled materials used to manufacture the organization's product and services	2	2	3	3	2
3	Fuel/electricity/heating/cooling/steam consumption	1	1	2	2	2
4	Electricity/heating/cooling/steam sold	2	1	2	1	2
5	Reduction in energy consumption due to conservation	2	2	2	3	3
6	Water withdrawn for operations	0	1	1	2	2
7	Water recycled and reused	0	1	1	2	1
8	Gross direct Greenhouse gas Emissions	3	3	3	3	1
9	Organic Pollutants	2	2	0	0	1
10	Water discharge and quality of water discharged	0	1	1	2	1
11	Waste and method of disposal	3	3	4	4	2
12	Number and volume of spills	0	0	0	0	1
13	Environmental protection expenditures	3	3	2	4	2
14	Assessment of suppliers on the basis of environmental risks	1	2	2	1	2
15	Assessment of clients on the basis of environmental risks	0	1	1	1	2

Source: Researcher’s Compilation from Corporate Reports (2010-2014)

The corporate reports of 11 industrial goods companies were assessed based on the governance indicators in Table 4.18. There was an increase in reporting on governance structure from 45 percent in year 2010 to 82 percent in year 2014. There was an increase in reporting on competencies of members of the highest governance body from 45 percent in year 2010 to 73 percent in year 2014. There was an increase in reporting on the composition of executive and non-executive directors on the board from 55 percent in year 2010 to 82 percent in year 2014. There was an increase in reporting tenure on the governance body from 55 percent in year 2010 to 82 percent in year 2014. There was an increase in reporting the nature of each director's other significant positions and commitments from 36 percent in year 2010 to 73 percent in year 2014. There was an increase in reporting on stakeholder representation from 45 percent in year 2010 to 73 percent in year 2014. There was an increase in reporting on whether the chair of the highest governance body is also an executive officer from 55 percent in year 2010 to 82 percent in year 2014. There was an increase in reporting on conflicts of interest from 55 percent in year 2010 to 82 percent in year 2014. There was a decrease in reporting on the highest governance body's role in identifying and managing social, environmental impacts, risks and opportunities from 27 percent in year 2010 to 18 percent in year 2014. None of the companies reported on the committee that reviews and approves the organization's sustainability report and ensures that all material aspects are covered. There was a rise in reporting on the highest governance body in risk management from 55 percent in year 2010 to 73 percent in year 2014. 55 percent of the companies in years 2010, 2011, 2013 and 2014 respectively reported on whistle blowing mechanisms. 45 percent of the companies in year 2012 reported on whistle blowing mechanisms or hotlines.

Table 4.18: Number of Companies Reporting Governance Indicators in the Industrial Goods Sector

		Years				
		2010	2011	2012	2013	2014
S/No.	**Governance Indicators**					
1	Governance structure and composition	5	7	7	8	9
2	Competencies of members of the highest governance body	5	6	5	6	8
3	Composition of Board directors	6	7	7	8	9
4	Directors' Tenure	6	7	7	8	9
5	Directors' other significant positions and commitments	4	4	4	5	8
6	Stakeholder representation	5	6	7	7	8
7	Chairman is an Executive Officer	6	7	7	8	9
8	Conflicts of interest – cross-board membership and related party disclosures	6	6	7	8	9
9	Board's role in identifying and managing economic, social and environmental impacts	3	4	7	7	2
10	Committee that incorporates material aspects in sustainability report	0	0	0	0	0
11	Highest governance body in risk management	6	7	7	8	8
12	Directors' and Executive Remuneration	6	7	7	8	8
13	Organization's code of conduct and code of ethics	6	7	7	8	8
14	Mechanisms for seeking advice on Integrity Issues	6	6	6	7	8
15	Whistle blowing mechanisms or hotlines	6	6	5	6	6

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The corporate reports of 11 industrial goods companies were assessed based on the social indicators in Table 4.19. There was an increase in reporting benefits to employees from 55 percent in year 2010 to 91 percent in year 2014. There was an increase in reporting on lost day rate, absentee rate and work-related fatalities for the workforce from 18 percent in 2010 to 27 percent in year 2014. There was an increase in reporting on health, safety, and employee training from 55 percent in year 2010 to 82 percent in year 2014. There was a reduction in reporting on representation of men, women and diversity in governance bodies from 36 percent in 2010 to 18 percent in year 2014. 9 percent of the companies in year 2010 reported on equal remuneration of women and men. No company in year 2014 reported on equal remuneration of women and men. None of the companies reported on child labour all through years 2010 to 2014.

There was an increase in reporting on local community development programmes from 55 percent in year 2010 to 73 percent in year 2014. 45 percent of the companies in year 2010 reported on stakeholder engagement plans while 55 percent of the companies in year 2014 reported on stakeholder engagement plans. There was an increase in reporting on anti-corruption policies and procedures from 18 percent in year 2010 to 45 percent in year 2014. 18 percent of the companies in year 2010 reported on political financial and other contributions made directly or indirectly by the organization. On the other hand, 45 percent of the companies in the year 2014 reported on political financial and in-kind contributions made directly and indirectly by the organization. There was an increase in reporting on assessments for impacts on society from 9 percent in year 2010 to 27 percent in year 2014. No company reported on actual potential impacts on society identified in the supply chain from years 2010 to 2014.

Table 4.19: Number of Companies Reporting Social Indicators in the Industrial Goods Sector

		Years				
S/No.	**Social Indicators**	2010	2011	2012	2013	2014
1	Benefits to full-time employees	6	7	7	8	10
2	Injury/injury rate/occupational diseases rate	2	2	3	3	3
3	Health and Safety employee training	6	7	7	8	9
4	Representation of men and women in governance bodies	4	4	4	4	2
5	Equal remuneration of men and women	1	1	1	1	0
6	Child labour	0	0	0	0	0
7	Local community development programmes	6	7	7	8	8
8	Stakeholder engagement plans	5	5	5	5	6
9	Anti-corruption policies and procedures	2	3	3	4	5
10	Political financial and other kinds of contributions made by the organization	2	2	2	3	5
11	Suppliers and clients subject to assessments for impacts on society	1	2	2	2	3
12	Potential negative impacts on society identified in the supply chain	0	0	0	0	0

Source: Researcher's Compilation from Corporate Reports (2010-2014)

The output for total economic, environmental, governance and social indicators are shown in Table 4.20. The information for economic indicators reported in corporate reports from year 2010 to 2014 is summarised. The mean economic indicator scores is highest in years 2013 and 2014, with score range from 3 to 14 in year 2013 and a score range of 4 to 14 in year 2014. There is an increase in reporting of economic indicator from year 2010 to 2014. 2013 has the highest environmental indicators mean score of 3.48, with score range from 0 to 15. The lowest environmental indicators mean score of 0.91 is in year 2010, with score range of 0 to 15. In year 2010, the governance indicators score range from 0 to 15, with a mean of 7.43 and standard deviation of 5.67. Year 2010 has the lowest mean score while 2014 has the highest mean score. In year 2014, the scores range from 0 to 15, with a mean of 10.02, and standard deviation of 5.48. In year 2010, the social indicators scores range from 0 to 12, with a mean of 3.48 and standard deviation of 2.94. Year 2010 has a lower mean score compared to years 2011, 2012, 2013 and 2014 that have mean score of 4.80, 5.19, 5.63 and 5.15 respectively.

Table 4.20: Descriptive Analysis of Economic, Environmental, Social and Governance Indicators across Time Periods

	Year	N	Minimum	Maximum	Mean	Standard Deviation
Economic Indicators	2010	54	.00	13.00	6.9630	3.5817
	2011	54	.00	14.00	8.5556	2.5303
	2012	54	4.00	14.00	9.1296	2.7475
	2013	54	3.00	14.00	9.1667	2.6547
	2014	54	4.00	14.00	9.1667	2.1610
Environmental Indicators	2010	54	.00	15.00	.9074	2.7832
	2011	54	.00	15.00	1.9630	4.0327
	2012	54	.00	15.00	3.1667	4.9287
	2013	54	.00	15.00	3.4815	5.0235
	2014	54	.00	15.00	2.7778	4.1055
Governance Indicators	2010	54	.00	15.00	7.4259	5.67218
	2011	54	.00	15.00	8.7963	5.65478
	2012	54	.00	15.00	8.8704	5.87623
	2013	54	.00	15.00	9.9815	5.20700
	2014	54	.00	15.00	10.0185	5.48236
Social Indicators	2010	54	.00	12.00	3.4815	2.93798
	2011	54	.00	12.00	4.7963	3.42234
	2012	54	.00	12.00	5.1852	3.80206
	2013	54	.00	12.00	5.6296	3.49823
	2014	54	.00	12.00	5.1481	3.20617

Source: Researcher's Computation from Corporate Reports (2010-2014)

4.1.2 Primary Data Analysis - Preliminary

a. Primary Data Analysis – Preliminary Analysis of the Importance of Factors Influencing Sustainability Reporting

The primary data analysis is based on hypothesis four. The following tables are the result of data collected from the field survey in order to assess the importance and performance of factors influencing corporate sustainability reporting. Out of the 81 copies of questionnaire administered to companies in the financial services, consumer goods, industrial goods and oil and gas sector, 54 copies were completed and retrieved from respondents. The response rate is 67 percent. The responses of the different categories of business organizations are presented using tables, and the data is interpreted using mean and standard deviation. The survey instrument was completed by corporate managers in the banking, oil and gas, consumer goods, and industrial goods sectors in Nigeria. Tables 4.21, 4.22 and 4.23 present the descriptive statistics based on hypothesis four. The factors are grouped based on their nature (coercive, normative and mimetic).

Table 4.21 presents descriptive analysis of perceived importance of coercive pressures. Foreign lenders' emphasis on approving loans based on sustainability performance has the highest mean score followed by Securities and Exchange Commission (SEC) Code of Corporate Governance factor, investors' concern with long-term performance of the business organization and Central Bank of Nigeria (CBN) Sustainability Banking Principles factor. The total asset and revenue base of a business organization and consumers' interest in sustainable product and services of an organization have low mean scores.

Table 4.21: Descriptive Analysis of Perceived Importance of Coercive Pressures

Factors	N	Mean	Standard Deviation
Investors' concern with long-term performance of the business organization	54	3.352	.705
Securities and Exchange Commission (SEC) Code of Corporate Governance	54	3.407	.714
Central Bank of Nigeria (CBN) Sustainability Banking Principles	54	3.315	.639
Consumers' interest in sustainable products and services of an organization	54	3.296	.903
Revenue base of a business organization	54	3.056	.899
Total asset base of a business organization	54	3.000	.952
Foreign lenders' emphasis on approving loans on the basis of sustainability performance	54	3.444	.664
Local lenders' emphasis on approving loans on the basis of sustainability performance	54	3.241	.799

Source: Field Survey (2017)

Table 4.22 presents descriptive analysis of perceived importance of normative pressures. The normative factors with high mean score are: initiation from chief executive officer, employee training on sustainability reporting by business organizations, professional accounting firms' training of accounting professionals, rating of business organizations on the basis of sustainability performance and professional accounting association training of accounting professionals. The following factors have low mean scores: corporate membership of external governance bodies such as United Nations Environment Programme (UNEP), global oil and gas industry association for environmental and social issues (IPIECA), and United Nations Global Compact (UNGC), awards given by business organizations for sustainability performance, human resources on sustainability and accounting firms' provision of assurance services on sustainability reporting to organizations.

Table 4.22: Descriptive Analysis of Perceived Importance of Normative Pressures

Factors	N	Mean	Standard Deviation
Initiation from Chief Executive Officer of organization	54	3.611	.596
Pressure from the Board of Directors	54	3.130	.802
Employee Training on sustainability reporting by business organizations	54	3.519	.637
Professional Accounting Association Training of Accounting Professionals	54	3.204	.810
Professional Accounting Firms Training of Accounting Professionals	54	3.222	.839
Corporate membership of external governance bodies such as United Nations Environment Programme (UNEP), global oil and gas industry association for environmental and social issues (IPIECA), and United Nations Global Compact (UNGC)	54	3.037	.951
Human resources on sustainability	54	3.111	.817
Employees' attitude towards sustainability reporting	54	3.130	.912
Accounting firms' Provision of Assurance Services on sustainability reporting to organizations	54	3.111	.817
Use of assurance services on sustainability reporting by business organizations	54	3.185	.779
Rating of business organizations on the basis of sustainability performance	54	3.222	.817
Awards given to business organizations for sustainability performance	54	3.074	.968

Source: Field Survey (2017)

Table 4.23 presents descriptive analysis of perceived importance of mimetic pressures. Reporting practices of the most successful leader in the industry factor has a higher mean compared to presence of a business organization in a foreign country.

Table 4.23: Descriptive Analysis of Perceived Importance of Mimetic Pressures

Factors	N	Mean	Standard Deviation
Successful Industry Leaders' engaging in sustainability reporting	54	3.185	.754
Presence of a business organization in a foreign country	54	2.870	.991

Source: Field Survey (2017)

b. Primary Data Analysis - Preliminary Analysis of the Actual Influence of Factors Influencing Sustainability Reporting

The following tables are the result of data collected from the field survey in order to assess the actual influence of the factors from the perspective of corporate respondents. The responses of the different categories of business organizations were presented using tables. Also, the mean and standard deviation scores of the factors were presented. The survey instrument was completed by corporate managers in the banking, oil and gas, consumer goods, and industrial goods sectors in Nigeria. The results of the preliminary analysis of the actual influence of factors influencing sustainability reporting are presented in Table 4.24, Table 4.25 and Table 4.26. Tables 4.24, 4.25 and 4.26 present the descriptive statistics based on hypothesis four. The factors were grouped based on their nature (coercive, normative and mimetic).

Table 4.24 presents descriptive analysis of actual influence of coercive pressures. The factors with high mean scores are: investors' concern with long-term performance of the business organization, Securities and Exchange Commission (SEC) Code of Corporate Governance, Central Bank of Nigeria (CBN) Sustainability Banking Principles and foreign lenders' emphasis on approving loans on the basis of sustainability performance. The factors with low mean scores are: total asset base of a business organization, revenue base of an organization and local lenders' emphasis on approving loans on the basis of sustainability performance. This means that respondents opined that these three factors with low mean scores do not actually influence sustainability reporting as much as the four factors with high mean scores.

Table 4.24: Descriptive Analysis of Actual Influence of Coercive Pressures

Factors	N	Mean	Standard Deviation
Investors' concern with long-term performance of the business organization	54	3.482	.606
Securities and Exchange Commission (SEC) Code of Corporate Governance	54	3.407	.687
Central Bank of Nigeria (CBN) Sustainability Banking Principles	54	3.259	.678
Consumers' interest in sustainable products and services of an organization	54	3.241	.775
Revenue base of a business organization	54	3.148	.833
Total asset base of a business organization	54	3.037	.823
Foreign lenders' emphasis on approving loans on the basis of sustainability performance	54	3.259	.732
Local lenders' emphasis on approving loans on the basis of sustainability performance	54	3.167	.720

Source: Field Survey (2017)

Table 4.25 presents descriptive analysis of actual influence of normative pressures. The factors with high mean scores are: initiation from chief executive officer, employee training on sustainability reporting by business organizations, professional accounting firms training of accounting professionals, accounting firms' provision of assurance services on sustainability reporting to organizations and rating of business organizations on the basis of sustainability performance. The factors with low mean scores are: professional accounting association training of accounting professionals, corporate membership of external governance bodies such as the United Nations Environment Programme (UNEP), global oil and gas industry association for environmental and social issues (IPIECA), and United Nations Global Compact (UNGC) and awards given to business organizations for sustainability performance. This implies that respondents opined that these three factors with low mean scores do not actually influence sustainability reporting as much as the factors with high mean scores.

Table 4.25: Descriptive Analysis of Actual Influence of Normative Pressures

Factors	N	Mean	Standard Deviation
Initiation from Chief Executive Officer of organization	54	3.482	.613
Pressure from the Board of Directors	54	3.185	.729
Employee Training on sustainability reporting by business organizations	54	3.333	.727
Professional Accounting Association Training of Accounting Professionals	54	3.074	.866
Professional Accounting Firms Training of Accounting Professionals	54	3.167	.795
Corporate membership of external governance bodies such as United Nations Environment Programme (UNEP), global oil and gas industry association for environmental and social issues (IPIECA), and United Nations Global Compact (UNGC)	54	3.056	.878
Human resources on sustainability	54	3.130	.778
Employees' attitude towards sustainability reporting	54	3.130	.972
Accounting firms' Provision of Assurance Services on sustainability reporting to organizations	54	3.167	.771
Use of assurance services on sustainability reporting by business organizations	54	3.148	.810
Rating of business organizations on the basis of sustainability performance	54	3.167	.863
Awards given to business organizations for sustainability performance	54	3.093	.896

Source: Field Survey (2017)

Table 4.26 presents descriptive analysis of actual influence of mimetic pressures. Reporting practices of the successful leader in the industry factor has a higher mean compared to presence of a business organization in a foreign country. This implies that respondents opined that presence of a business organization in a foreign country does not actually influence sustainability reporting compared to reporting practices of the successful leader in the industry.

Table 4.26: Descriptive Analysis of Actual Influence of Mimetic Pressures

Factors	N	Mean	Standard Deviation
Successful Industry Leaders' engaging in sustainability reporting	54	3.167	.818
Presence of a business organization in a foreign country	54	3.000	.847

Source: Field Survey (2017)

From the field survey, the mean score of the perceived extent of sustainability reporting is 2.352 and the maximum score is 3.00 which represent high level of reporting. The minimum score is 1.00 which represents low level of reporting. A total of 6 banks, 11 oil and gas companies and 37 manufacturing companies made up of consumer goods and industrial goods companies are involved in the survey. This results in 11.1 percent of the respondents from the banking sector, 20.4 percent from the oil and gas sector, and 68.5 percent from both consumer goods and industrial goods sectors.

From the field survey, 4 respondents are from the investor relations department and 2 respondents are from the corporate communications department, while 6 respondents are from compliance department. However, 21 respondents are from finance department, while 3 respondents are from risk management department, and 17 respondents are from other departments. This implies that respondents from the finance department account for 38.9 percent. This is the highest group of respondents. Conversely, respondents from corporate communications account for 3.7 percent. Respondents from investor relations account for 7.4 percent, those from compliance and risk management account for 11.1 percent and 5.6 percent respectively. Respondents from other departments account for 33.3 percent.

From the field survey, 5 respondents had Higher National Diploma qualification, and 35 respondents had Bachelors degree, while 4 respondents were Masters in Business Administration (MBA) graduates. However, 9 respondents were M Sc. graduates and 1 respondent had a Doctorate degree. 64.8 percent of the respondents have Bachelor’s degree and this is the highest academic qualification for the respondents. The academic qualification with the least number of respondents is the Doctorate degree. From the field survey, 10 respondents had no professional qualification while 24 respondents were qualified with the Institute of Chartered Accountants of Nigeria (ICAN) and 4 respondents were qualified with the Association of National Accountants of Nigeria (ANAN). However, 1 respondent had the Association of Certified Chartered Accountants (ACCA) and 9 respondents had other qualifications, while 4 respondents had both ICAN and ACCA professional qualifications, 1 respondent had both ACCA and Chartered Institute of

Stockbrokers (CISA) professional qualifications. Also, 1 respondent had ICAN, ANAN and ACCA professional qualifications.

Out of the 54 respondents, 20 respondents had spent less than 1 year in the organization while 22 respondents had spent between 1 to 3 years in the organization and 6 respondents had spent between 4 to 6 years. However, 3 respondents had spent between 7 to 10 years while 3 respondents had spent above 10 years in the organization.

4.1.3 Test of hypotheses

Test of Hypothesis One

Hypothesis 1: There is no significant variation sustainability reporting across selected corporate business organizations from 2010 to 2014 in Nigeria.

The descriptive statistics (mean, standard deviation and N) for the five sets of sustainability reporting indicator scores is shown in Table 4.27.

From Table 4.27, the lowest mean sustainability reporting indicator score is for Time 1 (2010), before the Central Bank Sustainability Banking Principles in 2012 and Securities and Exchange Commission Code of Corporate Governance in 2011. However, the mean sustainability reporting indicator score is lowest in year 2010, with score ranging from 0 to 50. The highest mean sustainability reporting indicator score is for Time 4 (2013), after the Central Bank Sustainability Banking Principles in 2012 and Securities and Exchange Commission Code of Corporate Governance in 2011. There is a decrease in the mean sustainability reporting occurrence score from year 2013 to 2014.

The one-way repeated measures analysis of variance is suitable to test hypothesis one because it examines whether there is a change in sustainability reporting index scores over the five time periods (2010 to 2014). The assumptions for using one-way repeated measures analysis of variance for hypothesis one are also met in this study. These assumptions include: presence of one independent variable (categorical) - time 1, time 2, time 3, time 4 and time 5; presence of one dependent variable (continuous)- sustainability reporting index scores. The essence of the one-way repeated measures analysis of variance was to show if there is a significant difference somewhere among the five sets of scores.

Table 4.27: Descriptive Statistics for Sustainability Reporting Indicator Scores for 2010, 2011, 2012, 2013 and 2014

	Time	N	Minimum	Maximum	Mean	Standard Deviation
SR SCORE 2010	1	54	.00	50.00	18.7778	12.84107
SR SCORE 2011	2	54	.00	55.00	24.1111	13.81367
SR SCORE 2012	3	54	4.00	56.00	26.3519	15.88420
SR SCORE 2013	4	54	3.00	55.00	28.2593	14.79187
SR SCORE 2014	5	54	4.00	55.00	27.1111	13.00605

Source: Researcher's Compilation from Corporate Reports (2010-2014)

Based on Table 4.28, the value for Wilks' Lambda is 0.55, with a probability of 0.000. The p value is less than 0.05; therefore it is deduced that there is a statistically significant effect for time. There is a statistically significant variation in the sustainability reporting scores across the five (5) time periods (Time 1, Time 2, Time 3, Time 4 and Time 5).

The value of the Partial Eta Squared obtained in this study is 0.448. Using the guidelines provided by Cohen (1988) as cited in Pallant (2011), where 0.01 represents small effect size, 0.06 represents moderate effect size and 0.14 represents large effect size, the result of the Partial Eta Squared in this study (0.448) represents a very large effect size.

Table 4.28: Multivariate Tests[b]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Pillai's Trace	.448	10.143[a]	4.000	50.000	.000	.448
	Wilks' Lambda	.552	10.143[a]	4.000	50.000	.000	.448
	Hotelling's Trace	.811	10.143[a]	4.000	50.000	.000	.448
	Roy's Largest Root	.811	10.143[a]	4.000	50.000	.000	.448
a. Exact statistic							
b. Design: Intercept Within Subjects Design: time							

Source: Researcher's Computation using IBM Statistical Package for Social Sciences (2017)

Based on Table 4.29, further Pairwise Comparisons are conducted on the sustainability reporting indicator scores across time 1 (2010) to time 5 (2014). The difference between Time 1 and Time 2, Time 1 and Time 3, Time 1 and Time 4, Time 1 and Time 5, Time 2 and Time 4 are significant with the values in the Significance column being less than 0.05 namely 0.000, 0.000, 0.000, 0.000, 0.002.

Table 4.29: Pairwise Comparisons

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	-5.333*	1.162	.000	-8.736	-1.931
	3	-7.574*	1.515	.000	-12.011	-3.137
	4	-9.481*	1.529	.000	-13.960	-5.003
	5	-8.333*	1.592	.000	-12.998	-3.669
2	1	5.333*	1.162	.000	1.931	8.736
	3	-2.241	.929	.194	-4.962	.481
	4	-4.148*	1.036	.002	-7.181	-1.115
	5	-3.000	1.502	.509	-7.399	1.399
3	1	7.574*	1.515	.000	3.137	12.011
	2	2.241	.929	.194	-.481	4.962
	4	-1.907	.764	.156	-4.144	.329
	5	-.759	1.627	1.000	-5.526	4.007
4	1	9.481*	1.529	.000	5.003	13.960
	2	4.148*	1.036	.002	1.115	7.181
	3	1.907	.764	.156	-.329	4.144
	5	1.148	1.436	1.000	-3.058	5.354
5	1	8.333*	1.592	.000	3.669	12.998
	2	3.000	1.502	.509	-1.399	7.399
	3	.759	1.627	1.000	-4.007	5.526
	4	-1.148	1.436	1.000	-5.354	3.058
Based on estimated marginal means						
*. The mean difference is significant at the .05 level.						
a. Adjustment for multiple comparisons: Bonferroni.						

Source: Researcher's Computation using IBM SPSS (2017)

Test of Hypothesis One – Advanced Data Analysis based on Banking Sector

In order to ascertain whether the rules and codes of industry and stock market regulators have significant impact on sustainability reporting in the banking sector in Nigeria, one-way repeated measures analysis of variance is used to analyse the data. The descriptive statistics (mean, standard deviation and N) for the five sets of sustainability reporting indicator scores is shown in Table 4.30.

Based on Table 4.30, the lowest mean sustainability reporting indicator score is for Time 1 (2010), before the Central Bank Sustainability Banking Principles in 2012 and Securities and Exchange Commission Code of Corporate Governance in 2011. The highest mean sustainability reporting indicator score is for Time 4 (2013), after the Central Bank Sustainability Banking Principles in 2012 and Securities and Exchange Commission Code of Corporate Governance in 2011.

Table 4.30: Descriptive Statistics for Sustainability Reporting Indicator Scores in the Banking Sector from 2010 to 2014

	Time	Mean	Standard Deviation	N
SR SCORE 2010	1	25.3571	9.07751	14
SR SCORE 2011	2	30.0714	6.19509	14
SR SCORE 2012	3	34.2143	7.80708	14
SR SCORE 2013	4	35.6429	7.93829	14
SR SCORE 2014	5	33.2857	10.56430	14

Source: Researcher's Compilation from Corporate Reports (2010-2014)

Based on Table 4.31, the value for Wilks' Lambda is 0.463, with a probability of 0.078. The p value is greater than 0.05; therefore it is deduced that there is no statistically significant effect for time, even though there was a change in sustainability reporting index scores across the five (5) time periods (Time 1, Time 2, Time 3, Time 4 and Time 5).

The value of the Partial Eta Squared obtained in this study is 0.538. Using the guidelines provided by Cohen (1988) as cited in Pallant (2011), where 0.01 represents small effect size, 0.06 represents moderate effect size and 0.14 represents large effect size, the result of the Partial Eta Squared in this study (0.538) represents a very large effect size.

There is no statistical significant difference between the sustainability reporting index scores for 2010 and 2011, 2010 and 2012, 2010 and 2013, 2010 and 2014, 2011 and 2012, 2011 and 2013, 2011 and 2014, 2012 and 2013, 2012 and 2014.

Table 4.31: Multivariate Tests[b]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Pillai's Trace	.537	2.900[a]	4.000	10.000	.078	.537
	Wilks' Lambda	.463	2.900[a]	4.000	10.000	.078	.537
	Hotelling's Trace	1.160	2.900[a]	4.000	10.000	.078	.537
	Roy's Largest Root	1.160	2.900[a]	4.000	10.000	.078	.537
a. Exact statistic							
b. Design: Intercept Within Subjects Design: time							

Source: Researcher's Computation using IBM SPSS (2017)

Test of Hypothesis One – Advanced Data Analysis based on Industrial Goods Sector

In order to ascertain whether the rules and codes of industry and stock market regulators have significant impact on sustainability reporting in the industrial goods sector in Nigeria, one-way repeated measures analysis of variance is used to analyse the data.

The descriptive statistics (mean, standard deviation and N) for the five sets of sustainability reporting indicator scores is shown in Table 4.32.

From Table 4.32, the lowest mean sustainability reporting indicator score is for Time 1 (2010), before the Central Bank Sustainability Banking Principles in 2012 and Securities and Exchange Commission Code of Corporate Governance in 2011. The highest mean sustainability reporting indicator score is for Time 5 (2014), after the Central Bank Sustainability Banking Principles in 2012 and Securities and Exchange Commission Code of Corporate Governance in 2011.

Table 4.32: Descriptive Statistics for Sustainability Reporting Indicator Scores For Industrial Goods Sector from 2010 to 2014

	Time	Mean	Standard Deviation	N
SR SCORE 2010	1	19.3636	15.20048	11
SR SCORE 2011	2	22.2727	14.95387	11
SR SCORE 2012	3	23.0000	15.40130	11
SR SCORE 2013	4	25.1818	14.93866	11
SR SCORE 2014	5	26.4545	12.83249	11

Source: Researcher's Compilation from Corporate Reports (2010-2014)

From Table 4.33, the value for Wilks' Lambda is 0.39, with a probability of 0.113. The p value is greater than 0.05; therefore it is deduced that there is no statistically significant effect for time.

The value of the Partial Eta Squared obtained in this study is 0.614. Using the guidelines provided by Cohen (1988) as cited in Pallant (2011), where 0.01 represents small effect size, 0.06 represents moderate effect size and 0.14 represents large effect size, the result of the Partial Eta Squared in this study (0.614) represents a very large effect size.

There is no rationale for conducting Pairwise Comparisons since there is no statistical significant difference in the sustainability reporting index scores across Time 1 (2010) to Time 5 (2014).

Table 4.33: Multivariate Tests[b]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Pillai's Trace	.614	2.784[a]	4.000	7.000	.113	.614
	Wilks' Lambda	.386	2.784[a]	4.000	7.000	.113	.614
	Hotelling's Trace	1.591	2.784[a]	4.000	7.000	.113	.614
	Roy's Largest Root	1.591	2.784[a]	4.000	7.000	.113	.614
a. Exact statistic							
b. Design: Intercept Within Subjects Design: time							

Source: Researcher's Computation using IBM SPSS (2017)

Test of Hypothesis One – Advanced Data Analysis based on Oil and Gas Sector

In order to ascertain whether the rules and codes of industry and stock market regulators have significant impact on sustainability reporting in the oil and gas sector in Nigeria, one-way repeated measures analysis of variance is used to analyse the data.

The descriptive statistics (mean, standard deviation and N) for the five sets of sustainability reporting indicator scores is shown in Table 4.34.

From Table 4.34, the lowest mean sustainability reporting index score is for Time 1 (2010), before the Central Bank Sustainability Banking Principles in 2012 and Securities and Exchange Commission Code of Corporate Governance in 2011. The highest mean sustainability reporting index score is for Time 5 (2014).

Table 4.34: Descriptive Statistics for Sustainability Reporting Indicator Scores for Oil and Gas Sector from 2010 to 2014

	Time	Mean	Standard Deviation	N
SRSCORE2010	1	23.4444	12.34009	9
SRSCORE2011	2	25.5556	12.88518	9
SRSCORE2012	3	26.6667	17.72005	9
SRSCORE2013	4	27.0000	17.26268	9
SRSCORE2014	5	28.8889	13.34583	9

Source: Researcher's Compilation from Corporate Reports (2010-2014)

From Table 4.35, the value for Wilks' Lambda is 0.340, with a probability of 0.189. The p value is greater than 0.05; therefore it can be deduced that there is no statistically significant effect for time.

The value of the Partial Eta Squared obtained in this study is 0.651. Using the guidelines provided by Cohen (1988) as cited in Pallant (2011), where 0.01 represents small effect size, 0.06 represents moderate effect size and 0.14 represents large effect size, the result of the Partial Eta Squared in this study (0.651) represents a large effect size.

There is no rationale for conducting Pairwise Comparisons since there is no statistical significant difference in the sustainability reporting index scores across Time 1 (2010) to Time 5 (2014).

Table 4.35: Multivariate Tests[b]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Pillai's Trace	.651	2.333[a]	4.000	5.000	.189	.651
	Wilks' Lambda	.349	2.333[a]	4.000	5.000	.189	.651
	Hotelling's Trace	1.867	2.333[a]	4.000	5.000	.189	.651
	Roy's Largest Root	1.867	2.333[a]	4.000	5.000	.189	.651
a. Exact statistic							
b. Design: Intercept Within Subjects Design: time							

Source: Researcher's Computation using IBM SPSS (2017)

Test of Hypothesis One – Advanced Data Analysis based on Consumer Goods Sector

In order to ascertain whether the rules and codes of industry and stock market regulators have significant impact on sustainability reporting in the consumer goods sector in Nigeria, one-way repeated measures analysis of variance is used to analyse the data.

The descriptive statistics (mean, standard deviation and N) for the five sets of sustainability reporting indicator scores is shown in Table 4.36.

From Table 4.36, the lowest mean sustainability reporting index score was for Time 1 (2010), two years before the Central Bank Sustainability Banking Principles in 2012 and one year before the Securities and Exchange Commission Code of Corporate Governance in 2011. The highest mean sustainability reporting index score was for Time 4 (2013), one year after the Central Bank Sustainability Banking Principles was formally introduced to the financial institutions sector in Nigeria. The year 2013 is two years after the Securities and Exchange Commission Code of Corporate Governance was introduced to publicly listed business organizations in Nigeria.

Table 4.36: Descriptive Statistics for Sustainability Reporting Indicator Scores for Consumer Goods Sector from 2010 to 2014

	Mean	Standard Deviation	N
SRSCORE2010	11.7500	11.11128	20
SRSCORE2011	20.3000	16.55326	20
SRSCORE2012	22.5500	18.37755	20
SRSCORE2013	25.3500	16.40050	20
SRSCORE2014	22.3500	13.42141	20

Source: Researcher's Compilation from Corporate Reports (2010-2014)

Based on Table 4.37, the value for Wilks' Lambda is 0.418, with a probability of 0.005. The p value is less than 0.05; therefore it is deduced that there is a statistically significant effect for time.

The value of the Partial Eta Squared obtained in this study is 0.582. Using the guidelines provided by Cohen (1988) as cited in Pallant (2011), where 0.01 represents small effect size, 0.06 represents moderate effect size and 0.14 represents large effect size, the result of the Partial Eta Squared in this study (0.582) represents a very large effect size.

Table 4.37: Multivariate Tests[b]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Pillai's Trace	.582	5.570[a]	4.000	16.000	.005	.582
	Wilks' Lambda	.418	5.570[a]	4.000	16.000	.005	.582
	Hotelling's Trace	1.393	5.570[a]	4.000	16.000	.005	.582
	Roy's Largest Root	1.393	5.570[a]	4.000	16.000	.005	.582
a. Exact statistic							
b. Design: Intercept Within Subjects Design: time							

Source: Researcher's Computation using IBM SPSS (2017)

From Table 4.38, further Pairwise Comparisons are conducted on the sustainability reporting index scores across time 1 (2010) to time 5 (2014). The difference between Time 1 and Time 2, Time 1 and Time 3, Time 1 and Time 4, Time 1 and Time 5 are significant with the values in the Significance column being less than 0.05 namely 0.029, 0.011,0.001 and 0.016. The significant difference is attributed to the difference in sustainability reporting index scores for 2010 and 2011, 2010 and 2012, 2010 and 2013, 2010 and 2014 respectively.

There is no significant difference between the sustainability reporting indicator scores for 2011 and 2012, 2011 and 2013, 2011 and 2014, 2012 and 2013, 2013 and 2014.

Table 4.38: Pairwise Comparisons

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	-8.550*	2.522	.031	-16.554	-.546
	3	-10.800*	2.826	.012	-19.770	-1.830
	4	-13.600*	2.685	.001	-22.120	-5.080
	5	-10.600*	2.890	.016	-19.771	-1.429
2	1	8.550*	2.522	.031	.546	16.554
	3	-2.250	1.310	1.000	-6.406	1.906
	4	-5.050	1.779	.105	-10.697	.597
	5	-2.050	2.674	1.000	-10.536	6.436
3	1	10.800*	2.826	.012	1.830	19.770
	2	2.250	1.310	1.000	-1.906	6.406
	4	-2.800	1.562	.890	-7.758	2.158
	5	.200	2.569	1.000	-7.952	8.352
4	1	13.600*	2.685	.001	5.080	22.120
	2	5.050	1.779	.105	-.597	10.697
	3	2.800	1.562	.890	-2.158	7.758
	5	3.000	2.012	1.000	-3.385	9.385
5	1	10.600[8]	2.890	.016	1.429	19.771
	2	2.050	2.674	1.000	-6.436	10.536
	3	-.200	2.569	1.000	-8.352	7.952
	4	-3.000	2.012	1.000	-9.385	3.385

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

Source: Researcher's Computation using IBM SPSS (2017)

Test of Hypothesis Two

H_{02}: Companies' institutional field factors do not significantly influence their sustainability reporting in Nigeria.

The results of the Pooled Ordinary Least Square (OLS), Fixed Effects and the Random Effects estimation models for the panel data of sustainability reporting and institutional field factors are shown in Table 4.39.

The results of the Pooled Ordinary Least Square (OLS), Fixed Effects and Random Effects estimation models for the panel data for institutional field factors influencing sustainability reporting for the sample of companies during the period 2010 to 2014 are shown in Table 4.39.

A total of 270 observations were included in the analysis. The R-Squared is 0.4130, showing that the pooled OLS model accounts for approximately 41 percent of the variance in sustainability reporting. In order to assess the statistical significance of the result from the pooled OLS model, it was necessary to test whether the R in the population equals 0. The model in this study reaches statistical significance (Sig. = 0.0000; this implies that $p < 0.00005$). Due to the inability of pooled OLS to account for within effects (company effects) and omitted variable bias, it is necessary to adopt Panel data estimation tools. Panel Fixed Effects model and Random Effects model are used in this study. The Hausman specification test was computed to determine which one of the two models (either Panel Fixed Effects or Random Effects) is appropriate.

Although, Clark and Linzer (2012) argue that the Hausman specification test may be inappropriate in choosing between fixed effects or random effects model if the results of the test are not significant, in this study the Hausman specification test is significant ($p<0.05$). Based on the Hausman test, the Fixed Effects model result is more reliable as the P-value of the test is significant (P is equal to 0.0411) at the 5% level. This makes the Hausman test appropriate in choosing from either fixed effects or random effects model. This study did not employ additional simulation analysis to determine the most appropriate choice between fixed effects or random effects model.

Holding all other variables constant, on average, after the introduction of Securities and Exchange Commission revised code of corporate governance, companies' sustainability reporting is about 4.2745 scores more than companies' sustainability reporting before the introduction of the revised code. On the average, after the introduction of the Central Bank of Nigeria sustainability banking principles, companies' sustainability reporting is about 2.6897 scores more than sustainability reporting before the sustainability banking principles. On the average, companies with a financial statement auditor that is one of the Big four have about 5.5343 scores more sustainability reporting than those whose financial statement auditor is not one of the Big four accounting firms. The independent variables namely: Securities and Exchange Commission Code of corporate governance, Central Bank of Nigeria sustainability banking principles and accounting firm are significantly related to sustainability reporting at the 5 percent level.

Holding all other variables constant, on average, companies that are members of external governance bodies (such as IPIECA and UNEP FI) which are particular to the industry they belong have about 3.8523 more sustainability reporting scores than their counterparts that are not members of such external governance bodies. Companies that are members of external governance bodies (such as UNGC) which are not particular to the industry they belong have about 0.4262 more sustainability reporting scores than their counterparts that are not members of such external governance bodies. Companies that have foreign affiliation have about 4.2286 less sustainability reporting scores than their counterparts that do not have foreign affiliation. Because size is a logged variable, a one percent increase in size would result in a 000229 score reduction in the sustainability reporting indicators. A one score increase in reporting of the most successful company in an industry would result in a 0.0818 score increase in sustainability reporting. The independent variables namely: membership of governance bodies which are particular to an industry, membership of governance bodies which are not particular to an industry, foreign presence, size and reporting of the most successful company in an industry are not significant in influencing the dependent variable (sustainability reporting).

Table 4.39: Estimation Results for Sustainability Reporting Using Institutional Field Factors for the 54 Sample Companies for the Period 2010 to 2014

Dependent Variable: Sustainability Reporting			
Independent Variables	Pooled OLS	Fixed Effects	Random Effects
Constant	-14.3849	19.1814	1.9097
SECCGC: Coefficient (Standard Error)	5.4332** (2.1976)	4.2745** (1.6447)	4.7889*** (1.6218)
CBNSBP: Coefficient (Standard Error)	2.2702 (1.8493)	2.6897** (1.1644)	2.2996 (1.1607)**
ACCTF: Coefficient (Standard Error)	5.5001*** (1.5948)	5.5343** (2.6211)	6.4370*** (2.1667)
MEGBPI: Coefficient (Standard Error)	4.3812 (2.4225)	3.8523 (6.4645)	5.7839 (3.5841)
MEGBNPI: Coefficient (Standard Error)	-.1183 (1.8666)	.4262 (3.5496)	.4129 (2.7655)
FORPR: Coefficient (Standard Error)	9.5888*** (1.6673)	-4.2286 (7.9394)	9.8240*** (2.6656)
SIZE: Coefficient (Standard Error)	1.0276*** (0.2610)	-.2287 (0.2583)	.2277 (0.2251)
ROMS: Coefficient (Standard Error)	-.0122 (0.879)	.0818 (0.0758)	.0531 (0.0700)
No. of Observations	270	270	270
R^2	0.4130	0.2389	0.3772
F-Statistics	23.76	8.16	
Prob. (F- Statistics)	0.0000	0.0000	
Sigma_u		13.3984	8.8526
Sigma_e		7.0139	7.0139
Rho		.7849	.6143
Wald Chi^2			96.11
P-Value (X^2)			0.0000
Hausman Chi-Square Test		16.09 (0.0411)**	

***Significant at 1%, **Significant at 5%

Numbers in parentheses are the standard error values of the coefficient.

Source: Results obtained from data analysis using Stata Statistical Software Package

Test of Hypothesis 3

H_{03}: Companies' internal organizational processes do not significantly influence their sustainability reporting in Nigeria.

The results of the Pooled Ordinary Least Square (OLS), Fixed Effects and Random Effects estimation models for the panel data for reporting process factors influencing sustainability reporting for the sample of companies during the period 2010 to 2014 are shown in Table 4.40.

A total of 270 observations were included in the analysis. The R-Squared is 0.4295, showing that the pooled OLS model accounts for approximately 43 percent of the variance in sustainability reporting. In order to assess the statistical significance of the result from the pooled OLS model, it was necessary to test whether the R in the population equals 0. The model in this study reaches statistical significance (Sig. equals 0.0000; this implies that p is less than 0.00005). Due to the inability of pooled OLS to account for within-effects and omitted variable bias, it is necessary to adopt Panel data estimation tools. Panel fixed effects and random effects model were used to estimate the model for the third hypothesis. The Hausman specification test was used as prescribed in Clark and Linzer (2012). Based on the Hausman test, the Fixed Effects model result is more reliable than the random effects model as the P-value of the test is significant (P is equals to 0.0006) at the 5% level.

Holding all other variables constant, on average, a one score increase in stakeholder engagement would result in a 5.3751 score increase in sustainability reporting. Stakeholder engagement is significantly related to sustainability reporting at the 1 percent level. Holding all other variables constant, on average, companies that subscribe to assurance of sustainability information have about 4.5261 less sustainability reporting scores than their counterparts that do not subscribe to assurance. On the average, companies that have sustainability framework have about 0.8486 less sustainability reporting scores than their counterparts that do not have sustainability frameworks. On the average, companies that have board committees on sustainability have about 3.7327 more sustainability reporting scores than their counterparts that do not have board committees on sustainability. Based on the Fixed Effects model results, this study concludes that assurance, sustainability

framework and board committee on sustainability are not significantly related to the level of sustainability reporting.

Table 4.40: Estimation Results for Sustainability Reporting Using Reporting Process Factors for the 54 Sample Companies for the Period 2010 To 2014

Dependent Variable: Sustainability Reporting			
Independent Variables	Pooled OLS	Fixed Effects	Random Effects
Constant	15.6237	19.5993	17.972
ASUR: Coefficient (Standard Error)	.6988 (3.1212)	-4.5261 (4.8038)	.1037 (3.8772)
SUSFR: Coefficient (Standard Error)	4.5151*** (1.5644)	-.8486 (1.9576)	.4576 (1.8119)
BODC: Coefficient (Standard Error)	4.2455** (1.6503)	3.7327 (2.2084)	4.6889** (1.9738)
STKE: Coefficient (Standard Error)	7.7495*** (1.2557)	5.3751*** (1.0516)	6.2366*** (0.9929)
No. of Observations	270	270	270
R^2	0.4295	0.3952	0.4196
F-Statistics	55.78	9.70	
Wald Statistics			85.36
Prob. (F- Statistics)	0.0000	0.0000	0.0000
Sigma_u		10.0169	7.9114
Sigma_e		7.3215	7.3215
Rho		.6518	.5387
Hausman Chi-Square Test		19.55*** (0.0006)	

The superscripts *** and ** represent the significant values at 1% and 5%.
The values in parentheses are the standard error values of the coefficient.
Source: Results obtained from data analysis using Stata Statistical Software Package

Based on Table 4.41, multicollinearity includes checking for correlations between the variables in the model. Correlations between independent variables (accounting firm, foreign presence, size, reporting of most successful, Central Bank of Nigeria sustainability reporting guidelines, membership of external governance bodies particular to an industry, membership of external governance bodies not particular to an industry, stakeholder engagement, sustainability framework, assurance, board committee on sustainability) and the dependent variable (sustainability reporting) was checked. The independent variables show some relationship with the dependent variable (sustainability reporting). Based on Tables 4.41, all the independent variables were retained because none of the variables has a bivariate correlation of 0.7 or more.

Table 4.41: Correlation Matrix of Independent Variables

	SIZE	SECCGC	CBNSBP	ACCTF	MEGBPI	MEGBNPI	ROMS	FORPR	STKE	SUSFR
SIZE	1.0000									
SECCGC	0.0592	1.0000								
CBNSBP	0.0714	0.6124	1.0000							
ACCTF	0.3022	0.0136	0.0222	1.0000						
MEGBPI	0.2272	0.0170	0.0277	0.1930	1.0000					
MEGBNPI	0.0710	0.0452	0.0277	0.1653	0.0334	1.0000				
ROMS	-0.0483	0.5273	0.4264	-0.1273	-0.1150	0.0991	1.0000			
FORPR	0.3206	-0.0037	0.0091	0.2947	0.3065	0.0559	-0.1454	1.0000		
STKE	0.4011	0.1515	0.1787	0.3412	0.3524	0.1596	0.0104	0.4183	1.000	
SUSFR	0.3833	0.1304	0.1614	0.3090	0.3422	0.2394	-0.1090	0.4187	0.5579	1.000
ASUR	0.0987	0.0078	0.0128	0.1298	0.3853	0.1937	0.0362	0.2827	0.5465	0.2777
BODC	0.2157	0.0943	0.1190	0.2552	0.4401	0.2307	-0.0323	0.3881	0.5841	0.4749

Source: Results obtained from data analysis using Stata Statistical Software Package

The results of the Pooled Ordinary Least Square (OLS), Fixed Effects and Random Effects estimation models for the panel data for institutional field factors and reporting process factors influencing sustainability reporting for the sample of companies during the period 2010 to 2014 are shown in Table 4.42.

A total of 270 observations were included in the analysis. The R-Squared is 0.5330, showing that the pooled OLS regression accounts for approximately 53 percent of the variance in sustainability reporting. In order to assess the statistical significance of the result from the pooled OLS model, it was necessary to test whether the R in the population equals 0. The model in this study reaches statistical significance (Sig. equals 0.0000; this implies that p is less than 0.00005). Due to the inability of pooled OLS to account for within effects (company effects) and omitted variable bias, it is necessary to adopt Panel data estimation tools namely: Panel Fixed Effects model and Random Effects model. In line with Clark and Linzer (2012) the Hausman specification test was computed to determine which one of the two models (either Panel Fixed Effects or Random Effects) is appropriate. The F-Statistics also indicate that the regression equation is significant. The data was subjected to Hausman specification test to ascertain which of fixed effect or random effect was appropriate. Based on the Hausman test, the fixed effects model result is more reliable as the P-value of the test is significant (P is equal to 0.0108) at the 5% level.

In order to ascertain which of the institutional field and reporting process variables included in the model contributed to the prediction of the dependent variable, the values in the coefficients column were examined along with their significance using the results of the fixed effects model. Holding all other variables constant, on average, after the introduction of Securities and Exchange Commission revised code of corporate governance, companies' sustainability reporting is about 3.6011 scores more than companies' sustainability reporting before the introduction of the revised code. On the average, companies with a financial statement auditor that is one of the Big four have about 5.6096 scores more sustainability reporting scores than companies with a financial statement auditor that is not one of the Big four accounting firms. On the average, a one score increase in stakeholder engagement results in a 4.1877 increase in sustainability reporting score. Based on the fixed effects model, Securities and Exchange Commission revised code of corporate

governance, accounting firm are significantly and positively related to sustainability reporting at the 5 percent level. Stakeholder engagement is significantly and positively related to sustainability reporting at the 1 percent level.

Table 4.42: Estimation Results for Sustainability Reporting Using Both Institutional Field and Reporting Process Factors for the 54 Sample Companies for the Period 2010 to 2014

Dependent Variable: Sustainability Reporting			
Independent Variables	Pooled OLS	Fixed Effects	Random Effects
Constant	-7.5443	18.3176	3.1510
SECCGC: Coefficient (Standard Error)	4.6434** (2.1758)	3.6011** (1.5991)	4.0643** (1.5776)
CBNSBP: Coefficient (Standard Error)	.8779 (1.7004)	1.7365 (1.1525)	1.2105 (1.1479)
ACCTF: Coefficient (Standard Error)	3.4266** (1.5801)	5.6096** (2.5259)	5.4628*** (2.0315)
MEGBPI: Coefficient (Standard Error)	-1.2877 (1.9487)	1.7847 (6.4180)	2.0676 (3.3935)
MEGBNPI: Coefficient (Standard Error)	-3.1575 (1.6411)	3.307817 (3.4934)	.8062 (2.6000)
FORPR: Coefficient (Standard Error)	5.9766*** (1.7668)	-3.6704 (7.6526)	7.5324*** (2.4130)
SIZE: Coefficient (Standard Error)	.7410*** (0.2291)	-.3135 (0.2499)	.1349 (0.2147)
ROMS: Coefficient (Standard Error)	-.0164 (0.0714)	.0802 (0.0736)	.0493 (0.0671)
ASUR: Coefficient (Standard Error)	4.3122 (3.1089)	-3.9297 (4.4409)	-.3704 (3.7279)
SUSFR: Coefficient (Standard Error)	1.1724 (1.6420)	-1.7917 (1.8578)	-.9814 (1.7254)
BODC: Coefficient (Standard Error)	3.8273** (1.5554)	2.5674 (2.0743)	2.9669 (1.8850)
STKE: Coefficient (Standard Error)	5.0395*** (1.2717)	4.1877*** (1.0240)	4.5884*** (0.9664)
No. of Observations	270	270	270
R^2	0.5330	0.1655	0.4929
F-Statistics	36.84	7.53	
Wald Statistics			146.56
Prob. (F- Statistics)	0.0000	0.0000	0.0000
Sigma_u		11.8546	7.5404
Sigma_e		6.7584	6.7584
Rho		.7547	.5545
Hausman X^2 Test		25.99 (0.0108)**	

The superscripts *** and ** represent the significant values at 1% and 5%.
The values in parentheses are the standard error values of the coefficient.
Source: Results obtained from data analysis using Stata Statistical Software Package

Test of Hypothesis 4

H_{04}: There are no significant factors that influence sustainability reporting in Nigeria from the perspective of corporate respondents.

Before proceeding to analyse the primary data using factor analysis, preliminary tests were carried out to ascertain the suitability of the data for factor analysis. Two of such tests are the Kaiser Meyer-Oklin and Barlett's Test of Sphericity which resulted in values of 0.783 and 0.000; implying that the Kaiser Meyer-Oklin value exceeded the recommended value of 0.6 and the Barlett's Test of Sphericity reached statistical significance (because p is equals to 0.000, which is less than 0.05). The result of the Barlett's Test of Sphericity also favors the factorability of the correlation matrix. In the correlation matrix table, there were correlation coefficients of 0.3 and above. Using Kaiser's criterion, the study was interested only in components that have an eigen value of greater than or equals to 1. The first five components recorded eigen values of greater than 1 (8.689, 2.808, 1.762, 1.404 and 1.223) (see Table 4.43). These five components explained a total of 72.21 percent of the variance.

Table 4.43: Total Variance Explained

Component	Initial Eigen values	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Cumulative Percent	Total	Percent of Variance	Cumulative Percent	Total
1	39.494	8.689	39.494	39.494	5.955
2	52.259	2.808	12.765	52.259	5.992
3	60.269	1.762	8.010	60.269	5.002
4	66.652	1.404	6.384	66.652	2.001
5	72.214	1.223	5.561	72.214	1.997

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Source: Computations from IBM Statistical Package for Social Sciences (2017)

On the Scree plot in Figure 4.1, a change in the shape of the plot was seen from component 5. The break between the fifth and sixth components is obvious. This implied that components 1, 2, 3, 4 and 5 explained or captured much more of the variance than the remaining components.

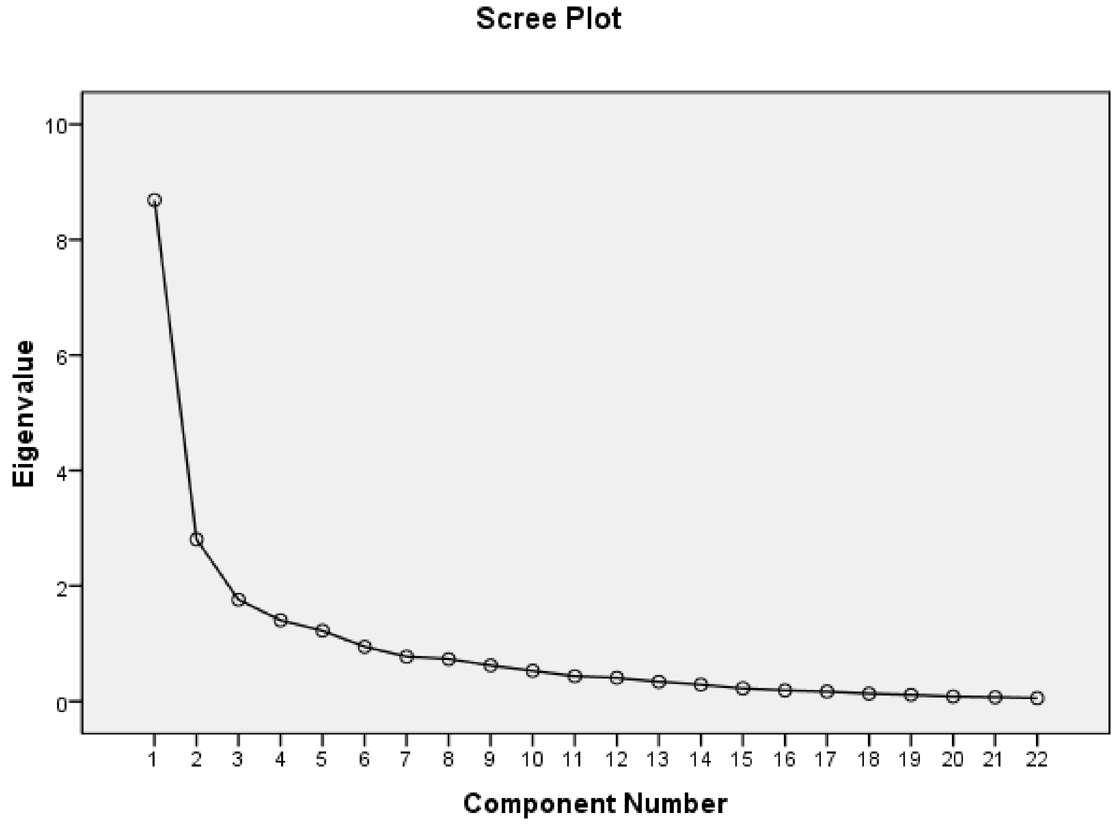

Figure 4.1: Scree Plot
Source: Figure from IBM Statistical Package for Social Sciences (2017)

Table 4.44 shows the results of the Pattern Matrix which shows the factor loadings of each of the variables. The highest loading items on each component is identified and labeled on the component. In component 1, the highest loadings are total asset, revenue, successful industry leaders, pressure from the board of directors, foreign presence, consumer concern and employee attitude. These factors are a mix of coercive, normative and mimetic influences. The second component showed the following factors namely receipt of award, presence of sustainability officer, provision of assurance services by accounting firms, use of assurance services, rating by external parties based on sustainability performance and training of accountants by professional accounting associations. These factors point to steps that have been taken by organizations for the purpose of continuous improvement in corporate reporting practices. On the third component, guidance by the Securities and Exchange Commission (SEC) Code of Corporate Governance, Chief Executive Officer (CEO) initiation, Central Bank of Nigeria (CBN) Sustainability banking guidelines, employee training, professional accounting firm training and foreign lender loaded. Local lender and membership of external governance bodies loaded on the fourth component.

Based on the Pattern Matrix in Table 4.44, this study concludes that there was a mix of coercive and normative pressures loading on components 1, 2, 3 and 4. Only one coercive factor loaded on component 5. This study concludes that either coercive factors or normative factors alone are insufficient to explain sustainability reporting.

Table 4.44: Pattern matrix for Principal Component Analysis with Oblimin Rotation of Five Factor Solution of Factors Influencing Sustainability Reporting

	Pattern Matrix					
	Components					
Factors	1	2	3	4	5	Communalities
Total Asset Base	.836					.714
Revenue Base	.773					.828
Successful Industry Leaders	.681					.752
Pressure from the Board of Directors	.675					.627
Foreign Presence	.634					.730
Consumers' Interest	.591					.669
Employees' Attitude	.584					.780
Awards for Sustainability Performance		.834				.737
Human Resources on Sustainability		.746				.823
Provision of Assurance Services on Sustainability Reporting by Accounting Firms		.726				.569
Use of Assurance Services on Sustainability Reporting by Organizations		.705				.643
Rating of organization based on sustainability performance		.681				.675
Professional Accounting Association Training of Accounting Professionals		.423				.742
Securities and Exchange Commission Code of Corporate Governance			.825			.749
Initiation from Chief Executive Officer of Organization			.765			.693
Central Bank of Nigeria Sustainability Banking Principles			.658			.771
Employee Training by Organization			.520			.735
Professional Accounting Firm Training of Accounting Professionals			.493			.711
Foreign lenders' emphasis on approving loans on the basis of sustainability performance			.484			.830
Local lenders' emphasis on approving loans on the basis of sustainability performance				.815		.713
Membership of external governance bodies				.629		.742
Investor's concern with long-term sustainability performance					.684	.656

Source: Computations from IBM Statistical Package for Social Sciences (2017)

Table 4.45: Structure Matrix for Principal Component Analysis with Direct Oblimin Rotation of Five Factor Solution of Factors Influencing Sustainability Reporting

	Structure matrix				
	Components				
Factors	1	2	3	4	5
Total Asset Base	.816				
Revenue Base	.867				
Successful Industry Leaders	.805				
Pressure from the Board of Directors	.739				
Foreign Presence	.703				
Consumers' Interest	.669				
Employees' Attitude	.755				
Professional Accounting Association Training of Accounting Professionals	.565				
Awards for Sustainability Performance		.844			
Human Resources on Sustainability		.843			
Provision of Assurance Services on Sustainability Reporting by Accounting Firms		.732			
Use of Assurance Services on Sustainability Reporting by Organizations		.760			
Rating of organization based on sustainability performance		.707			
Securities and Exchange Commission Code of Corporate Governance			.857		
Initiation from Chief Executive Officer of Organization			.772		
Central Bank of Nigeria Sustainability Banking Principles			.720		
Employee Training by Organization			.647		
Professional Accounting Firm Training of Accounting Professionals			.672		
Foreign lenders' emphasis on approving loans on the basis of sustainability performance			.553		
Local lenders' emphasis on approving loans on the basis of sustainability performance				.817	
Membership of external governance bodies				.683	
Investor's concern with long-term sustainability performance					.738

Source: Computations from IBM Statistical Package for Social Sciences (2017)

From Table 4.46, there are more positive than negative correlations between the five factors. There are positive correlations between factors 1 and 2, 1 and 3, 1 and 5, 2 and 3, 2 and 4, 2 and 5, 3 and 4, 3 and 5. There are negative correlations between factors 1 and 4, 4 and 5.

Table 4.46: Component Correlation Matrix

Component	1	2	3	4	5
1	1.000				
2	.327	1.000			
3	.348	.323	1.000		
4	-.051	.099	.066	1.000	
5	.165	.001	.136	-.080	1.000

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

Source: Computations from IBM Statistical Package for Social Sciences (2017)

From Table 4.47, the relationship between each of the five factors and extent of sustainability reporting was investigated using Pearson-moment correlation coefficient. The Pearson correlation coefficients showed that there are significant associations between the level of sustainability reporting and factors 1, 2, 4 and 5 respectively. There was a medium positive correlation between factor 1 and the extent of sustainability reporting, $r = .325$, $n=54$, $p<0.05$. There was a medium positive correlation between factor 2 and the extent of sustainability reporting, $r =.395$, $n=54$, $p<0.05$. There was a medium positive correlation between factor 4 and the extent of sustainability reporting, $r =.301$, $n=54$, $p<0.05$. There was a medium positive relationship between factor 5 and the extent of sustainability reporting, $r =.342$, $n=54$, $p<0.05$. The factors that make up factor 3 comprise of SEC code of corporate governance, initiation from company chief executive officer, CBN sustainability banking principles, employee training, professional accounting firm training of accounting professionals, and foreign lenders' emphasis on approving loans on the basis of sustainability performance. There was weak positive correlation between factor 3 and the extent of sustainability reporting, $r = .240$, $n=54$, $p<0.10$.

The factors that made up component 1 were: total asset base, revenue, successful industry leaders, pressure from the board of directors, foreign presence, consumers' interest and employees' attitude.

The factors that made up component 2 were: award for sustainability performance, human resources on sustainability, provision of assurance services on sustainability reporting by accounting firms, use of assurance services on sustainability reporting, rating of organizations based on sustainability performance and professional accounting association training of accounting professionals.

The factors that made up component 4 were: local lenders' emphasis on approving loans on the basis of sustainability performance and membership of external governance bodies. The only factor that loaded on component 5 was investor's concern with long-term sustainability performance.

Based on the factor analysis results, this study concludes that factor 1 includes coercive, normative and mimetic pressure variables. Meanwhile, factor 2 includes

normative pressure variables. Factor 4 includes coercive and normative pressure variables, while factor 5 is made up of a coercive pressure variable. This implies that a mix of coercive, normative and mimetic pressures was found to be responsible for the level of sustainability reporting.

Table 4.47: Pearson Correlations

		Factor1	Factor2	Factor3	Factor4	Factor5	Extent of SR
Factor1	Pearson Correlation	1					
Factor2	Pearson Correlation	.597** (.000)	1				
Factor3	Pearson Correlation	.611** (.000)	.623** (.000)	1			
Factor4	Pearson Correlation	.152 (.273)	.421** (.002)	.344* (.011)	1		
Factor5	Pearson Correlation	.409** (.002)	.251 (.067)	.326* (.016)	.073 (.602)	1	
Extent of SR	Pearson Correlation	.325* (.016)	.395** (.003)	.240 (.080)	.301* (.027)	.342* (.011)	1
N	54	54	54	54	54	54	54

(Sig. 2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Source: Computations from IBM Statistical Package for Social Sciences (2017)

CHAPTER FIVE
DISCUSSION

5.0 Preface

In this chapter, the research results are discussed with respect to the related literature and findings of prior studies on organizational field factors and internal organizational factors that determine sustainability reporting.

5.1 Discussion of Results for Test of Hypothesis One

From hypothesis 1 which is: there is no significant variation in sustainability reporting across selected companies from 2010 to 2014 in Nigeria, this current study predicted that there is no significant difference in sustainability reporting across companies from 2010 to 2014 in Nigeria. However, from the descriptive statistics results in Table 4.27, there is an increase in sustainability reporting from year 2010 to 2014. However, within those years, there is a decrease in sustainability reporting from years 2013 to 2014. The results of one way repeated measures analysis of variance (ANOVA) in Table 4.28 show that there is a statistically significant variation in sustainability reporting across five time periods starting from year 2010 to 2014. From the results of pair wise comparisons as shown in Table 4.29 it is deduced that the difference between 2010 and 2011, 2010 and 2012, 2010 and 2013, 2010 and 2014, 2011 and 2013 are significant.

The interventions from the Securities and Exchange Commission (SEC) in terms of issuing a revised code of corporate governance in 2011 and the Central Bank of Nigeria's sustainability reporting guidelines issued in 2012 could have been responsible for an increase in reporting from 2010 to 2011 and 2012 to 2013. This finding possibly corroborates new institutional theory where companies align with their regulators by engaging in sustainability reporting to avoid sanctions. Practical implication of finding is that as a result of these interventions, companies are appreciating the need for sustainability reporting.

Based on the results in Table 4.27, there is a decrease in sustainability reporting from 2013 to 2014 in the sample companies. This can be attributed to inadequate enforcement by regulators such as SEC and CBN. Enforcement by regulators is

essential because from the results, there was a decrease in reporting from 2013 to 2014. One of the mechanisms for enforcement by regulators can be demand for submission of interim corporate reports with sustainability disclosures and/or interim separate sustainability reports. Where there is inadequate follow-up by regulators, there may not be any need to expect compliance from companies in terms of adherence to the codes of corporate governance of SEC and sustainability reporting guidelines of CBN. Iyoha *et al.* (2014) express concern over the adequacy of SEC to ensure compliance with financial reporting requirements. The role of SEC as regulator of companies in the securities market should also be fulfilled when they follow-up companies to ensure that they report transparent and verifiable information.

Generally, the companies included in the current study report more economic and governance indicators of sustainability reporting. Some of the economic indicators of sustainability reporting employed in this study such as revenue, operating costs, employee wages and benefits, payments to providers of capital, have already been taken into consideration in financial reporting. The results of Table 4.20 show the trend in reporting of economic indicators. Some of these economic indicators are part of financial reporting system. The year that the SEC code of corporate governance is introduced is year 2011. Between years 2010 and 2012 there is a marked increase in the mean score of economic indicators across the sampled companies. Also, the CBN sustainability reporting guidelines are introduced in year 2012. Between years 2011 and 2013 there is an increase in the mean score of economic indicators across the sampled companies. These findings agree with Iyoha (2011) where state agencies and regulators have an influence on the quality of financial reporting.

Based on the results in Table 4.20, economic and governance disclosures were on the average the indicators mostly reported upon. This was followed by social and environmental disclosures. These results agree with Owolabi (2009) because the level of environmental reporting among sampled companies from consumer goods, industrial goods, oil and gas sectors is found to be low. These results do not agree with Raucci and Tarquinio (2015) because in their study companies report mostly on social indicators, followed by economic and environmental indicators. From the

results in Table 4.20, the mean scores of reporting on environmental indicators is low because out of 15 indicators, in year 2014 the mean reporting score for sample companies in this study is 2.78.

The findings of this study agree with Qi *et al.* (2012) where low level of environmental disclosures is found. A probable cause for the low level of environmental disclosures found in the current study is that some organizations such as banks do not envisage the need to report environmental information. In line with previous studies, companies in the financial services sector are prone to risk and when they do not measure and report on risk their net worth may be jeopardized. Corporate Knights (2014) note that banks represent lower-impact industries. Hence, they may not need sophisticated systems to capture sustainability reporting information, particularly environmental indicators. The findings of this current study also agree with Corporate Knights (2014) because as this study finds that banks do not give priority to disclosures pertaining to water usage, greenhouse gas emissions, organic pollutants and environmental protection expenditures in their corporate reports.

Based on the results in Table 4.30, Table 3.32, Table 3.34 and Table 3.36, companies in the banking sector in year 2014 disclosed more sustainability indicators compared to those in the oil and gas, consumer goods and industrial goods sectors. This result is different from Raucci and Tarquinio (2015) where oil and gas companies disclose more indicators compared to companies in financial services, industrial, utilities, consumer goods, consumer services, technology, telecommunications, basic materials and health care sectors. Perhaps, the CBN Sustainability Banking Principles which was circulated to financial institutions in 2012 could be a reason for the sustainability reporting of banks in Nigeria.

From the results in Table 4.30 the average sustainability reporting indicators for the sampled companies in the banking sector were highest in year 2013. An average score of 35.64 indicators out of 56 total indicators represents approximately 64 percent compliance with the sustainability reporting indicators. The oil and gas, consumer goods and industrial goods showed an average score of 28.89, 22.35 and 26.45 respectively. The findings of this study agree with Chindavijak *et al.* (2015)

where Thailand companies recorded 50 percent of total indicators against GRI criteria.

The findings in this study agree with Tang and Chan (2010) where companies in the financial services industry have been found to have the highest score in sustainability reporting and the ranking of aspects coverage is also highest in 2010 to 2014 (with the exception of environmental indicators in year 2010). In their view, companies in the financial services sector have more resources and tend to contribute to issues relating to sustainable development as well as report to stakeholders.

In the Nigerian context, companies in the financial services sector are required to produce stand-alone sustainability reports by the Central Bank of Nigeria (CBN). This requirement is to commence in 2014, but some companies were already reporting before that time. Specifically, some of the companies report on direct risks on the banks through liability for impacts caused by clients, reputation risks through association with clients that are liable to cause impacts, credit risks due to fines, loss of license to operate, and market risk associated with reduced value of security and collateral. Also, some of the banks make it clear that their risk management, audit and credit operations are directly involved in trainings on sustainability reporting. It is also important to note that in the year 2014, some of the banks were able to categorize their project financing to other sectors of the Nigerian economy namely oil and gas, power, infrastructure and others. In a particular bank, no projects with minimal or no social or environmental impacts are financed.

Obaro (2013) states that there challenges facing financial institutions aiming to imbibe sustainability accounting measures in their organizations. One of these challenges is how to assess organizational performance in a multi-stakeholder environment. It is further noted that comparability is a missing attribute of sustainability reporting. This is also observed in the findings of this study. Since sustainability reporting is relatively new as a reporting requirement from the Apex Financial Regulator (CBN), companies in the banking sector presented their reports in various ways they deemed it fit. It is stressed that in order to implement the CBN reporting guidelines and measure the various aspects of organizational performance, a full financial accounting cycle was required.

The findings of this current study agrees with Abu-Baker and Naser (2000) where it has been found that a limited number of companies in Jordan engaged in social disclosures, with the most common themes being human resources and community involvement. In this study, the companies were found to favor disclosures on human resources particularly employee benefits and local community development programmes. The main difference between Abu-Baker and Naser (2000) and this current study is that this study also found that disclosures on health and safety employee training have been given more attention by Nigerian companies.

5.2 Discussion of Results for Test of Hypothesis Two

Hypothesis 2 states that companies' institutional field factors do not influence their sustainability reporting in Nigeria. Thus, a company's sustainability reporting is hypothesized to be influenced by institutional field factors. From the pooled OLS regression results in Table 4.39, the coefficients of the size, SEC code of corporate governance, big four accounting firm, foreign presence as expected are significantly and positively related to sustainability reporting.

The results of this study show that higher levels of size (as measured by total assets) lead to more sustainability reporting. This supports the proposition that larger companies have more stakeholders, and by extension, such a company will want to be accountable to them. Also, more stakeholders are looking into the operations of companies with large size. The result of this current study is in tandem with where larger companies were found to disclose more credible sustainability information. However, the results of this study contradict Dilling (2010) where there is no relationship between size and sustainability reporting.

Also, companies engage in sustainability reporting as regulators develop governance codes that require them to engage in such reporting. This provides support for the propositions due to new institutional theory where companies align with regulators because they fear the punishment that may arise from their lack of compliance. However, in a prior study by Bell and Lundblad (2011), regulation has been found to negatively influence sustainability reporting. The finding of this current study in relation to the influence of regulation is an improvement on Bell and Lundblad (2011) because of their use of a case study company. Also, the findings of this study

in relation to the influence of regulation disagree with Kuhn *et al.*(n.d) where mandatory CSR reporting does not lead to higher CSR transparency.

Normative pressures arise from a company's relationship with professional accounting firms who are deemed to be industry leaders. The positive relationship between foreign presence of a company and sustainability reporting suggests that as companies expand their operations to foreign environments, there is tendency for them to incorporate developments that have been institutionalized in those environments. The companies included in the sample of this study have subsidiaries or affiliate companies in more developed countries.

This study finds a positive and significant relationship between accounting firm and sustainability reporting. This finding agrees with Barako (2007), Lan *et al.* (2013) and Fernandez-Feijoo *et al.* (2016).

5.2 Discussion of Results for Test of Hypothesis Three

Hypothesis 3 posits that sustainability reporting is influenced by the reporting process. The reporting process is also known as the internal organizational system which is expected to relate to sustainability disclosures. When companies develop their internal reporting processes such as stakeholder engagement, sustainability framework, board committee on sustainability and third party assurance, it shows they desire to release credible information to stakeholders. Based on results from pooled OLS regression in Table 4.40, a positive relationship between stakeholder engagement and sustainability reporting suggests that stakeholders are recognized in the sustainability reporting process. The findings of this study support Eccles *et al.* (2012) where high sustainability companies are more likely to engage in stakeholder engagement. Also, Kaur and Lodhia (2014) noted that international standards on sustainability reporting such as Global Reporting Initiative, AccountAbility 1000 have stressed the role of stakeholder engagement in sustainability reporting.

A positive relationship between stakeholder engagement and sustainability reporting implies that as stakeholder engagement tend to 3, sustainability reporting increases. On the other hand, as stakeholder engagement tends to 1, sustainability reporting reduces. Prior studies have been able to ascertain the level of stakeholder

engagement in sustainability reporting. None of these studies has identified the relationship between the level of stakeholder engagement and sustainability reporting. In this current study, low levels of stakeholder engagement are found and this concurs with Kaur and Lodhia (2014). However, this study finds that companies identify their stakeholders without reporting on the means that they engage with them.

A positive relationship between sustainability framework and sustainability reporting suggests that the presence of sustainability framework increases sustainability reporting. Sustainability frameworks include frameworks identifying areas of sustainability they focused on during the year. This helps to give companies direction to focus on areas that they deem material or significant to their operations.

A positive relationship between board committee on sustainability and sustainability reporting indicates that as companies recognize the role of the board of directors in sustainability reporting, they improve in the practice of sustainability reporting. The results of this study agree with Rankin *et al*. (2011) where the presence of board committee on environmental issues led to increased sustainability disclosures. The findings in this current study also agree with Herremans *et al.* (2011) where companies with broader responsibilities for the sustainability committee in the board of directors are likely to provide more information pertaining to sustainability reporting. The reason for this result may possibly be that sustainability committees enhance board oversight on sustainability issues.

Sustainability reporting should reflect in the internal structures of companies in order to ensure that the information reported emanates from organizational processes. Based on the literature, it is expected that business organizations with high sustainability reporting should have sustainability framework, board committee on sustainability issues, assurance by third parties and stakeholder engagement. High sustainability reporting category is represented by sustainability reporting scores ranging from 34 to 39, and 40 to 56. Where there is high sustainability reporting category, the actual internal structures are compared with the expected internal structures in the sample companies. Adverse variances (actual internal structures fell short of expected internal structures) are found among the sample companies.

The companies in the banking sector could have been after a show of legitimacy to society through sustainability reporting since they were not reporting to show accountability because the internal structures (stakeholder engagement, sustainability framework, board committee on sustainability issues, assurance by third party) were not present to support their reporting.

The result is similar in the oil and gas sector. Where there was high sustainability reporting category, the actual internal structures are compared with the expected internal structures in the business organizations, the following are found. There are adverse variances (actual internal structures fell short of expected internal structures). In the oil and gas sector, there are no companies with complete absence of internal structures (sustainability framework, stakeholder engagement, assurance and board committee on sustainability issues).

In the consumer goods sector, where there is high sustainability reporting category, the actual internal structures are compared with the expected internal structures in the business organizations, the following are found. There are adverse variances (actual internal structures fell short of expected internal structures). The actual internal structures (sustainability framework, stakeholder engagement, assurance and board committee on sustainability issues) are not present at all a number of companies. These findings point to the need for internal reporting processes to support sustainability reporting. Williams *et al*. (2010) advocate that the involvement of accountants in the sustainability reporting process (that is, information provider, report preparer, advisory role and financial costing), can help to improve the quality of what organizations report.

The inference from the results is based on Fixed Effects model rather than Random Effects model because the significance of the Hausman chi-square test supports Fixed Effects analysis at 0.05 level of confidence. Based on the fixed effects model, only stakeholder engagement is significantly and positively related to sustainability reporting. The findings of this current study disagree with studies such as Murguia and Bohling (2013) and Brandt (2015) where companies have been found to be deficient in stakeholder engagement. In the current study, about 44.81 percent of the companies identified their stakeholders, 10.74 percent of the sample companies identified stakeholders and the method of stakeholder engagement while 7.78

percent reported on identification of stakeholders, method and frequency of stakeholder engagement.

The differences in the results presented in Tables 4.39, 4.40 and 4.42 shows that there could be internal disturbances in the error term that may likely arise if all the independent variables are run together. As a result, it was necessary for models on institutional field factors and reporting process factors to be run separately.

5.4 Discussion of Results for Test of Hypothesis Four

Ranking the mean scores of corporate managers' response to the importance of factors influencing sustainability reporting in Table 4.21, Table 4.22 and Table 4.23, initiation from chief executive officer of organization and employee training by organization have higher mean scores compared to other factors. The least mean score is attributed to the presence of a business organization in a foreign country. This implies that respondents opine that improvements in sustainability reporting are expected to come from the internal players within organizations as opposed to stakeholders outside an organization such as foreign lenders, Securities and Exchange Commission, investors, Central Bank, consumers, local lenders, amongst others. Interestingly, respondents are of the opinion that initiation from the Chief Executive Officer of an organization had the greatest influence on sustainability reporting.

The finding of this current study in relation to the CEO of an organization having the greatest influence on sustainability reporting agrees with prior studies (Nakabiito and Udechukwu, 2008; Wallen and Wasserfaller, 2008) where internal processes set by a company's management have been incorporated starting with the CEO. Wilmshurst and Frost (2000) hint that the Chief Financial Officer (CFO) can be very useful for providing more information on sustainability reporting. These studies place importance on the CEO because the sustainability reporting process is not only about stakeholders, but it is also about the internal policies and strategies implemented by the CEO. The CEO's importance in influencing sustainability reporting can also be traced to the responsibility for setting the strategy to actualize an organization's goals pertaining to improved sustainability performance. Although, corporate respondents do not opine that SEC is one of the most important

factors influencing sustainability reporting, they agree that their organizations' sustainability reporting is guided by SEC Code of Corporate Governance. The response to the statement on foreign presence shows that not many respondents strongly agree that it was actually an influential factor.

In line with the opinion of respondents, analysis of secondary data shows that foreign presence is an insignificant negative influence on sustainability reporting. Also, SECCGC and CBNSBP have significant positive influence on sustainability reporting. In the survey aspect of this study, the mean scores attributed to the actual influence of these two factors rank third and fifth out of twenty two factors. This implies that regulators have an influence on reporting practices of organizations. This finding reinforces the role of regulators in guiding companies on the contents of their sustainability reports whether as stand-alone documents or integrated into corporate annual reports.

CHAPTER SIX
CONCLUSIONS AND RECOMMENDATIONS

6.0 Preface

This chapter discusses the findings of this study in details and summary. Based on the findings from this study, conclusions and recommendations were drawn.

6.1 Summary of Work Done

This study sought to assess the determinants of sustainability reporting in selected companies in Nigeria. The research report was written in six chapters. Chapter one introduced the study, with a background to the study, statement of research problem, objectives of the study, research questions, research hypotheses, significance of the study, scope of the study, definition of key terms. In the second chapter, relevant literature relating to corporate sustainability reporting was reviewed. Another feature of chapter two includes theoretical and conceptual frameworks.

The third chapter dealt with the research method employed for the purpose of this study. The research design, population of the study, sampling technique and sample size, validity and reliability of research instrument, instruments for data collection, sources of data and description of actual field work, were discussed in chapter three. In order to actualize the objectives of this study, a survey of the importance and performance of factors influencing sustainability reporting from the perspective of corporate respondents was carried out. Then, secondary data from corporate annual reports and factors that are observable in the organizational field were gathered and analysed using SPSS.

Chapter four dwelt on the test of hypotheses, results and findings from the research. In chapter five, the results from this study were discussed with respect to the related literature and findings of prior studies in organizational field factors and internal organizational factors that determine sustainability reporting. In the current chapter, the summary of work done, summary of findings (theoretical and empirical), conclusion, recommendation, contribution to knowledge and suggestions for further studies were discussed.

6.2 Summary of Findings

The summary of findings from the entire study can be separated into two main parts namely theoretical and empirical findings. These findings are expounded below.

6.2.1 Theoretical Findings

The theoretical findings of this study were drawn from two theoretical perspectives namely new institutional theory and legitimacy theory.

1. Based on new institutional theory, business organizations operate within social structures, rules and norms that are capable of influencing their decision-making. Consequently, business organizations can decide on what to include or exclude from their corporate reports.
2. Business organizations could be influenced by coercive, normative and mimetic pressures in the organizational field.
3. The influence of a single form of pressure may not be able to influence business organizations to adopt sustainability reporting.
4. Coercive pressures occur when institutions withdraw financial support from business organizations in order to promote certain behaviour or policy. In other words, coercive pressure originates from members of the organizations' field that could punish, fix a penalty or deny the organization when they fail to act in accordance with their expectations.
5. Normative pressures occur through the influence of professional networks that give room for certain reporting practices to permeate a business organization. This form of pressure also occurs through education and training of corporate actors to be familiar with reporting practices.
6. Mimetic pressures occur through organizations' modeling of their reporting practices with other business organizations in their environment that are deemed to be successful. These business organizations whose reporting practices are modeled by other organizations may not even be aware. Also, business organizations within the same industry are bound to associate together. The reporting practices of business organizations within the same industry may be similar overtime.
7. Sustainability reporting practices should be internalized in companies. In order to avoid decoupling, actual structures are to be constituted to ensure that the reporting is not mimicked or ceremonial.

6.2.2 Empirical Findings

Based on the results from the descriptive statistics and test of hypotheses, this study deduced the following empirical findings.

1. The highest level of sustainability reporting was recorded in year 2013, that is, two years after the Securities and Exchange Commission code of corporate governance and a year after the Central Bank of Nigeria sustainability banking principles. Meanwhile, year 2010 had the lowest mean sustainability reporting index.

2. There was presence of coercive pressures from size, SEC Code of Corporate Governance, mimetic pressure from foreign presence and normative pressures from big four accounting firm.

3. This study also found that stakeholder engagement make significant and unique contribution to the prediction of sustainability reporting. Stakeholder engagement is one of the internal structures that are present in companies' reporting process.

4. This study found that corporate managers rated factors influencing sustainability reporting differently in their order of importance. This study found that a mix of coercive, normative and mimetic pressure variables was perceived by respondents to be responsible for the extent of sustainability reporting.

6.3 Conclusion

This study made the following conclusions based on the findings from the analysed data.

There is a significant effect for time across the five periods (2010, 2011, 2012, 2013 and 2014) in the banking sector and consumer goods sector. During this period, SEC introduced a revised corporate governance code in 2011 and CBN introduced sustainability banking principles in 2012. This suggests that when regulatory bodies introduce disclosure and reporting guidelines, business organizations within and outside that industry are affected. However, in the industrial goods, oil and gas sectors, there was no statistically significant effect for time across the five periods.

Coercive and normative pressures were present in the organizational field. Business organizations reported more after the SEC code of corporate governance and CBN sustainability banking principles. Business organizations reported more information on sustainability when their financial auditor is one of the big four.

Business organizations engaging in sustainability reporting are not committing to improving their internal processes and structures especially relating to sustainability framework and assurance.

This implies that a mix of coercive, normative and mimetic pressures was found to be responsible for the level of sustainability reporting.

6.4 Recommendations

The following recommendations emanated from the findings of this study:

1. The stock exchange regulator (SEC) and CBN should monitor companies in Nigeria to ensure that they fully implement the disclosure requirements of the corporate governance code and sustainability reporting guidelines. Companies should also be urged to prepare interim sustainability reports.

2. Small and medium sized accounting firms should be equipped with relevant information on sustainability reporting to enable them offer advisory services to companies pertaining to sustainability reporting.

3. Companies should develop their internal organizational processes in the area of subscribing to assurance on sustainability reporting in order to enhance the credibility of information embedded in such reports.

4. Institutions such as company regulators, professional accounting firms, investors, in the business environment should improve their support for sustainability reporting. Also, there should be support for sustainability reporting from within business organizations particularly from the Chief Executive Officer who is responsible for making decisions.

6.5 Contributions to Knowledge

1. This study contributes to the sustainability reporting literature. It assesses the determinants of corporate sustainability reporting from institutional field and reporting process perspective in Nigeria. It provides evidence that while companies align with institutions in their business environment, sustainability reporting may be decoupled from the actual reporting process.

2. The study provides a framework that can be used to assess the internal process through which sustainability disclosures emanate. Evidence from this study shows that there is a need for companies to initiate and continuously monitor the internal processes through which sustainability reporting emanates.

6.6 Suggestions for Further Study

This study focused on factors influencing sustainability reporting by business organizations in selected industries in Nigeria. Based on the limitations in this study, the following suggestions are made for further research:

i. The reporting practices of companies in other industries such as telecommunication, conglomerate and insurance could be examined.

ii. The behaviour of organizational actors could be assessed in view of whether they will disclose or not disclose certain negative information about corporate sustainability performance.

iii. The role of board members' education on sustainability reporting could be examined in view of whether it enhances engagement in sustainability reporting by companies.

iv. The relevance of sustainability reporting to investors could be assessed.

References

Abd-Mutalib, H., Jamil, C.Z.M., and Wan-Hussin, W.N. (2014). The availability, extent and quality of sustainability reporting by Malaysian listed firms: Subsequent to mandatory disclosure. *Asian Journal of Finance & Accounting,* **6(2)**, 239-257. doi: 10.5296/ajfa.v6i2.6108

Abu-Baker, N., and Naser, K. (2000). Empirical evidence on corporate social disclosure (CSD) practices in Jordan. *International Journal of Commerce and Management*, ***10*** **(3/4)**, 18-34. doi: 10.1108/eb047406

Aburaya, R.K. (2012). The relationship between corporate governance and environmental disclosure: UK Evidence (Doctoral dissertation). Durham University, United Kingdom. Retrieved from http://etheses.dur.ac.uk/3456/1/PhD_Thesis.pdf?DDD2+

AccountAbility (2011). AA1000 Stakeholder engagement standard: Final draft. Retrieved from http://www.accountability.org/images/content/5/4/542/AA1000SES%202010%20PRINT.pdf

Adams, C.A. (2002). Internal organizational factors influencing corporate social and ethical reporting: Beyond current theorising. *Accounting, Auditing & Accountability Journal,* ***15*****(2)**, 223-250. doi: 10.1108/09513570210418905

Adams, C.A. (2004). The ethical, social and environmental reporting-performance portrayal gap. *Accounting, Auditing & Accountability Journal,* ***17*****(5)**, 731-757. doi: 10.1108/09513570410567791

Adams, C.A., and Larrinaga-Gonzalez, C. (2007). Engaging with organizations in pursuit of improved sustainability accounting and performance. *Accounting, Auditing & Accountability Journal,* ***20*****(3)**, 333-355. doi: 10.1108/09513570710748535

Adams, C.A., and McNicholas, P. (2007). Making a difference: Sustainability reporting, accountability and organizational change. *Accounting, Auditing & Accountability Journal,* ***20*****(3)**, 382-402. doi: 10.1108/09513570710748553

Adams, C., and Whelan, G. (2009). Conceptualising future change in corporate sustainability reporting. *Accounting, Auditing & Accountability Journal*, ***22*****(1)**, 118-143. doi: 10.1108/09513570910923033

Adams, M., Thornton, B., and Sepehri, M. (2010). The impact of the pursuit of sustainability on the financial performance of the firm. *Journal of Sustainability and Green Business,* ***1***, 1-14. Retrieved from http://www.aabri.com/manuscripts/10706.pdf

Adegbite, A.A., Amiolemen, S.O., Ologeh, I.O., and Oyefuga, I.O. (2012). Sustainable development policy and corporate social responsibility in business

organizations in Nigeria. *Journal of Sustainable Development,* **5(6)**, 83-89. doi: 10.5539/jsd.v5n6p83

Adeniyi, I. (2016). An assessment of voluntary codes of conduct in the financial sector – A case study of the GABV, UNEP-FI and UNPRI (Master's thesis). University of Waterloo, Canada. Retrieved from https://uwspace.uwaterloo.ca/handle/10012/10358

Adnan, S.M., Van Staden, C., and Hay, D. (2010). Do culture and governance structure influence CSR reporting quality: Evidence from China, India, Malaysia and the United Kingdom. In: Sixth Asia Pacific Interdisciplinary Research in Accounting Conference, Sydney, Australia, 12-13 July 2010, pp: 1-27. Retrieved from http://apira2010.econ.usyd.edu.au/conference_proceedings/APIRA-2010-271-Adnan-Do-culture-and-governance-structure-influence-CSR-reporting-quality.pdf

Aerts, W., Cormier, D., Gordon, I.M., and Magnan, M. (2006). Performance disclosure on the web: an exploration of the impact of managers' perceptions of stakeholder concerns. *The* International *Journal of Digital Accounting Research*, ***6*(12)**, 159-194. Retrieved from http://www.uhu.es/ijdar/10.4192/1577-8517-v6_6.pdf

Aerts, W., Cormier, D., and Magnan, M. (2006). Intra-industry imitation in corporate environmental reporting: An international perspective. *Journal of Accounting and Public Policy,* **25(3)**, 299-331. doi: 10.1016/j.jaccpubpol.2006.03.004

Aggarwal, P. (2013). The impact of sustainability performance of company on its financial performance: A study of listed Indian companies. *Global Journal of Management and Business Research Finance,* ***13*(11)**, 61-70. Retrieved from https://globaljournals.org/GJMBR_Volume13/6-Impact-of-Sustainability-Performan.pdf

Ahmad, N.S.M. (2014). The attitudes of accountants towards environmental disclosure (CED) in Libya: A review and future direction. *World Journal of Entrepreneurship, Management and Sustainable Development,* ***10*(2)**, 119-127. doi: 10.1108/WJEMSD-07-2013-0040

Ahmad, W.N.K.W., Brito, M.P., and Tavasszy, L.A. (2016). Sustainable supply chain management in the oil and gas industry: A review of corporate sustainability reporting practices. *Benchmarking: An International Journal,* ***23*(6)**, 1423-1444. doi: 10.1108/BIJ-08-2013-0088

Ajinkya, B., Bhojraj, S., and Sengupta, P. (2003). The governance effect of institutional investors and outside directors on the properties of management earnings forecasts. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=410541

Ajzen, I., (2005). Attitudes, personality and behavior. 2nd Edn., England: Open University Press. ISBN No 978-0335217038

Akinyemi, B., Okoye, A.E., and Izedonmi, F. (2015). History and development of accounting in perspective. *International Journal of Sustainable Development Research, **1**(**2**)*, 14-20.

Alexius, S., Furusten, S., and Lowenberg, L. (2013). Sustainable banking? The discursive repertoire in sustainability reports of banks in Sweden. In: 29th European Group for Organizational Studies Colloquium, Montreal, Canada, 4-6 July 2013, pp: 1-35. Retrieved from https://www.diva-portal.org/smash/get/diva2:678522/FULLTEXT01.pdf

Allison, P.D. (2009). Fixed effects regression models. California: SAGE Publications Inc. ISBN No 978-0761924975

Al-Tuwaijri, S.A., Christensen, T.E., and Hughes, K.E. (2004). The relations among environmental disclosure, environmental performance and economic performance: A simultaneous equations approach. *Accounting, Organizations and Society, **29***(**5-6**), 447-471. doi: 10.1016/S0361-3682(03)00032-1

Ambashe, M., and Alrawi, H. (2013). The development of accounting through the history. *International Journal of Advances in Management and Economics,* ***2***(**2**), 95-100. Retrieved from www.managementjournal.info/download1.php?f=12022013.pdf

Amran, A.S., and Devi, S. (2008). The impact of government and foreign affiliate on corporate social reporting: The case of Malaysia. *Managerial Auditing Journal, **23***(**4**), 386-404. doi: 10.1108/02686900810864327

Amran, A., Lee, S.P., and Selvaraj, S. (2014). The influence of governance structure and strategic corporate social responsibility towards sustainability reporting quality. *Business Strategy and the Environment, **23***(**4**), 217-235. doi: 10.1002/bse.1767

Asaolu, T.O., Agboola, A.A., Ayoola, T.J., and Salawu, M.K. (2011). Sustainability reporting in the Nigerian oil and gas sector. In: Environmental Management Conference, Federal University of Agriculture, Abeokuta, Nigeria, 12-15 September 2011, pp: 1-24. Retrieved from http://scholar.oauife.edu.ng/sites/default/files/tjayoola/files/238-475-1-sm.pdf

Association of Certified Chartered Accountants (2004). Towards transparency: Progress on global sustainability reporting. London: Certified Accountants Educational Trust. Retrieved from https://www.corporateregister.com/pdf/TowardsTransparency.pdf

Awang, M., and Mohammad, A.H. (2015). Reliability and validity of facilities management competencies instrument using partial least squares. *International Journal of Social Science and Humanity*, **5**(**1**), 95-99. Retrieved from http://www.ijssh.org/papers/430-C00018.pdf

Ayuso, S., Rodriguez, M.A., Garcia-Castro, R., and Arino, M.A. (2014). Maximizing stakeholders' interests: An empirical analysis of the stakeholder

approach to corporate governance. *Business & Society,* ***53*****(3)**, 414-439. Doi: 10.1177/0007650311433122

Baele, A. (2012). The CEO's perception on CSR: A determinant of CSR reporting (Master's Thesis). Ghent University, Belgium. Retrieved from http://lib.ugent.be/fulltxt/RUG01/001/893/406/RUG01-001893406_2012_0001_AC.pdf

Baker, R.C., and Bettner, M.S. (1997). Interpretive and critical research in accounting: A commentary on its absence from mainstream accounting research. *Critical Perspectives on Accounting*, ***8*****(4)**, 293-310. doi: 10.1006/cpac.1996.0116

Ball, A., and Craig, R. (2010). Using neo-institutionalism to advance social and environmental reporting. *Critical Perspectives on Accounting*, ***21***, 283-293. doi: 10.1016/j.cpa.2009.11.006

Ballou, B., Heitger, D.L., and Landes, C.E. (2006). The future of corporate sustainability reporting: A rapidly growing assurance opportunity. *Journal of Accountancy December,* 65-74. Retrieved from http://www.journalofaccountancy.com/issues/2006/dec/thefutureofcorporatesustainabilityreporting.html

Barako, D.G. (2007). Determinants of voluntary disclosures in Kenyan companies annual reports. *African Journal of Business Management,* ***1*****(5)**, 113-128. Retrieved from https://pdfs.semanticscholar.org/1424/5cab9d7f031ffd10dfaab22ed0d473924c98.pdf

Barlett, B.D. (2012). The effect of corporate sustainability reporting on firm Valuation (College Senior Thesis). Claremont Graduate University, United States of America. Retrieved from http://www.scholarship.claremont.edu/cgi/viewcontent.cgi?article=1550&content=cmc_theses

Baron, R. (2014). The evolution of corporate reporting for integrated performance. Retrieved from https://www.oecd.org/sd-roundtable/papersandpublications/The%20Evolution%20of%20Corporate%20Reporting%20for%20Integrated%20Performance.pdf

Bartels, W., Fogelberg, T., Hoballah, A., and Lugt, C.T. (2016). Global trends in sustainability reporting regulation and policy. Retrieved from www.sseinitiative.org/wp-content/uploaads/2016/05/Carrots-Sticks-2016.pdf

Bassey, B.E., Effiok, S.O., and Eton, O.E. (2013). The impact of environmental accounting and reporting on organizational performance of selected oil and gas companies in Niger Delta region. *Research Journal of Finance and Accounting,* ***4*****(3)**, 57-73. Retrieved from http://www.iiste.org/Journals/index.php/RJFA/article/view/4962

Basso, A. (2012). A study of relationship between patents and nascent entrepreneurial activity (Master's Thesis). Erasmus University, Rotterdam. Retrieved from https://thesis.eur.nl/pub/12432/

Bebbington, J., Gray, R., Thomson, J., and Walters, D. (1994). Accountants' attitudes and environmentally-sensitive accounting. *Accounting and Business Research*, ***24*****(94)**, 109-120. doi:10.1080/00014788.1994.9729470

Bebbington, J., Larrinaga, C., and Moneva, J.M.M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing & Accountability Journal,* ***21*****(3)**, 337-361. doi:10.1108/09513570810863932

Bebbington, J., Higgins, C., and Frame, B. (2009). Initiating sustainable development reporting: Evidence from New Zealand. *Accounting, Auditing & Accountability Journal,* ***22*****(4)**, 588-625. doi:10.1108/09513570910955452

Beck, C.A., Campbell, D., and Shrives, P.J. (2010). Content analysis in environmental reporting research: Enrichment of the method in a British-German context. *The British Accounting Review,* ***42*****(3)**, 207-222. doi: 10.1016/j.bar.2010.05.002

Belal, A.R., and Cooper, S. (2011). The absence of corporate social responsibility reporting in Bangladesh. *Critical Perspectives on Accounting,* ***22*****(7)**, 654-667. doi:10.1016/j.cpa.2010.06.020

Belal, A.R., and Owen, D.L. (2007). The views of corporate managers on the current state of, and future prospects for, social reporting in Bangladesh: An engagement-based study. *Accounting, Auditing & Accountability Journal,* ***20*****(3)**, 472-494. doi: 10.1108/09513570710748599

Bell, J., and Lundblad, H. (2011). A comparison of ExxonMobil's sustainability reporting to outcomes. *Journal of Applied Business and Economics*, ***12*****(1)**, 17-29. Retrieved from http://m.www.na-businesspress.com/JABE/BellWeb.pdf

Bellringer, A., Ball, A., and Craig, R. (2011). Reasons for sustainability reporting by New Zealand local governments. *Sustainability Accounting, Management and Policy Journal,* ***2*****(1)**, 126-138. doi: 10.1108/20408021111162155

Belkaoui, A. (1976). The impact of the disclosure of the environmental effects of organizational behavior on the market. *Financial Management*, ***5*****(4)**, 26-31. Retrieved from https://www.jstor.org/stable/pdf/3665454.pdf

Bennett, M., Sola, D., and Roux, L. (2011). Corporate disclosures on sustainability. London, United Kingdom: Consultative Committee of Accountancy Bodies. Retrieved from http://www.ccab.org.uk/documents/111208_sustainability.pdf

Bice, S.J. (2011). Beyond the business case: A new institutional analysis of corporate social responsibility in Australian mining (Doctoral dissertation). The University of Melbourne, Australia. Retrieved from https://minerva-access.unimelb.edu.au/handle/11343/36826

Blacconiere, W.G., and Patten, D.M. (1994). Environmental disclosures, regulatory costs, and changes in firm value. *Journal of Accounting and Economics*, ***18*****(3)**, 357-377. doi: 10.1016/0165-4101(94)90026-4

Boesso, G., and Kumar, K. (2007). Drivers of corporate voluntary disclosure: a framework and empirical evidence from Italy and the United States. *Accounting, Auditing & Accountability Journal,* ***20*****(2)**, 269-296. doi: 10.1108/09513570710741028

Brandt, S. (2015). The state and quality of stakeholder engagement disclosures in sustainability reports: Exploring the current practices of European companies (Master's thesis). University of Amsterdam, The Netherlands. Retrieved from http://dare.uva.nl/cgi/arno/show.cgi?fid=605301

Brennan, N.M., and Solomon, J. (2008). Corporate governance, accountability and mechanisms of accountability: An overview. *Accounting, Auditing & Accountability Journal*. ***21*****(7)**, 885-906. doi: 10.1108/09513570810907401

Brown, N., and Deegan, C. (1998). The public disclosure of environmental performance information – a dual test of media agenda setting theory and legitimacy theory. *Accounting and Business Research,* ***29*****(1)**, 21-41. doi: 10.1080/00014788.1998.9729564

Buhr, N. (2002). A structuration view on the initiation of environmental reports. *Critical Perspectives on Accounting*, ***13***, 17-38. doi:10.1006/cpac.2000.0441

Burritt, R.L., and Schaltegger, S. (2010). Sustainability accounting and reporting: Fad or trend? *Accounting, Auditing & Accountability Journal,* ***23*****(7)**, 829-846. doi: 10.1108/09513571011080144

Bushee, B.J., and Noe, C.F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of Accounting Research,* ***38***, 171-202. Retrieved from https://www.jstor.org/stable/pdf/2672914.pdf

Business Action for Sustainable Development (2012). Contribution for Rio+20 compilation document. Retrieved from http://www.uncsd2012.org/content/documents/424BASD_FINAL_1%20Nov2011_input_for_Rio20.pdf

Buys, P.W., Oberholzer, M., and Andrikopoulos, P. (2011). An investigation of the economic performance of sustainability reporting companies versus non-reporting companies: A South African perspective. *Journal of Social Sciences*, ***29*****(2)**, 151-158. Retrieved from http://www.krepublishers.com/02Journals/JSS/JSS-29-0-000-11-Web/JSS-29-2-000-11-Abst-Pdf/JSS-29-2-151-11-1192-Buys-P/JSS-29-2-151-11-1192-Buys-P-Tt.pdf

Buys, P.W., and Van Niekerk, E. (2014). The South African financial services industry's integrated reporting compliance with global reporting initiative framework. *Banks and Bank Systems,* ***9*****(4)**, 107-115. Retrieved from https://businessperspectives.org/journals_free/bbs/2014/BBS_en_2014_04_Buys.pdf

Cahaya, F.R. (2011). Labour practices and decent work disclosures in Indonesia (Doctoral dissertation). Curtin University, Australia. Retrieved from http://espace.library.curtin.edu.au/webclient/StreamGate?folder_id=0&dvs=1472033359551~749&usePid1=true&usePid2=true

Cahaya, F.R., Porter, S., Tower, G., and Brown, A. (2015). The Indonesian government's coercive pressure on labour disclosures: Conflicting interests or government ambivalence? *Sustainability Accounting, Management and Policy Journal,* ***6*****(4)**, 475-497. Doi: 10.1108/SAMPJ-09-2014-0051

Calitz, A.P., Cullen, M.D.M., and S. Bosire (2015). Sustainability reporting by South African higher education institutions. In: Information technology in environmental engineering: proceedings of the 7th International Conference on Information Technologies in Environmental Engineering, Gomez, J.M., and B. Scholtz, (Eds.). London: Springer, pp: 112-124. ISBN No 9783319251523

Carroll, C.M. (2009). Climate change risk disclosure: An update on evolving voluntary and mandatory reporting programs and implications for insurers and their insureds. Retrieved from http://www.dentons.com/en/insights/alerts/2015/november/13/media/6c3113d03b734328a9d8b9972a754ef3.ashx

Center for Corporate Citizenship and Ernst&Young LLP (2013). Value of sustainability reporting. Retrieved from http://www.bcccc.net/pdf/valueofsustainabilitysummary.pdf

Central Bank of Nigeria (2012). Nigerian sustainable banking principles - Central Bank of Nigeria. Abuja, Nigeria: Central Bank of Nigeria. Retrieved from https://www.cbn.gov.ng/out/2012/ccd/circular-nsbp.pdf

Chatterjee, A. (2012). Assurance of corporate greenhouse gas disclosures in the mining and crude oil production sector: A comparative international study. *Journal of the Asia-Pacific Centre for Environmental Accountability,* ***18*****(2)**, 75-102. Retrieved from https://www.unisa.edu.au/Global/business/centres/cags/docs/apcea/APCEA_2012_18(2)_Chatterjee.pdf

Chiang, C., and Northcott, D. (2012). Financial auditors and environmental matters: Drivers of change to current audit practices. *Journal of Accounting &Organizational Change,* ***8*****(3)**, 340-363. doi: 10.1108/18325911211258335

Chindavijak, C., Phusavat, K., and Kess, P. (2015). Assessing the status of sustainability report of petrochemical and energy sectors in Thailand. In: Managing Intellectual Capital Management, and Innovation for Sustainable Knowledge and Learning and Inclusive Society Joint International Conference, Bari, Italy, 27-29 May 2015, pp: 1961-1970. Retrieved from http://www.toknowpress.net/ISBN/978-961-6914-13-0/papers/ML15-404.pdf

Ching, H.Y., Gerab, F., and Toste, T. (2013). Analysis of sustainability reports and quality of information disclosed of top Brazilian companies. *International Business Research, **6***(**10**), 62-77. doi: 10.5539/ibr.v6n10p62

Ching, H.Y., Gerab, F., and Toste, T. (2014). Scoring sustainability reports using GRI indicators: A study based on ISE and FTSE4Good price indexes. *Journal of Management Research, **6***(**3**), 27-48. doi: 10.5296/jmr.v6i3.5333

Christofi, A., Christofi, P., and Sisaye, S. (2012). Corporate sustainability: Historical development and reporting practices. *Management Research Review*, ***35***(**2**), 157-172. doi: 10.1108/01409171211195170

Clark, T.S., and Linzer, D.A. (2012). Should I use fixed or random effects? Retrieved from https://datajobs.com/data-science-repo/Fixed-Effects-Models-[Clark-and-Linzer].pdf

Clayton, A.F., Rogerson, J.M., and Rampedi, I. (2015). Integrated reporting vs. sustainability reporting for corporate responsibility in South Africa. *Bulletin of Geography, Socio-Economic Series, **29***, 7-17. doi: 10.2478/bog-2015-0021

Cormier, D., and Magnan, M. (2003). Environmental reporting management: A continental European perspective. *Journal of Accounting and Public Policy, **22***(**1**), 43-62. doi: 10.1016/S0278-4254(02)00085-6

Cormier, D., Gordon, I.M., and Magnan, M. (2004). Corporate environmental disclosure: Contrasting management's perceptions with reality. *Journal of Business Ethics, **49***, 143-165. doi:10.1023/B:BUSI.0000015844.86206.b9

Corporate Knights. (2014). Measuring sustainability disclosure: Ranking the world's stock exchanges. Retrieved from http://www.corporateknights.com/wp-content/reports/2014_World_Stock_Exchange.pdf

Corporate Sustainability Reporting Coalition (2012). Convention on corporate sustainability reporting. Retrieved from http://www.uncsd2012.org/content/documents/359CSRC%20proposal%20for%20Convention%20on%20Corporate%20Sustainability%20Reporting_final.pdf

Covaleski, M. A., Dirsmith, M.W., and Samuel, S. (1996). Managerial accounting research: The contributions of organizational and sociological theories. *Journal of Management Accounting Research, **8**,* 1–35. Retrieved from http://s3.amazonaws.com/academia.edu.documents/35340313/Managerial_Accounting_Research_The_Contributions.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1488841112&Signature=CQ%2BF%2BQiHPYc8LfuVDkGODuRRcs4%3D&response-content-disposition=inline%3B%20filename%3DManagerial_Accounting_Research_the_contr.pdf

Cyriac, S. (2013). Corporate sustainability reporting practices: A comparative study of practices by Indian and European companies. *The Macrotheme Review, **2***(6), 38-

46. Retrieved from http://macrotheme.com/yahoo_site_admin/assets/docs/4CyMR26.32041008.pdf

Damayanthi, S.D.G., and Rajapakse, R.M.R.B. (2013). Factors leading to CSR reporting: A case from manufacturing sector in Sri Lanka. Retrieved from http://www.cmb.ac.lk/wp-content/uploads/FACTORS-LEADING-TO-CSR-REPORTING.pdf

Darus, F., Hamzah, E.A.C., and Yusoff, H. (2013). CSR web reporting: The influence of ownership structure and mimetic isomorphism. *Procedia Economics and Finance, 7***,** 236-242. doi: 10.1016/S2212-5671(13)00240-2

Deegan, C., and Unerman, J. (2006). Extended systems of accounting: the incorporation of social and environmental factors within external reporting. In: Financial accounting theory, Deegan, C. and J. Unerman, (Eds.). London: McGraw-Hill, pp: 374-409. ISBN No 0077108965. Retrieved from http://highered.mheducation.com/sites/dl/free/0074716719/363733/ch09.ppt.

Deephouse, D.L., and Carter, S.M. (2005). An examination of differences between organizational legitimacy and organizational reputation. *Journal of Management Studies*, ***42*****(2)**, 329-360. doi: 10.1111/j.1467-6486.2005.00499.x

Delmas, M.A., and Toffel, M.W. (2005). Institutional pressure and environmental management. Santa Barbara: University of California. Retrieved from https://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/display.files/fileID/13320

Deloitte (2015). Prioritizing your sustainability risks and opportunities. Retrieved from http://www2.deloitte.com/uk/en/pages/audit/solutions/prioritising-sustainability-risks-and-opportunities.html

Deloitte Global Services Limited (2016a). IAS 18 - Revenue. Retrieved from www.iasplus.com/en/standards/ias/ias18

Deloitte Global Services Limited (2016b). IAS 19 - Employee Benefits. Retrieved from www.iasplus.com/en/standards/ias/ias19

Deloitte Global Services Limited (2016c). IAS 1 - Presentation of financial statements. Retrieved from www.iasplus.com/en/standards/ias/ias1

Deloitte Global Services Limited (2016d). IAS 7 - Statement of Cash Flows. Retrieved from www.iasplus.com/en/standards/ias/ias7

Department for Environment, Food and Rural Affairs (2006). Environmental key performance indicators: Reporting guidelines for UK business. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69281/pb11321-envkpi-guidelines-060121.pdf

DeSimone, P. (2014). Board oversight of sustainability issues: A study of the S&P 500. Washington, United States of America: Sustainable Investments Institute.

Retrieved from http://irrcinstitute.org/wp-content/uploads/2015/09/final_2014_si2_irrci_report_on_board_oversight_of_sustainability_issues_public1.pdf

De Villiers, C., and Alexander, D. (2010). Isomorphism in social and environmental disclosures. Retrieved from http://apira2010.econ.usyd.edu.au/conference_proceedings/APIRA-2010-196-deVilliers-Isomorphism-in-social-and-environmental-disclosures.pdf

De Villiers, C., Low, M., and Samkin, G. (2014). The institutionalization of mining company sustainability disclosures. *Journal of Cleaner Production, **84**,* 51-58. doi: 10.1016/j.jclepro.2014.01.089

Dilling, P.F.A. (2010). Sustainability reporting in a global context: What are characteristics of corporations that provide high quality sustainability reports-An empirical analysis. *International Business & Economics Research Journal*, ***9*(1)**, 19-30. doi: 10.19030/iber.v9i1.505

Dilling, P.F.A. (2016). Reporting on long-term value creation- the example of public Canadian energy and mining companies. *Sustainability,* ***8***, 1-26. Doi:10.3390/su8090938

DiMaggio, P.J., and Powell, W.W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, ***48*(2)**, 147-160. Retrieved from https://www.jstor.org/stable/pdf/2095101.pdf

Directory of the Nigerian Stock Exchange (2015). Listed companies. Retrieved from http://www.nse.com.ng/Issuers-section/listed-securities/listed-companies

Dobbs, S., and Van Staden, C. (2011). Motivations for corporate social and environmental reporting: New Zealand Evidence. Retrieved from http://www.utas.edu.au/__data/assets/pdf_file/0011/188426/Dobbs_VanStaden.pdf

Dong, S. (2011). An assessment of CSR reporting practice in China's mining and minerals industry. Retrieved from https://www.unisa.edu.au/Global/business/centres/cags/docs/seminars/Paper%20Shidi.pdf

Doran, K.L., and Quinn, E.L. (2009). Climate change risk disclosure: A sector by sector analysis of SEC 10-K filings from 1995-2008. *North Carolina Journal of International Law and Commercial Regulation*, ***34*(3)***,* 721-766. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1416279&download=yes

Ebiringa, O.T., Yadirichukwu, E., Chigbu, E.E., and Ogochukwu, O.J. (2013). Effect of firm size and profitability on corporate social disclosures: The Nigerian oil and gas sector in focus. *British Journal of Economics, Management & Trade,* ***3*(4)**, 563-574. doi: 10.9734/BJEMT/2013/5147

Eccles, R.G. and M.P. Krzus, (2010). One report: Integrated reporting for a sustainable strategy. New Jersey: John Wiley & Sons Inc. ISBN No 978-0-470-58751-5

Eccles, R.G., Ioannou, I., and Serafeim, G. (2012). The impact of corporate sustainability on organizational processes and performance. United States of America: Harvard Business School, Harvard University. Retrieved from http://www.hbs.edu/faculty/Publication%20Files/SSRN-id1964011_6791edac-7daa-4603-a220-4a0c6c7a3f7a.pdf

Echegaray, F., Hetherington, L., Kritski, E., and Deshmukh, Y. (2008). The impact of climate change on business: The rise of the green consumer? Retrieved from http://www.irisnetwork.org/Publications%20Downloads/MAR/MAR_Impact_of_Climate_Change.pdf

EC staff consolidated version (2010). International accounting standard 7. Retrieved fromhttp://ec.europa.eu/internal_market/accounting/docs/consolidated/ias7_en.pdf

Egbe, R.E., and Thompson, D. (2010). Environmental challenges of oil spillage for families in oil producing communities of the Niger Delta region. *JHER, **13***, 24-34. Retrieved from http://www.heran.org/html/jher13/2egbe.pdf

Elijido-Ten, E. (2010). Sustainability and balanced scorecard reporting: What determines public disclosure decision? Retrieved from http://apira2010.econ.usyd.edu.au/conference_proceedings/APIRA-2010-274-Elijido-Ten-Sustainability-and-balanced-scorecard-reporting.pdf

Elliott, B. and J. Elliott, (2011). Financial accounting and reporting. 14th Edn., Essex, England: Pearson Education Limited. ISBN No 978-0273778172

Elsakit, O.M., and Worthington, A.C. (2012). The attitudes of managers and stakeholders towards corporate social and environmental disclosure. *International Journal of Economics and Finance*, ***4*(12)**, 240-251. doi: 10.5539/ijef.v4n12p240

Emtairah, T., and Mont, O. (2008). Gaining legitimacy in contemporary world: Environmental and social activities of organizations. *International Journal of Sustainable Society, **1***(**2**), 134-148. doi: 10.1504/IJSSoc.2008.02257

Epp, A. (2013). Assessing the impact of stakeholder engagement on perceptions of DMO performance. Retrieved from http://www.icrtourism.org/wp-content/uploads/2012/03/OP28-paper.pdf

Ernst&Young (2013). Six growing trends in corporate sustainability. Retrieved from http://www.ey.com/Publication/vwLUAssets/Six_growing_trends_in_corporate_sustainability_2013/$FILE/Six_growing_trends_in_corporate_sustainability_2013.pdf

Faisal, F., Tower, G., and Rusmin, R. (2012). Legitimizing corporate sustainability reporting throughout the world. *Australasian Accounting, Business and Finance Journal*, ***6*(2)**, 19-34. Retrieved from http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1335&context=aabfj

Farneti, F., and Guthrie, J. (2009). Sustainability reporting by Australian public sector organizations: Why they report. *Accounting Forum*, ***33*****(2)**, 89-98. doi: 10.1016/j.accfor.2009.04.002

Farneti, F., and Rammal, H.G. (2013). Sustainability reporting in the Italian public sector: Motives and influences. In: 7th Asia Pacific Interdisciplinary Research in Accounting Conference, Kobe, Japan, 26-28 July 2013, pp: 1-22. Retrieved from http://www.apira2013.org/proceedings/pdfs/K137.pdf

Fernandez-Feijoo, B., Romero, S., and Blanco, S.R. (2016). Financial auditor and sustainability reporting: An exploratory study among companies following the GRI guidelines. In: The 39th European Accounting Association Annual Congress, Maastricht, The Netherlands, 11-13 May 2016, pp: 1-12.

Frost, G., Jones, S., Loftus, J., and Der Laan, S.V. (2005). A survey of sustainability reporting practices of Australian reporting entities. *Australian Accounting Review,* ***15*****(35)**, 89-96. doi: 10.1111/j.1835-2561.2005.tb00256.x

Gallego-Alvarez, I. (2012). Indicators for sustainable development: Relationship between indicators related to climate change and explanatory factors. *Sustainable Development*, ***20*****(4)**, 276-292. doi: 10.1002/sd.483

Garcia-Ayuso, M., and Larrinaga, C. (2003). Environmental disclosure in Spain: corporate characteristics and media exposure. *Revista Espanola de Financiacion y Contabilidad,* ***32*****(115)**, 184-214. Retrieved from https://www.jstor.org/stable/pdf/42870867.pdf

Garud, R., Hardy, C., and Maguire, S. (2007). Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organizational Studies*, ***28*****(7)**, 957-969. doi: 10.1177/0170840607078958

Gherardi, L., Guthrie, J., and Farneti, F. (2014). Stand-alone sustainability reporting and the use of GRI in Italian Vodafone: A longitudinal analysis. *Procedia-Social and Behavioral Sciences,* ***164***, 11-25. doi:10.1016/j.sbspro.2014.11.045

Global oil and gas industry association for environmental and social issues (2015). Membership. Retrieved from http://www.ipieca.org/membership/

Global Reporting Initiative (2011). Sustainability reporting guidelines version 3.1. Retrieved from https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-Technical-Protocol.pdf

Global Reporting Initiative (2013a). Sustainability reporting guidelines version G4. Retrieved from http://www.globalreporting.org/resourcelibrary/GRIG4- Part1-Reporting-Principles-and-Standard-Disclosures.pdf

Global Reporting Initiative (2013b). The external assurance of sustainability reporting. Retrieved from https://www.globalreporting.org/resourcelibrary/GRI-Assurance.pdf

Global Oil and Gas Industry Association for Environmental and Social Issues (2014). Reporting survey results. Retrieved from http://www.ipieca.org/system/files/uploads/IPIECA_Reporting_survey_2014_results.pdf

Goswami, K., and Lodhia, S. (2012). Influences on sustainability reporting practices in selected South Australian local councils: An explanatory case study. Retrieved from http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1023&context=acsear2012

Guo, M., and Zhao, X. (2011). What is the impact of industrial environmental events on the quality of environmental disclosure in corporate annual reports? A longitudinal study (Master's thesis). Umea University, Sweden. Retrieved from http://www.diva-portal.org/smash/get/diva2:429076/FULLTEXT02

Gould, S. (2011). Accounting for sustainability. *Accountancy Plus*, ***1***, 19-20. Retrieved from https://www.ifac.org/system/files/news/files/2011-03-cpa-ireland-accountancyplus-accounting-for-sustainability-stathis-gould.pdf

Greco, G., Sciulli, N., and D'Onza, G. (2015). The influence of stakeholder engagement on sustainability reporting: evidence from Italian local councils. Public Management Review, ***17*****(4)**, 465-488. doi: 10.1080/14719037.2013.798024

Gujarati, D.N. (2004). Basic Econometrics, 4th Edn., New York: The McGraw-Hill Companies. ISBN No 0072427922

Gujarati, D.N., and D.C. Porter, (2009). Basic Econometrics. 5th Edn., New York: McGrawHill Irwin. ISBN No 978-0071276252

Gupta, S., and Goldar, B. (2005). Do stock markets penalize environment-unfriendly behavior? Evidence from India. *Ecological Economics*, ***52*****(1)**, 81-95. doi: 10.1016/j.ecolecon.2004.06.011

Guthrie, J., and Farneti, F. (2008). GRI sustainability reporting by Australian public sector organizations. *Public Money & Management*, ***28*****(6)**, 361-366. doi: 10.1111/j.1467-9302.2008.00670.x

Hahn, R., and Kuhnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, ***59***, 5-21. doi: 10.1016/j.jclepro.2013.07.005

Haider, M.D. (2010). An overview of corporate social and environmental reporting (CSER) in developing countries. *Issues in Social and Environmental Accounting*, ***4*****(1)**, 3-17. Retrieved from iiste.org/Journals/index.php/ISEA/article/download/938/859

Hassan, N.T. (2010). Corporate social responsibility disclosure: An examination of framework of determinants and consequences (Doctoral dissertation). Durham University, United Kingdom. Retrieved from http://etheses.dur.ac.uk/480/1/Thesis_Nasr.pdf?DDD2+.

Hassel, L., Nilsson, H., and Nyquist, S. (2005). The value relevance of environmental performance. *European Accounting Review*, ***14*(1)**, 41-61. Doi: 10.1080/0963818042000279722

Haveman, H.A. (1993). Follow the leader: Mimetic isomorphism and entry into new markets. *Administrative Science Quarterly,* ***38*(4)**, 593-627. Retrieved from http://www.jstor.org/stable/2393338

Healy, P.M., and Palepu, K.G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics,* ***31*(1-3)**, 405-440. Doi:10.1016/S0165-4101(01)00018-0

Hendey, E. (2013). Does divestment work? Retrieved from http://www.iop.harvard.edu/does-divestment-work

Herremans, I., Nazari, J.A., and Warsame, H. (2011). The role of micro-level organizational variables in sustainability reporting. In: The Canadian Academic Accounting Association Annual Conference, Canada, 26-29 May 2011, pp: 1-25. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1741367##

Herschovis, S., Herremans, I.M., and Warsame, H.A. (2009). The role of internal processes in the sustainability performance and disclosure relationship. In: The Canadian Academic Accounting Association Annual Conference, Canada, 4-7 June 2009, pp: 1-46. Retrieved from http://ssrn.com/abstract1326088.

Herzig, C., Giese, N., Hetze, K., and Godemann, J. (2012). Sustainability reporting in the German banking sector during the financial crisis. *International Journal of Innovation and Sustainable Development,* ***6*(2)**, 184-218. Doi:10.1504/IJISD.2012.046952

Hess, D. (2014). The future of sustainability reporting as a regulatory mechanism. United States of America: Ross School of Business, University of Michigan. Retrieved from https://deepblue.lib.umich.edu/bitstream/handle/2027.42/106401/1228_Hess.pdf?sequence=1

Hibbitt, C. (1998). External environmental disclosure and reporting by large European companies: An economic, social and political analysis of managerial behaviour. Retrieved from www.rozenbergps.com/files/hibbit.pdf

Hibbitt, C. (2003). External environmental disclosure and reporting by large European companies: An economic, social and political analysis of managerial behavior. Retrieved from http://www.rozenbergps.com/files/hibbit.pdf

Hohnen, P. (2012). The future of sustainability reporting. Retrieved from http://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Energy,%20Environment%20and%20Development/0112pp_hohnen.pdf

Hossain, M., Rowe, A.L., and Quaddus, M. (2013). A managerial perspective of corporate social and environmental responsibility (CSER) reporting: Evidence from

a developing country. In: 7th Asia-Pacific Interdisciplinary Research in Accounting (APIRA) Conference, Kobe, Japan, 26-28 July 2013, pp: 1-26. Retrieved from http://www.apira2013.org/proceedings/pdfs/K232.pdf

Huijbregts, B. (2013). The influence of country specific factors on the likelihood of sustainability reporting (Master's thesis). University of Amsterdam, The Netherlands. Retrieved from http://dare.uva.nl/cgi/arno/show.cgi?fid=490733.

Humphrey, C., O'Dwyer, B., and Unerman, J. (2014). The rise of integrated reporting: Understanding attempts to institutionalize a new reporting framework. Retrieved from http://www00.unibg.it/dati/corsi/90010/67195-PROF_UNERMAN_SEMINAR_%20INTEGRATED%20REPORTING.pdf

Husillos, J., Gonzalez, C.L., and Gil, M.J.A. (2011). The emergence of triple-bottom line reporting in Spain. *Spanish Journal of Finance and Accounting,* ***40*****(150)**, 195-219. Doi: 10.1080/02102412.2011.10779701

IFRS Foundation education staff (2013). Module 28 - Employee benefits. Retrieved from http://www.ifrs.org/IFRS-for-SMEs/Documents/IFRS%20for%20SMEs%20Modules/Module28__version %202013.pdf

Ilker, E., Sulaiman, A.M. and Rukayya, S.A. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics,* ***5*****(1)**, 1-4. Doi: 10.11648/j.ajtas.20160501.11

Integrated Reporting and Assurance Services (2012). Review of sustainability reporting in South Africa as per the Global Reporting Initiative (GRI) Guidelines. Retrieved from http://www.iras.co.za/Documents/Research/King_III_and_GRI_13_Research _Report.pdf

International Federation of Accountants (2006). Why sustainability counts for professional accountants in business. Retrieved from www.ifac.org/sites/default/files/.../files/why-sustainability-counts-f.pdf

International Federation of Accountants (2010). International standard on assurance engagements 3000. Retrieved from http://www.re-assurance.co.uk/bin/pdf/original_pdf_file/isae_3000%2828_07_2010%29.pd f

International Institute for Sustainable Development and Deloitte & Touche (1992). Business strategies for sustainable development: Leadership and accountability for the 90s. Retrieved from http://www.iisd.org/business/pdf/business_strategy.pdf

Ioane, L.M. (2014). Establishing and maintaining a professional accounting body in Samoa: The role of the Samoa Institute of Accountants (SIA) (Master's Thesis). Auckland University of Technology, New Zealand. Retrieved from http://aut.researchgateway.ac.nz/bitstream/handle/10292/8436/IoaneLM.pdf? sequence=3

Ioannou, I., and Serafeim, G. (2014). The consequences of mandatory sustainability reporting: Evidence from four countries. United States of America: Harvard Business School, Harvard University. Retrieved from http://www.hbs.edu/faculty/Publication%20Files/11-100_7f383b79-8dad-462d-90df-324e298acb49.pdf

Islam, M., and Dellaportas, S. (2011). Perceptions of corporate social and environmental accounting and reporting practices from accountants in Bangladesh. *Social Responsibility Journal,* **7(4)**, 649-664. Doi:10.1108/17471111111175191

Ite, A.E., Ibok, U.J., Ite, M.U., and Petters, S.W. (2013). Petroleum exploration and production: Past and present environmental issues in the Nigeria's Niger Delta. *American Journal of Environmental Protection,* ***1*(4)**, 78-90. Retrieved from http://pubs.sciepub.com/env/1/4/2/

Iyoha, F.O. (2011). State agencies, industry regulations and the quality of accounting practice in Nigeria (Doctoral dissertation). Covenant University, Nigeria. Retrieved from http://theses.covenantuniversity.edu.ng/bitstream/handle/123456789/130/Main%20 Body.pdf?sequence=1

Iyoha, F.O., Ojeka, S., and Ajayi, A. (2014). Impact of state institutions on the quality of accounting practice in Nigeria. *Journal of South African Business Research,* 1-10. doi:10.5171/2014.782177

Jackson, A., Boswell, K., and Davis, D. (2011). Sustainability and triple bottom line reporting – What is it all about? *International Journal of Business, Humanities and Technology,* ***1*(3)**, 55-59. Retrieved from http://ijbhtnet.com/journals/Vol_1_No_3_November_2011/6.pdf

Jalaludin, D., Sulaiman, M., and Ahmad, N.N.N. (2011). Understanding environmental management accounting (EMA) adoption: A new institutional sociology perspective. *Social Responsibility Journal,* ***7*(4)**, 540-557. Doi:10.1108/17471111111175128

James-Overheu, C., and Cotter, J. (2009). Corporate governance, sustainability and the assessment of default risk. *Asian Journal of Finance & Accounting*, ***1*(1)**, 34-53. Retrieved from www.macrothink.org/journal/index.php/ajfa/article/download/93/96

Jenkins, H., and Yakovleva, N. (2006). Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, ***14***, 271-284.

Jeucken, M. (2001). Sustainable finance and banking – Slow starters are gaining pace. Retrieved from http://www.sustainability-in-finance.com/ifi.pdf

Johnson, M. (2013). Mimetic, coercive and normative influences and the decision of national sport organizations to bid for world championship events (Master's Thesis). Auckland University of Technology, New Zealand. Retrieved from

http://aut.researchgateway.ac.nz/bitstream/handle/10292/7182/JohnstonM.pdf?sequence=3

Jones, H. (2010). Sustainability reporting matters: What are national governments doing about it? London: Association of Certified Chartered Accountants. Retrieved from http://www.accaglobal.com/content/dam/acca/global/PDF-technical/sustainability-reporting/tech-tp-srm.pdf

Jones, S., Frost, G., Loftus, J., and Der Laan, S. (2007). An empirical examination of the market returns and financial performance of entities engaged in sustainability reporting. Australian Accounting Review, ***17*****(41)**, 78-87. doi:10.1111/j.1835-2561.2007.tb00456.x

Joseph, C. (2010). Sustainability reporting on Malaysian local authority websites (Doctoral dissertation). Curtin University, Australia. Retrieved from http://espace.library.curtin.edu.au/cgi-bin/espace.pdf?file=/2010/11/29 /file_1/149374

Joseph, C. (2011). The influence of jurisdiction on the local government's website sustainability reporting. Retrieved from https://www.researchgate.net/publication/265444912

Joseph C., and Taplin R. (2011). The measurement of sustainability disclosure: abundance versus occurrence. *Accounting Forum*, ***35*****(1)**, 19-31. doi: 10.1016/j.accfor.2010.11.002

Joseph, C., and Taplin, R. (2012). International initiatives influence on local government sustainability web-disclosures. *Social Responsibility Journal*, ***8*****(4)**, 589-602. doi: 10.1108/17471111211272561

Kaspereit, T., and Lopatta, K. (2011). The value relevance of SAM's corporate sustainability ranking and GRI sustainability reporting in the European stock markets. Retrieved from papers.ssrn.com/sol3/papers.cfm?abstract_id=1976224

Kaspersen, M. (2013). The construction of social and environmental reporting. Retrieved from http://openarchive.cbs.dk/bitstream/handle/10398/8667/Mia_Kaspersen_Summary.pdf?sequence=3

Kaur, A., and Lodhia, S. (2014). The state of disclosures on stakeholder engagement in sustainability reporting in Australian local councils. *Pacific Accounting Review*, ***26*****(1/2)**, 54-74. doi: 10.1108/PAR-07-2013-0064

Khaveh, A., Nikhashemi, S.R., Yousefi, A., and A. Haque (2012). Voluntary sustainability disclosure, revenue and shareholders wealth- A perspective from Singaporean companies. *Business Management Dynamics,* ***1*****(9)**, 6-12. Retrieved from http://bmdynamics.com/issue_pdf/bmd110196_6_12.pdf

Klynveld Peat Marwick Goerdeler (2008). Sustainability reporting: A guide. Retrieved from

http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/sustainable-guide-0811.pdf

Klynveld Peat Marwick Goerdeler (2011). KPMG International survey of corporate responsibility reporting. Retrieved from http://www.kpmg.com/ES/es/ActualidadyNovedades/ArticulosyPublicaciones/Documents/CR_Report_2011.pdf

Klynveld Peat Marwick Goerdeler (2013). GRI's G4 guidelines: the impact on reporting. Retrieved from http://www.kpmg.com/TW/zh/Documents/ccs/KPMG_GRI%20G4%20Briefing_FINAL.pdf

Klynveld Peat Marwick Goerdeler (2015). Currents of change: The KPMG survey of corporate responsibility reporting. Retrieved from http://www.kpmg.com/FR/fr/IssuesAndInsights/ArticlesPublications/Documents/Survey-of-CR-Reporting-112015.PDF

Kocmanova, A., Hrebicek, J., and Docekalova, M. (2011). Corporate governance and sustainability. *Economics and Management*, ***16***, 543-550. Retrieved from https://www.researchgate.net/publication/228461240_CORPORATE_GOVERNANCE_AND_SUSTAINABILITY

Kolk, A. (2005). Sustainability reporting. Retrieved from http://dare.uva.nl/document/2/37443

Kolk, A. (2008). Sustainability accountability and corporate governance: Exploring multinationals' reporting practices. *Business Strategy and the Environment*, ***17*****(1)**, 1-15. doi: 10.1002/bse.511

Kolk, A., and Margineantu, A. (2009). Globalisation and regionalization of accounting firms and their sustainability services. *International Marketing Review,* ***26*****(4/5)**, 396-410. Doi: 10.1108/02651330910971959

Krongkaew-Arreya, N., and Setthasakko, W. (2013). Influence factors to develop sustainability report: A case study of Thailand. In: The 8th Annual London Business Research Conference, Imperial College, London, United Kingdom, 8-9 July 2013, pp: 1-11. Retrieved from www.wbiworldconpro.com/pages/paper/london-conference-2013/460

Kuhn, A., Stiglbauer, M., and Heel, J. (n.d.). Does mandatory CSR reporting lead to higher CSR transparency? The case of France. Retrieved from www.virtusinterpress.org/IMG/pdf/Anna-Lena_Kuhn_Markus_Stiglbauer_Janina_Heel_paper.pdf

Kumar, V.K.S., and Devi, R.V. (n.d). Sustainability reporting practices in India: Challenges and prospects. Retrieved from http://www.aims-international.org/aims12/12A-CD/PDF/K465-final.pdf

Kwanbo, M.L. (2011). An assessment of the effectiveness of social disclosure on Earnings per Share in Nigerian public corporations. *World Journal of Social Sciences*, ***1*(1)**, 86-106. Retrieved from http://www.wbiconpro.com/313-Lubabah.pdf

Lan, Y., Wang, L., and Zhang, X. (2013). Determinants and features of voluntary disclosures in the Chinese stock market. *China Journal of Accounting Research,* ***6*(4)**, 265-285. doi: 10.1016/j.cjar.2013.04.001

Larrinaga-Gonzalez, C., and Perez-Chamorro, V. (2008). Sustainability accounting and accountability in public water companies. *Public Money & Management*, ***28*(6)**, 337-343. doi: 10.1111/j.1467-9302.2008.00667.x

Laszlo, C., (2003). The sustainable company: How to create lasting value through social and environmental performance. Washington: Island Press. ISBN No 1597266299

Lehman, G. (2011). The management of sustainability: The art of interpretation. *JAMAR,* ***9*(1)**, 75-88. Retrieved from http://www.cmawebline.org/images/stories/JAMAR_2011_Winter/JAMARv9.1-Research_Note-IAR.pdf

Lins, C., Wajnberg, D., Steger, U., and Ionescu-Somers, A. (2008). Corporate sustainability in the banking sector. Retrieved from http://www.imd.org/research/publications/upload/WP_2008_07_Steger_Lins_Wajnberg_Ionescu_Somers_Level_1.pdf

Lozano, R. (2008). Envisioning sustainability three-dimensionally. *Journal of Cleaner Production*, ***16***, 1838-1846. doi: 10.1016/j.jclepro.2008.02.008

Lozano, R. (2013). Are companies planning their organizational changes for corporate sustainability? An analysis of three case studies on resistance to change and their strategies to overcome it. *Corporate Social Responsibility and Environmental Management,* ***20*(5)**, 275-295. doi: 10.1002/csr.1290

Macve, R. (2000). Accounting for environmental cost. London: The London School of Economics and Political Science. Retrieved from http://www.lse.ac.uk/accounting/pdf/macvelsewpweb.pdf

Manetti, G. (2011). The Quality of Stakeholder Engagement in Sustainability Reporting: Empirical Evidence and Critical Points. *Corporate Social Responsibility and Environmental Management,* ***18*(2)**, 110-122. doi: 10.1002/csr.255

Martha, L.M.M., Rankin, M., and Birt, J. (2012). International sustainability reporting using the Global Reporting Initiative. Retrieved from http://mams.rmit.edu.au/3wnxtqb7lhvw1.pdf

McPhail, K., and Maimunah, T. (2012). Regulating for rights and sustainability: Biofuel in Malaysia. *Sustainability, Accounting, Management and Policy Journal,* ***3*(2)**, 252-261. doi: 10.1108/20408021211282359

Meek G.K., Roberts, C.B. and Gray, S.J. (1995). Factors influencing voluntary annual report disclosure by US, UK, and continental European multinational corporation. *Journal of International Business Studies, **26***(3), 555-572.

Meyer, J.W., and Rowan, B. (1977). Institutionalized organizations: Formal structures as myth and ceremony. *American Journal of Sociology*, ***63*(2)**, 340-363. Retrieved from https://www.jstor.org/stable/2778293

Michelon, G., and Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management and Governance*, ***16*(3)**, 477-509. doi: 10.1007/s10997-010-9160-3

Mitra, P.K., Agrawal, V., and Ghosh, A. (2015). Exploring the factors for effective sustainability reporting: A survey of Indian chemical industry. *Asian Social Science,* ***11*(3)**, 197-211. doi: 10.5539/ass.v11n3p197

Mohamad, Z.Z., Salleh, H.M., Ismail, N.D., and Chek, I.T. (2014). Does quality of non-financial information disclosure influence firms' profitability in Malaysia? *International Journal of Academic Research in Accounting, Finance and Management Sciences,* ***4*(4)**, 297-306. Retrieved from http://hrmars.com/hrmars_papers/Article_28_Does_Quality_of_Non-Financial_Information.pdf

Mohammed, R., Alwi, K., and Jamil, C.Z.M. (2010). Sustainability disclosure among Malaysian Shari'ah-compliant listed companies: Web reporting. *Issues in Social and Environmental Accounting,* ***3*(2)**, 160-179. Retrieved from http://repo.uum.edu.my/17388/1/935-2204-1-SM.pdf

Momin, M.A. (2006). Corporate social responsibility and reporting by multinational corporations in Bangladesh - An exploration (Doctoral dissertation). University of Glasgow, United Kingdom. Retrieved from http://theses.gla.ac.uk/1074/2/2006momin2phd.pdf

Moneva, J.M., and Ortas, E. (2008). Are stock markets influenced by sustainability matter? Evidence from European countries. *International Journal of Sustainability Economy,* ***1*(1)**, 1-16. doi: 10.1504/IJSE.2008.020013

Moneva, J.M., and Cuellar, B. (2009). The value relevance of financial and non-financial environmental reporting. *Environmental Resource Economics*, ***44***, 441-456. doi: 10.1007/s10640-009-9294-4

Moorthy, K.M., Tan, A., Choo, C., Wei, C.S., Ping, J.T.Y., and Leong, T.K. (2012). A study on factors affecting the performance of SMEs in Malaysia. *International Journal of Academic Research in Business and Social Sciences,* ***2*(4)**, 224-239. Retrieved from http://www.hrmars.com/admin/pics/713.pdf

Moroney, R., Windsor, C., and Aw, Y.T. (2012). Evidence of assurance enhancing the quality of voluntary disclosures: An empirical analysis. *Accounting & Finance*, ***52*(3)**, 903-939. doi: 10.1111/j.1467-629X.2011.00413.x/

Morrison, J., and Schulte, P. (2009). Assessment of current and emerging practice in corporate water reporting. California: Pacific Institute. Retrieved from http://www.pacinst.org/app/uploads/2013/02/report18.pdf

Mucciarone, M., Tower, G., and Garner, M. (2012). Factors affecting the GRI disclosures in the annual reports of Australian state government departments. Perth, Western Australia: Murdoch University. Retrieved from http://www.murdoch.edu.au/School-of-Business-and-Governance/_document/working-papers/current/MBS-Working-Paper-3-2012.pdf

Muller, S. (2011). Quantitative sustainability disclosure – An international comparison and its impact on investor valuation (Master's Thesis). Lappeenranta University of Technology, Finland. Retrieved from http://www.doria.fi/bitstream/handle/10024/69887/nbnfi-fe201106101728.pdf?sequence=2

Murguia, D.I., and Bohling, K. (2013). Sustainability reporting on large-scale mining conflicts: The case of Bajo de la Alumbrera, Argentina. *Journal of Cleaner Production, **41***, 202-209. doi: 10.1016/j.jclepro.2012.10.012

Murray, A., Sinclair, D., Power, D., and Gray, R. (2006). Do financial markets care about social and environmental disclosure? Further evidence and exploration from the UK. *Accounting, Auditing and Accountability Journal, **19***(**2**), 228-255. doi: 10.1108/09513570610656105

Murray, A. (2010). Do markets value companies' social and environmental activity? An inquiry into associations among social disclosure, social performance and financial performance (Doctoral dissertation). University of Glasgow, United Kingdom. Retrieved from http://theses.gla.ac.uk/1770/

Nakabiito, S., and Udechukwu, D. (2008). Factors influencing the degree of disclosure in sustainability reporting - A study of Swedish companies using the GRI reporting guidelines (Master's thesis). Linkopings University, Sweden. Retrieved from www.diva-portal.org/smash/get/diva2:17361/FULLTEXT01.pdf

Nortje, C., Middelberg, S.L., Oberholzer, M., and Buys, P.W. (2014). Developing a sustainable balanced scorecard for the oil and gas sector. *EnvironmentalEconomics, **5***(**4**), 52-60. Retrieved from https://businessperspectives.org/journals_free/ee/2014/ee_2014_04_Nortje.pdf

Nugroho, P.I., and Arjowo, I.S. (2014). The effects of sustainability report disclosure towards financial performance. *International Journal of Business and Management Studies, **3***(**3**), 225-239. Retrieved from http://universitypublications.net/ijbms/0303/pdf/R4ME44.pdf

Nurunnabi, M. (2016). Who cares about climate change reporting in developing countries? The market response to, and corporate accountability for, climate change in Bangladesh. *Environment, Development and Sustainability, **18***(**1**), 157-186. doi: 10.1007/s10668-015-9632-3

Obaro, C. (2013). Sustainability Accounting in Nigeria. In: Financial focus- risks and regulations, PricewaterhouseCoopers, (Eds.). Nigeria: PricewaterhouseCoopers, pp: 7-10. Retrieved from https://www.pwc.com/ng/en/assets/pdf/financial-focus-december-2013.pdf

O'Dwyer, B. (2002). Managerial perceptions of corporate social disclosure: An Irish story. *Accounting, Auditing & Accountability Journal*, ***15*(3)**, 406-436. Doi:10.1108/09513570210435898

O'Dwyer, B., and Owen, D.L. (2005). Assurance statement practice in environmental, social and sustainability reporting: A critical evaluation. *The British Accounting Review, **37***(**2**), 205-229. Doi: 10.1016/j.bar.2005.01.005

O'Dwyer, B., Owen, D., and Unerman, J. (2011). Seeking legitimacy for new assurance forms: The case of assurance on sustainability reporting. *Accounting, Organizations and Society Journal, **36***(**1**), 31-52. doi:10.1016/j.aos.2011.01.002

Okafor, C., and Ogiedu, K. (2011). Investors assessment of the credibility of management disclosures. *The Journal of Research in National Development, **9***(**2**), 366-376. Retrieved from http://www.transcampus.org/JORINDV9Dec2011/Jorind%20Vol9%20No2%20Dec%20Chapter47.pdf

Okoye, A.E., and C.C. Ngwakwe (2004). Environmental Accounting: A Convergence of Antecedent Divergence. In: Accountancy: Management Companion, Nigeria, Ezejelue, A.C. and A.E. Okoye, (Eds.). Nigeria: Nigerian Accounting Association.

Omolehinwa, E., (2000). Foundation of Accounting. Lagos: Pumark Nigeria Limited. ISBN No 9782049212

Osisioma, B.C. (2013). Budgeting, auditing and governance: Implementing the accountability framework. In: The 2013 Mandatory Continuing Professional Development Programme of Association of National Accountants of Nigeria (ANAN), Nigeria, February 2013, pp: 1-20.

Otusanya, O.J., Ajibolade, S.O., and Omolehinwa, E.O. (2012). The role of financial intermediaries in elite money laundering practices: Evidence from Nigeria. *Journal of Money Laundering Control, **15***(**1**), 58-84. Doi:10.1108/13685201211194736

Owojori, A.A., and Oluwagbuyi, L.O. (2011). Challenge of corporate governance in the management of mortgage institutions in Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies, **2***(**4**), 271-274. Retrieved from http://jeteraps.scholarlinkresearch.com/articles/Challenge%20of%20Corporate%20Governance%20in%20the%20Management%20of%20Mortgage%20Institutions%20in%20Nigeria.pdf

Owolabi, A.A. (2001). An evaluation of managers' and accounting professionals' perception of environmental issues and reporting in South Western Nigeria (Master's thesis). Obafemi Awolowo University, Ile-Ife, Nigeria.

Owolabi, A. (2007). Incorporating environmental costs into Nigerian oil and gas accounting (Doctoral dissertation). Obafemi Awolowo University, Ile-Ife, Nigeria.

Owolabi, A. (2009). Environmental disclosures in annual reports: The Nigerian perspective. *Economia Aziendale Online, **1***, 151-160. Retrieved from http://riviste.paviauniversitypress.it/index.php/ea/article/viewFile/433/489

Pallant, J., (2011). SPSS survival manual: A step by step guide to data analysis using SPSS. 4th Edn., United Kingdom: Open University Press. ISBN No 0335242391

Pannu, N.S. (2014). Transnational corporate regulation through sustainability reporting: A case study of the Canadian extractive sector (Master's thesis). The University of Western Ontario, Ontario, Canada. Retrieved from http://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=3464&context=etd

Parker, L.D. (2005). Social and environmental accountability research: A view from the commentary box. *Accounting, Auditing & Accountability Journal*, ***18*(6)**, 842-860. doi: 10.1108/09513570510627739

Patten, D.M., and Zhao, N. (2014). Standalone CSR reporting by U.S. retail companies. *Accounting Forum, **38***(**2**), 132-144. Doi: 10.1016/j.accfor.2014.01.002

Perego, P. (2009). Causes and consequences of choosing different assurance providers: An international study of sustainability reporting. *International Journal of Management*, ***26*(3)**, 412-424. Retrieved from https://repub.eur.nl/pub/19537/44768327.pdf

Peters, G.F., and Romi, A.M. (2009). Carbon disclosure incentives in a global setting: Empirical investigation. Retrieved from waltoncollege.uark.edu/acct/Carbon_Disclosure.doc

Peters, G.F., and Romi, A.M. (2015). The association between sustainability governance characteristics and the assurance of corporate sustainability reports. *AUDITING: A Journal of Practice & Theory*, ***34*(1)**, 163-198. Doi: 10.2308/ajpt-50849

Pfarrer, M.D., Smith, K.G., Bartol, K.M., Khanin, D.M., and Zhang, X. (2005). Coming forward: Institutional influences on voluntary disclosures. Retrieved from http://mba.tuck.dartmouth.edu/mechanisms/pages/Papers/Pfarrer.pdf

Plumlee, M., Brown, D., Hayes, R.M., and Marshall, S. (2010). Voluntary environmental disclosure quality and firm value: Further evidence. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?

Pollach, I. (2011). The interconnection between corporate environmental reporting contents and news coverage of environmental issues: A longitudinal study. Retrieved from pure.au.dk/portal/files/45849556/NCA_Irene_Pollach.docx

Popa, A., Blidisel, R., and Bodgan, V. (2009). Transparency and disclosure between theory and practice: A case study of Romania. In: Proceedings of FIKUSZ 2009

Symposium for Young Researchers, Budapest, Hungary, 15-17 November. Budapest Tech Keleti Karoly Faculty of Economics, Tavaszmezou, pp: 173-183. Retrieved from http://www.uni-obuda.hu/users/vecseya/RePEc/pkk/sfyr09/Popa_Adina.pdf

Porte, M.S., and Sampaio, E.S. (2014). Inconsistencies in sustainability reports – The case of Suzano. *Research Journal of Finance and Accounting, 5*(**15**), 43-51. Retrieved from http://iiste.org/Journals/index.php/RJFA/article/view/14787

Powell, W.W., and Colyvas, J.A. (2008). The new institutionalism. In: International Encyclopedia of Organization Studies, Clegg, S.R., and J.R. Bailey, (Eds.). Thousand Oaks, California: SAGE Publications, Inc. pp: 977-979. ISBN No 9781412915151. Retrieved from http://web.stanford.edu/group/song/papers/NewInstitutionalism.pdf

Puszczak, K., Fromczyk, A., and Urbanski, M. (2013). Analysis of sample size in consumer surveys. Retrieved from https://www.oecd.org/std/leading-indicators/GFK%20K.Pusczaksample%20size%20in%20customer%20surveys_paper.pdf

Qi, Y., Taplin, R., and Brown, A.M. (2012). Natural environmental disclosures in the annual reports of Chinese listed entities. *Journal of Asian and African Studies, 47*(**6**), 587-604. doi: 10.1177/0021909611422498

Quick R. (2008). Voluntary sustainability reporting practices in Germany: A study on reporting quality. *Contabilldade e Gestao, 5*, 7-35. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.584.5126&rep=rep1&type=pdf

Rankin, M., Windsor, C., and Wahyuni, D. (2011). An investigation of voluntary corporate greenhouse gas emissions reporting in a market governance system: Australian evidence. *Accounting, Auditing & Accountability Journal*, ***24***(**8**), 1037-1070. doi: 10.1108/09513571111184751

Ratanajongkol, S., Davey, H., and Low, M. (2006). Corporate social reporting in Thailand: The news is all good and increasing. *Qualitative Research in Accounting & Management, 3*(**1**), 67-83. doi:10.1108/11766090610659751

Raucci, D., and Tarquinio, L. (2015). A study of the economic and non-financial performance indicators in corporate sustainability reports. *Journal of Sustainable Development, 8*(**6**), 217-230. Doi: 10.5539/jsd.v8n6p216

Rautiainen, A. (2010). Conflicting legitimations and pressures in performance measurement adoption, use and change in Finnish municipalities (Dissertation). University of Jyvaskyla, Finland. Retrieved from https://jyx.jyu.fi/dspace/bitstream/handle/123456789/25738/9789513940720.pdf?sequ

Ricart, J.E., Rodriguez, M.A., and Sanchez, P. (2005). Sustainability in the boardroom: An empirical examination of Dow Jones Sustainability World Index

leaders. *Corporate Governance: The International journal of business in society,* ***5*****(3),** 24-41. Doi:10.1108/14720700510604670
Rowe, A.L., and Wehrmeyer, W. (2001). Why does the talk of positive environmental values not match the walk of environmental accountability in Shanghai? In: The 3rd Asia-Pacific Interdisciplinary Research in Accounting Conference, Adelaide, Australia, 15-17 July 2001, pp: 1-19.

Rubbens, C., Monaghan, P., Bonfiglioli, E., and Zadek, S. (2002). Impacts of reporting: The role of social and sustainability reporting in organizational transformation. Brussels, Belgium: CSR Europe. Retrieved from http://www.zadek.net/wp-content/uploads/2011/04/CSR_AccountAbility_Impacts-of-Reporting_2002.pdf

Salteh, H.M., Nahandi, Y.B., and Khoshbakht, H. (2011). Evaluating the relationship between corporate governance and voluntary disclosure in level automotive and manufacturing industries, basic metals and food and pharmaceutical products. *Business and Management Review,* ***1*****(10)**, 46-57. Retrieved from http://www.businessjournalz.org/articlepdf/BMR_11014.pdf

Salzmann, O., Ionescu-Somers, A., and Steger, U. (2005). The business case for corporate sustainability: Literature review and research options. *European Management Journal,* ***23*****(1)**, 27-36. Doi: 10.1016/j.emj.2004.12.007

Sam, C., and Tiong, P.N.C. (2015). An investigation of the corporate responsibility report assurance statements of the Big Four banks in Australia. *Journal of Economics Library,* ***2*****(1)**, 3-14. Retrieved from http://www.kspjournals.org/index.php/JEL/article/view/181/327

Samkin, G. (2012). Changes in sustainability reporting by an African defence contractor: a longitudinal analysis. *Meditari Accountancy Research*, ***20*****()**, 134-166. Doi: 10.1108/10222521211277834

Saunders, M., Lewis, P. and A. Thornhill, (2007). Research methods for business students. 4th Edn., England: Financial Times/Prentice Hall. ISBN No 0273701487

Sawani, Y., Zain, M.M., and Darus, F. (2010). Preliminary insights on sustainability reporting and assurance practices in Malaysia. *Social Responsibility Journal*, ***6*****(4)**, 627-645. Doi: 10.1108/17471111011083482

Scaltrito, D. (2015) Assessing disclosure quality: A methodological issue. *Journal of Modern Accounting and Auditing,* ***11***(9), 466-475. Retrieved from http://www.davidpublisher.com/Public/uploads/Contribute/560b99e9794cb.pdf

Schaltegger, S. (2012). Sustainability reporting in the light of business environments: Linking business environment, strategy, communication and accounting. Retrieved from http://www2.leuphana.de/umanagement/csm/content/nama/downloads/download_publikationen/Schaltegger_Sustainability_Reporting_in_the_Light_of_Business_Environments.pdf

Schonbohm, A., and Hofmann, U. (2012). Comprehensive sustainability reporting – A long road to go for German TecDax 30 companies. Germany: Berlin School of Economics and Law, Institute of Management. Retrieved from http://www.mba-berlin.de/fileadmin/user_upload/MAINdateien/1_IMB/Working_Papers/2012/WP_68_online.pdf

Scott, W.R., (2001). Institutions and Organizations: Ideas and interests. 2nd Edn., Thousand Oaks, California: Sage Publications. ISBN No 1412950902

Scott, W.R., (2008). Institutions and organizations: Ideas and interests. 3rd Edn., Thousand Oaks, California: Sage Publications. ISBN No 1412950902

Securities and Exchange Commission (2011). Code of Corporate Governance for Public Companies. Nigeria: Securities and Exchange Commission. Retrieved from www.sec.gov.ng/code-of-corporate- governance-.html

Sethi, P.S. (1975). Dimensions of corporate social performance: An analytical framework. C*alifornia Management Review*, ***17*****(3)**, 58-64. Doi: 10.2307/41162149

Setyorini, C.T., and Ishak, Z. (2012). Corporate social and environmental disclosure: A positive accounting theory view point. *International Journal of Business and Social Science,* ***3*****(9)**, 152-164. Retrieved from http://ijbssnet.com/journals/Vol_3_No_9_May_2012/17.pdf

Shum, P., Chen, H., and Burritt, R.L. (2009). A cross-country study of the determinants of sustainability reporting and assurance. In: 1st South American Congress on Social and Environmental Accounting Research, Universidade Federal do Rio de Janeiro, Brazil, 25-26 July 2009, pp: 1-26.

Sisaye, S. (2011). Ecological systems approaches to sustainability and organizational development: Emerging trends in environmental and social accounting reporting systems. *Leadership & Organization Development Journal*, ***32*****(4)**, 379-398. Doi: 10.1108/01437731111134652

Sisaye, S. (2012). An ecological analysis of four competing approaches to sustainability development. *World Journal of Entrepreneurship, Management and Sustainable Development,* ***8*****(1)**, 18-35. Doi:10.1108/20425961211221606

Sobhani, F.A., Zainuddin, Y., Amran, A., and Baten, M.A. (2011). Corporate sustainability disclosure practices of selected banks: a trend analysis. *African Journal of Business Management,* ***5*****(7)**, 2794-2804. Doi:10.5897/AJBM10.1155

Sobhani, F.A., and Amran, A. (2012). Managerial perceptions concerning non-disclosure of sustainability issues: A case of two selected banks in Bangladesh. *Asian Business Review*, ***1*****(1)**, 56-66. Retrieved from http://oaji.net/articles/2014/800-1398835645.pdf

Soyka, P.A., (2012). Creating a sustainable organization: Approaches for enhancing corporate value through sustainability. New Jersey: FT Press. ISBN No 0132874407

Stubbs, W., and Higgins, C. (2012). Sustainability and integrated reporting: A study of the inhibitors and enablers of integrated reporting. Sydney: Institute of Chartered Accountants in Australia. Retrieved from http://dro.deakin.edu.au/eserv/DU:30064924/higgins-sustainabilityand-2012.pdf

Suchman, M.C. (1995). Managing legitimacy- strategic and institutional approaches. *The Academy of Management Review*, ***20*****(3)**, 571-610. Retrieved from https://www.jstor.org/stable/pdf/258788.pdf

Sufian, (2012). Corporate social responsibility disclosure in Bangladesh. *Global Journal of Management and Business Research,* ***12*****(14)**, 149-155. Retrieved from https://journalofbusiness.org/index.php/GJMBR/article/viewFile/781/710

Sustainable Stock Exchange Brochure (2012). Retrieved from www.sseinitiative.org/wp-content/uploads/2012/03/Brochure-SSE_updates-version_2013.pdf

Sustainable Stock Exchange Initiative. (2013). Sustainability reporting policies. Retrieved from http://www.sseinitiative.org/sustainability-reporting-policies/

Swaen, V. (2002). Corporate social responsibility: Do managers and Consumers have the same conception of "doing good'? In: 10th International Conference of the Greening of Industry Network, Goteborg, Sweden, 23-26 June 2002, pp: 1-13. Retrieved from https://gin.confex.com/gin/archives/2002/papers/010140Swaen.pdf

Tamoi, J., Faizah, D., Mustaffa, M.Z., and S. Yussri (2014). Does good corporate governance lead to better sustainability reporting? An analysis using structural equation modelling. *Procedia-Social and Behavioral Sciences*, ***145***, 138-145. Doi: 10.1016/j.sbspro.2014.06.020

Tang, F.Y., and Chan, K.Y. (2010). Research on sustainability reporting in Hong Kong (Bachelor's thesis). Hong Kong Baptist University, Hong Kong. Retrieved from http://libproject.hkbu.edu.hk/trsimage/hp/07009496.pdf

Tavares, M.C. and L.L. Rodrigues (2016). The Determinants of Sustainability Reporting of the Portuguese Public Sector Entities. In: Global Perspectives On Risk Management and Accounting in the Public Sector, Ferreira, A.C.S., Azevedo, G.M.C., Oliveira, J.S. and R.P.F. Marques, (Eds.). United States of America: Information Science Reference, pp: 226-251. ISBN No 9781466698031

The Association of Chartered Certified Accountants and Net Balance Foundation (2012). The state of sustainability report assurance in the ASX 100. Retrieved from http://www.accaglobal.com/content/dam/acca/global/PDF- technical/sustainability-reporting/tech-tp-ssra.pdf

The Certified General Accountants Association of Canada (2005). Measuring up: A study on corporate sustainability reporting in Canada. Retrieved from www.cga-canada.org/en-ca/ResearchReports/ca_rep_2005- 06_sustainability.pdf

The Nigerian Stock Exchange (2015). Market segmentation. Retrieved from http://www.nse.com.ng/investors/becoming-an-investor/FAQs/The%20NSE%20Market%20Segmentation.pdf
The Nigerian Stock Exchange (2015). Industry sectors. Retrieved from http://www.nse.com.ng/Issuers-section/listing-your-company/industry-sector

Thijssens, T., Bollen, L., and Hassink, H. (2015). Secondary stakeholder influence on CSR disclosure: An application of stakeholder salience theory. *Journal of Business Ethics, **132*****(4)**, 873-891. doi:10.1007/s10551-015-2623-3

Thistlethwaite, J. (2015). The challenges of counting climate change risks in financial markets. Retrieved from https://www.cigionline.org/sites/default/files/policy_brief_no.62.pdf

Thoradeniya P., Lee, J., Tan, R., and Ferreira, A. (2015). Sustainability reporting and the theory of planned behavior. *Accounting, Auditing & Accountability Journal, **28***(**7**), 1099 – 1137. doi: 10.1108/AAAJ-08-2013-1449

Tilt, C.A., Tilling, M.V., and Davidson, R. (2006). NGO activism via websites. In: Australasian Conference on Social and Environmental Accounting Research. Wellington, New Zealand, 22-24 November, pp: 1-12. Retrieved from https://digital.library.adelaide.edu.au/dspace/bitstream/2440/55401/1/hdl_55401.pdf

Torres-Reyna, O. (2007). Panel data analysis: Fixed and random effects using Stata (v. 4.2). Retrieved from https://www.princeton.edu/~otorres/Panel101.pdf

Tol, R.S.J. (2009). The economic effects of climate change. *The Journal of Economic Perspectives,* ***23(*2**), 29-51. Retrieved from http://www.econ.yale.edu/~nordhaus/homepage/documents/Tol_impacts_JEP_2009.pdf

Tregidga, H., Milne, M.J., and Kearins, K. (2007). The role of discourse in bridging the text and context of corporate social and environmental reporting. In: 5th Asia-Pacific Interdisciplinary Research in Accounting Conference, Auckland, New Zealand, 8-10 July 2007, pp: 1-24. Retrieved from http://www.victoria.ac.nz/sacl/about/events/past-events2/past-conferences/csear2006/documents/tregidga-milne-kearins.pdf

Tregidga, H., Milne, M., and Lehman, G. (2012). Analyzing the quality, meaning and accountability of organizational reporting and communication: Directions for future research. *Accounting Forum*, ***36***(**3**), 223-230. doi: http://dx.doi.org/10.1016/j.accfor.2012.07.001

United Nations (2012). Resolution adopted by the General Assembly on 27 July 2012. Retrieved from http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N11/476/10/PDF/N1147610.pdf?OpenElement

United Nations Conference on Trade and Development (2008). Guidance on corporate responsibility indicators in annual reports. New York and Geneva: United Nations.

United Nations Conference on Trade and Development (2013). Best practice guidance for policy makers and stock exchanges on sustainability reporting initiatives. Retrieved from http://unctad.org/meetings/en/SessionalDocuments/ciiisard67_en.pdf

United Nations Environment Programme (2012). UNEP upgraded to universal membership following Rio+20 Summit. Retrieved from http://www.unep.org/documents.multilingual/default.asp?documentid=2700&articleid=9363&l=en

United Nations Environment Programme (2013). Groups of friends of paragraph 47. Retrieved from http://www.unep.org/resourceefficiency/Business/SustainableandResponsibleBusinessCorporateSustainabilityReporting/GroupofFriendsofParagraph47/tabid/105011/Default.aspx

United Nations Global Compact (2015). Our participants. Retrieved from https://www.unglobalcompact.org/what-is-gc/participants

United Nations Sustainable Stock Exchanges Initiative (2014). Sustainable stock exchanges: 2014 report on progress. Retrieved from www.sseinitaitive.org/wp-content/uploads/2012/03/SSE-2014-ROP.pdf

United Nations Environment Programme Finance Initiative (2015). Our members. Retreived from http://www.unepfi.org/members/

Utami, W. (2015). Financial performance and the quality of sustainability disclosure based on Global Reporting Initiative: Value relevances study in Indonesia Stock Exchange. *Mediterranean Journal of Social Sciences, **6***(**5**), 243-248. doi: 10.5901/mjss.2015.v6n5s5p243

Uwuigbe, U. (2011). Corporate environmental reporting practices: A comparative study of Nigerian and South African firms (Doctoral dissertation). Covenant University, Nigeria.

Vourvachis, P. (2008). In search of explanations for corporate social reporting (CSR): An attempt to revisit legitimacy theory. In: British Accounting Association Annual Conference, Blackpool, United Kingdom, 1-3 April 2008, pp: 1-71. Retrieved from http://business.kingston.ac.uk/sites/default/files/3_rp_corsocialreport.pdf

Wallen, C., and Wasserfaller, M. (2008). Internal organizational factors influencing voluntary CSR disclosure - The case of three Swedish state-owned companies (Bachelor’s thesis). University of Gothenburg, Sweden. Retrieved from https://gupea.ub.gu.se/bitstream/2077/17654/1/gupea_2077_17654_1.pdf.

Wanderley, L.S.O., Lucian, R., Farache, F., and Filho, J.M.S. (2008). CSR information disclosure on the web: A context-based approach analyzing the influence of country of origin and industry sector. *Journal of Business Ethics*, ***82***, 369-378. doi:10.1007/s10551-008-9892-z
Waris, A., and Muhammad, R. (2013). Factors influencing corporate social and]environmental disclosure (CSED) practices in the developing countries: an institutional theoretical perspective. *International Journal of Asian Social Science*, ***3*(3)**, 590-609. Retrieved from http://www.aessweb.com/pdf-files/590-609.pdf

Wayne, A.M.V. (2002). Sustainability reporting in South Africa. *Corporate Environmental Strategy*, ***9*(1)**, 79-85. doi: 10.1016/S1066-7938(01)00157-9

Weber, O., Diaz, M., and Schwegler, R. (2014). Corporate social responsibility of the financial sector – Strengths, weaknesses and the impact on sustainable development. *Sustainable Development,* ***22*(5)**, 321-335. doi:10.1002/sd.1543

Weber, O., Acheta, E., and Adeniyi, I. (2016). The impact of sustainability codes of conduct in the financial sector. Ontario, Canada: Centre for International Governance Innovation. Retrieved from https://www.cigionline.org/sites/default/files/no.92_web_0.pdf

Weber, O., and Koellner, T. (2008). The relation between sustainability performance and financial performance of firms. *Progress in Industrial Ecology: An International Journal,* ***5*(3)**, 236-254.

Wensen, K. V., Broer, W., Klein, J., and Knopf, J. (2011). The state of play in sustainability reporting in the European Union. Retrieved from ec.europa.eu/social/BlobServlet?docId=6727&langId=en

Whitley, R., (1999). Divergent capitalisms: The social structuring of change of business systems. Oxford: Oxford University Press. ISBN No 9780198293965

Wilburn, K., and Wilburn, R. (2013). Using global reporting initiative indicators for CSR programs. *Journal of Global Responsibility,* ***4*(1)**, 62-75. doi: 10.1108/20412561311324078

Wild, S. (2008). Sustainability reporting in fishing industry management-Regulation versus voluntarism. *Australasian Accounting, Business and Finance Journal*, ***2*(3)**, 57-70. Retrieved from http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1038&context=aabfj

Williams, B., Wilmshurst, T., and Clift, R. (2010). The role of accountants in sustainability reporting - A local government study. In: 6th Asia Pacific Interdisciplinary Research in Accounting Conference, University of Sydney, Sydney New South Wales, Australia, 12-13 July 2010, pp. 1-18. Retrieved from http://apira2010.econ.usyd.edu.au/conference_proceedings/APIRA-2010- 043-Williams-Belinda-Sustainability-reporting.pdf

Wilmshurst, T.D., and Frost, G.R. (2000). Corporate environmental reporting. A test of legitimacy theory. *Accounting, Auditing & Accountability Journal*, ***13*****(1)**, 10-26. doi: 10.1108/09513570010316126

Woolf, A.H. (1912). A short history of accountants and accountancy. London: GEE & Co. (Publishers) Ltd. Retrieved from https://archive.org/stream/shorthistoryofac00wooluoft/shorthistoryofac00wooluoft_djvu.txt

World Commission on Environment and Development (1987). Report of the World Commission on Environment and Development: Our Common Future. Retrieved from http://www.un-documents.net/our-common-future.pdf

Zhang, T., Gao, S.S., and Zhang, J.J. (2007). Corporate environmental reporting on the web- An exploratory study of Chinese listed companies. *Issues in Social and Environmental Accounting,* ***1*****(1)**, 91-108. Retrieved from www.iiste.org/Journals/index.php/ISEA/article/download/895/816

Zhao, N. (2011). An investigation of social and environmental reporting practices - In a Chinese context (Doctoral dissertation). University of London, United Kingdom. Retrieved from https://pure.royalholloway.ac.uk/portal/files/4503946/re_submit.pdf

Zhou, S. (2010). Determinants of assurance on carbon emissions - An international investigation (Master's thesis). University of New South Wales, Australia. Retrieved from http://unsworks.unsw.edu.au/fapi/datastream/unsworks:8741/SOURCE02?view=true

Zulkifli, N., Telford, B., and Marriott, N. (2007). Reaching social and environmental accountability in Malaysia. In: 5th Asia Pacific Interdisciplinary Research in Accounting Conference. Auckland, New Zealand, 8-10 July 2007, pp: 1-68. Retrieved from http://repository.um.edu.my/65812/1/apira_aucklandNZ.pdf

Zuo, J., Zhao, Z., Xia, B., Zillante, G., and Pan, Z.Y. (2014). Sustainability reporting in construction contractors: A case study. In: Proceedings of the 18th international symposium on advancement of construction management and real estate, Yang, D., and Y. Qian, (Eds.). Heidelberg: Springer, pp: 341-348. ISBN No. 9783642449161

Zvezdov, D. (2012). Sustainability accounting: Towards improved information management and management control (Doctoral dissertation). University The Leuphana University of Luneburg, Germany. Retrieved from http://opus.uni-lueneburg.de/opus/volltexte/2012/14226/pdf/Dissertation.pdf

Zyl, A.S. (2013). Sustainability and integrated reporting in the South African corporate sector. *International Business & Economics Research Journal,* ***12*****(8)**, 903-926. Retrieved from https://www.cluteinstitute.com/ojs/index.php/IBER/article/viewFile/7988/8042

Appendix I: Sustainability Reporting Index

Economic Indicators
Revenue
Operating costs
Employee wages and benefits
Payments to Providers of Capital
Payments to Government
Community Investments
Risks and Opportunity posed by climate change
Financial Implications of the risk and opportunity posed by climate change
Costs of actions taken to manage risks or opportunities posed by climate change
Value of Defined Benefit Plan obligations
Mode of Settling the Defined Benefit Plan Obligations (Liability)
Percentage of Salary contributed by the employer and employee
Financial Assistance received from government
Spending on local suppliers at significant locations of operations
Environmental Indicators
Renewable and non-renewable materials used
Recycled materials used to manufacture the organization's product and services
Fuel/electricity/heating/cooling/steam consumption
Electricity/heating/cooling/steam sold
Reduction in energy consumption due to conservation
Water withdrawn for operations
Water recycled and reused
Gross direct Greenhouse gas Emissions
Organic Pollutants
Water discharge and quality of water discharged
Waste and method of disposal
Number and volume of spills
Environmental protection expenditures
Assessment of suppliers on the basis of environmental risks
Assessment of clients on the basis of environmental risks

Social Indicators
Benefits to full-time employees
Injury/injury rate/occupational diseases rate
Health and Safety employee training
Representation of men and women in governance bodies
Equal remuneration of men and women
Child labour
Local community development programmes
Stakeholder engagement plans
Anti-corruption policies and procedures
Political financial and other kinds of contributions made by the organization
Suppliers and clients subject to assessments for impacts on society
Potential negative impacts on society identified in the supply chain
Governance Indicators
Governance structure and composition
Competencies of members of the highest governance body
Composition of Board directors
Directors' Tenure
Directors' other significant positions and commitments
Stakeholder representation
Chairman is an Executive Officer
Conflicts of interest – cross-board membership and related party disclosures
Board's role in identifying and managing economic, social and environmental impacts
Committee that incorporates material aspects in sustainability report
Highest governance body in risk management
Directors' and Executive Remuneration
Organization's code of conduct and code of ethics
Mechanisms for seeking advice on Integrity Issues
Whistle blowing mechanisms or hotlines
Total

Appendix II: Research Questionnaire

Dear Respondent,
This research questionnaire was designed to investigate the importance of the factors that could influence sustainability reporting of business organizations in Nigeria. This study is strictly meant for an academic research and the results will be of utmost benefit to the industry. Your participation in this survey will be highly appreciated. Confidentiality of your responses is assured and anonymity is guaranteed as results will be presented in grouped data form.

Thank you for your time.

Yours sincerely,

Researcher

Section A- Kindly rate the Importance of the following factors as it relates to sustainability reporting
(Each of these factors may be able to influence sustainability reporting. But you can tell us the extent to which they are important in influencing sustainability reporting on a scale of 1 to 4). **EI- Extremely Important, I-Important, SI- Slightly Important, NI-Not Important**

S/No.	Statements	EI	I	SI	NI
1	Initiation from Chief Executive Officer of organization				
2	Pressure from the Board of Directors				
3	Employee Training on sustainability reporting by business organizations				
4	Professional Accounting Association Training of Accounting Professionals				
5	Professional Accounting Firms Training of Accounting Professionals				
6	Investors' concern with long-term performance of the business organization				
7	Securities and Exchange Commission (SEC) Code of Corporate Governance				
8	Central Bank of Nigeria (CBN) Sustainability Banking Principles				
9	Successful Industry Leaders' engaging in sustainability reporting				
10	Consumers' interest in sustainable products and services of an organization				
11	Revenue base of a business organization				
12	Total asset base of a business organization				
13	Foreign lenders' emphasis on approving loans on the basis of sustainability performance				
14	Local lenders' emphasis on approving loans on the basis of sustainability performance				
15	Presence of a business organization in a foreign country				
16	Corporate membership of external governance bodies such as United Nations Environment Programme (UNEP), global oil and gas industry association for environmental and social issues (IPIECA), and United Nations Global Compact (UNGC)				
17	Human resources on sustainability				
18	Employees' attitude towards sustainability reporting				
19	Accounting firms' Provision of Assurance Services on sustainability reporting to organizations				
20	Use of assurance services on sustainability reporting by business organizations				
21	Rating of business organizations on the basis of sustainability performance				
22	Awards given to business organizations for sustainability performance				

Section B - Kindly note that SA-Strongly Agree, A- Agree, D-Disagree, SD-Strongly Disagree

S/No.	Statements	SA	A	D	SD
1	The Chief Executive Officer of my organization initiates sustainability reporting				
2	The Board of Directors of my organization pressures this organization to engage in sustainability reporting				
3	Employees in this organization are trained on sustainability reporting				
4	Accounting professionals in this organization subscribe to training on sustainability reporting by Professional Accounting Associations in Nigeria				
5	Accounting professionals in this organization subscribe to training on sustainability reporting by Professional Accounting Firms in Nigeria				
6	The investors in this organization are concerned with long-term performance				
7	This organization is guided by the Securities and Exchange Commission (SEC) Code of Corporate Governance guidelines for sustainability reporting				
8	This organization is guided by the Central Bank of Nigeria (CBN) Sustainability Banking Principles on sustainability reporting				
9	This organization looks up to Successful Industry Leaders' sustainability reporting				
10	The Consumers of the products and services of this organization are interested in sustainable products and services				
11	The revenue base of this organization is high				
12	The total asset base of this organization is high				
13	Foreign lenders emphasize on approving loans on the basis of sustainability performance of an organization				
14	Local lenders emphasize on approving loans on the basis of sustainability performance of an organization				
15	This organization has presence abroad and this influences her sustainability reporting				
16	This organization is a corporate member of external governance bodies such as United Nations Environment Programme (UNEP), global oil and gas industry association for environmental and social issues (IPIECA), and United Nations Global Compact (UNGC)				
17	There are sustainability officers in this organization				
18	Employees' attitude towards sustainability reporting is encouraging				
19	Accounting firms provide assurance services on sustainability reporting to this organization				
20	This organization uses assurance services on sustainability reporting provided by accounting firms				
21	This organization is rated by external parties on the basis of sustainability performance				
22	This organization has received awards on the basis of sustainability performance				

Section C

1. How would you rate the **Extent/Level** of Sustainability Reporting of your organization? High ( ) Medium ( ) Low( )
2. Which industry does your organization belong to? Banking ( ) Oil and Gas ( ) Consumer Goods ( ) Industrial Goods ( ) Others ( )
3. Which Department do you belong to in your organization? Investor Relations ( ) Corporate Communications ( ) Compliance ( ) Finance ( ) Risk Management ( ) Others ( )
4. What is your Highest Academic Qualification: HND ( ) BA/BSc. ( ) MBA () M Sc () Ph.D ( )
5. Professional Qualification: ICAN ( ) ANAN ( ) ACCA ( ) CISA ( ) Others ( )
6. How many years have you spent in the organization: Less than 1 year ( ) 1 to 3 years ( ) 4 to 6 years ( ) 7 to 10 years ( ) Above 10 years ( )

Appendix IIIa: List of Companies in the Population as at 2015

Access Bank Plc	DN Tyre & Rubber Plc	Berger Paints Plc	Austin Laz & Company Plc
Diamond Bank Plc	Flour Mills Nigeria Plc	Beta Glass Plc	Avon Crowncaps & Containers
Eco Transnational Inc.	Golden Guinea Breweries Plc	Cap Plc	Cement Company of Northern Nigeria Plc
FBN Holdings Plc	Guinness Nigeria Plc	Cutix Plc	Meyer Plc
FCMB Group Plc	Honeywell Flour Mill Plc	Dangote Cement Plc	Paints and Coatings Manufactures Plc
Fidelity Bank Plc	International Breweries Plc	DN Meyer Plc	Premier Paints Plc
Guaranty Trust Bank Plc	McNichols Plc	First Aluminum Nigeria Plc	Anino International Plc
Skye Bank Plc	Multi-Trex Integrated Foods Plc	Greif Nigeria Plc	Capital Oil Plc
Stanbic IBTC Holdings Plc	Northern Nigeria Flour Mills Plc	Lafarge Africa Plc	Japaul Oil & Maritime Services Plc
Sterling Bank Plc	NASCON Allied Industries Plc	Portland Paints & Products Nigeria Plc	Seplat Petroleum Development Company
Union Bank Nigeria Plc	Nestle Nigeria Plc	BECO Petroleum Product Plc	AG Leventis Plc
United Bank for Africa Plc	Nigerian Breweries Plc	Conoil Plc	C & I Leasing
Unity Bank Plc	Nigerian Enamelware Plc	Eterna Plc	Chellarams
WEMA Bank Plc	PZ Cussons Nigeria Plc	Forte Oil Plc	Ellah Lakes
Zenith International Bank Plc	UTC Nigeria Plc	Mobil Oil Nigeria Plc	Morison Industries
7-UP Bottling company Plc	Unilever Nigeria Plc	MRS Oil Nigeria Plc	Multiverse
Cadbury Nigeria Plc	Union Dicon Salt Plc	Oando Plc	Thomas Wyatt Nigeria
Champion Breweries Plc	Vitafoam Nigeria Plc	Ray Unity Petroleum Plc	Presco
Dangote Flour Mills Plc	Vonofoam Plc	Total Nigeria Plc	Aluminium Extrusion Industries
Dangote Sugar Refinery Plc	Ashaka Cement Company Plc	African Paints Nigeria Plc	B.O.C Gases Nigeria

Source: Directory of the Nigerian Stock Exchange (2015)

Appendix IIIb: List of Companies Sampled

Access Bank Plc	Flour Mills Nigeria Plc	DN Meyer Plc
Diamond Bank Plc	Guiness Nig Plc	First Aluminium Nig Plc
Eco Transnational Inc.	Honeywell Flour Mill Plc	Greif Nigeria Plc
FBN Holdings Plc	International Breweries Plc	Lafarge Africa Plc
FCMB Group Plc	Mcnichols Plc	Portland Paints & Products Nig. Plc
Fidelity Bank Plc	N.Nig Flour Mills Plc	BECO Petroleum Product Plc
Guaranty Trust Bank Plc	National Salt Co. Nig Plc	Conoil Plc
Stanbic IBTC Holdings Plc	Nestle Nigeria Plc	Eterna Plc
Sterling Bank Plc	Nigerian Breweries Plc	Forte Oil Plc
Union Bank Nigeria Plc	PZ Cussons Nigeria Plc	Mobil Oil Nig Plc
United Bank for Africa Plc	UTC Nigeria Plc	MRS Oil Nig Plc
Unity Bank Plc	Unilever Nigeria Plc	Oando Plc
WEMA Bank Plc	Union Dicon Salt Plc	Ray Unity Pet. Plc
Zenith International Bank Plc	Vitafoam Nigeria Plc	Total Nig Plc
7-UP Bottling company Plc	Ashaka cement company plc	
Cadbury Nigeria Plc	Berger Paints Plc	
Champion Breweries Plc	Beta Glass Plc	
Dangote Flour Mills Plc	Cap Plc	
Dangote Sugar Refinery Plc	Cutix Plc	
DN Tyre & Rubber Plc	Dangote Cement Plc	

Source: Directory of the Nigerian Stock Exchange (2015)