Indian Journal of Applied Business and Economic Research Vol. 3, No. 2, **2022** : pp. 207-238 © ARF India. All Right Reserved URL : <u>www.arfjournals.com</u> https://DOI:10.47509/IJABER.2022.v03i02.02



# REPUTATIONAL SUSTAINABLE CAPITAL REPORTING AND PERFORMANCE OF LISTED MANUFACTURING COMPANIES IN NIGERIA

# Etim Osim Etim<sup>1\*</sup>, Idorenyin H. Effiong<sup>2</sup>, Nsima John Umoffong<sup>3</sup> and Usen Paul Umo<sup>4</sup>

<sup>1</sup>Department of Accounting, Faculty of Business Administration, University of Uyo, Nigeria. E-mail: osimacc@gmail.com; etimosimetim@uniuyo.edu.ng <sup>2</sup>Niger Delta Development Commission (NDDC), Federal Capital Territory (FCT) Abuja, Nigeria <sup>3</sup>Department of Accounting, Faculty of Business Administration, University of Uyo, Nigeria <sup>4</sup>Department of Accounting, Faculty of Management Sciences, Akwa Ibom State University, Nigeria '(Corresponding Author)

Received : 10 July 2022; Revised : 13 August 2022; Accepted : 20 August 2022; Published : 27 December 2022

*Abstract:* The study was conducted to examine the implication of reputational sustainable capital reporting on the performance of listed manufacturing companies in Nigeria. This is as result of the need for organizations to publish sustainability reports which are integrated in nature.

*Ex-port factor* research design was adopted for the study involving use of contact analysis to extract data required for the study from published annual reports of the sampled companies. Data collated were analyzed using descriptive and inferential statistics. 9 items construct reputational (Social & Relational) capitals were based on sustainability index in line with international initiative Reporting Council (IIRC, 2013). Results showed reputational sustainable capital have significant negative influence on the ROA (r2 = 0.148, Coefficient -0.135, t = -2.105, p = 0.036, stat. Error = 0.096). It was concluded that quoted manufacturing companies in Nigeria had poor or weak reputational capital reporting index. It is recommended that regulatory authorities showed make reputational sustainable capital reporting mandatory with stringent penalty on defaulters.

Keywords: sustainability reporting, reputational sustainability capital, ROA.

# 1.1. Introduction

Over the years, numerous listed corporations globally, always consider reporting more of financial than sustainable perspectives. This reporting

#### To cite this article:

Etim Osim Etim, Idorenyin H. Effiong, Nsima John Umoffong and Usen Paul Umo (2022). Reputational Sustainable Capital Reporting and Performance of Listed Manufacturing Companies in Nigeria. *Indian Journal of Applied Business and Economic Research*, Vol. 3, No. 2, pp. 207-238. https://DOI: 10.47509/IJABER.2022.v03i02.02 frame is not only narrow and one-sided corporate information disclosures, but also cannot guarantee corporate sustainability nor disclose true performance. This "one-sided reporting might lead to the firms' inability to balance the corporate actions and activities with performance and sustainable perspectives, especially with the recent shift in reporting focus from stakeholder-returns or traditional (financial) accounting to sustainability reporting" (Etim and Effiong, 2020).

Recently, companies in advance nations are less interested in reporting only financials as many entities are providing stakeholders with diverse reporting approaches which are integrated in nature such as Environmental, Social and Governance (ESG) disclosures, sustainability reporting among others (Suttipun, 2017). Suttipun (2017) disclosed, that all the aforementioned reporting frameworks are still voluntary in many countries and without generalized frameworks; as such, giving companies an avenue to only report positive information to the stakeholders. The author added that there is difficulty in comparing sustainable capital reporting of one firm with another due to diverse reporting approaches and adoption of diverse guidelines to measure and report entity's information, which may affect financial performance.

International Integrated Reporting Council (IIRC) published sustainability reporting index in 2013 for disclosing various sustainable capitals – environmental, social and relationships, human and intellectual. Morros (2016) expressed that organizations disclose to diverse interest groups who might not only be interested in financial information but would be more interested in where, why and how corporate entities create value and the strategy companies employ to carry out sustainable capitals reporting.

GRI (2011) defined sustainable capital reporting "as the recognition, measurement, presentation and disclosure of various corporate capitals and their corporate performance towards achievements of sustainable resources development". Turker and Sayar (2014) and Oladipupo, Mathias and Mohammed (2013) opined that sustainable capital reporting being a key part of IR is: "to bring all-inclusive and operational approach to reporting; to provide facts for investment decision; to promote accountability and servitude; to improve firms' profitability and performance; and to support a more integrated thinking of sustainable capital".

Corporate sustainable capital reporting and firms' performance have risen as imperative concerns for researchers in contemporary studies. According to Okwuosa and Amaeshi (2017), relationship, intellectual and human capital footprints of private and public organizations in the annual reports linking the impact of the firms on the capitals with the performance. In summary, sustainable capital reporting could be seen as publication by reporting firms with an incentive to quantify and reduce their environment, social, human and intellectual capitals impact, reduce operating costs, and enhance protection of human and other lives as well as improving corporate image and firms' performance.

Furthermore, studies on sustainability reporting conducted in other countries (United States of America (USA), Australia, New Zealand, south Africa, India and many of the European countries) have pointed out that sustainable capitals (environmental/natural, social, human and intellectual capital) accounting and reporting is an important ingredient of corporate success and that it can contribute much more to firm's performance. Researchers observed that, these capitals targeting cost reduction, reduces wastes and improves eco-efficiency, enhance values and corporate image (reputation) as well as creating a sustainable base for improved earnings and operations in the future. Also, determine performance depend on the efforts of the employees, and helps organizations formulate their strategies, to assess strategy executions, to assist in diversification and expansion decisions, as well as to use as basis for compensations and to communicate measures to external stakeholders. To the best of the knowledge of the researchers, these have not been considered holistically in Nigerian context.

Therefore, in this study, reputational sustainable capital reporting (Social and relational capital reporting), and performance of quoted manufacturing firms in Nigeria is examined.

## 1.2. Statement of the Problem

The growing diverse reporting approaches without conscious reporting of non-financial information in the annual reports have made the reporting of business performance more problematic and doubtful. This is because all capitals employed by the firms in value creation are not listed with how the capitals influences firms' performance.

Researchers are of the opinion that the benefits offered by reputational sustainable capital reporting cannot be over-emphasized. These benefits include; value preservation and creation, cost savings and productivity, access to raw materials/products, image/brand protection, product/ servicing costing and pricing, and improved performance among others.

In Nigeria, some firms published or reported a lot of stand-alone information and this information are often insufficiently integrated and lack interconnectivity with their performance.

Above all, of the empirical studies reviewed, no study holistically examined the influence of Reputational Sustainable Capital (social and relationship capital reporting,) on firms performance in the Nigerian context to the best of the knowledge of the researchers. Therefore, these issues in relations to the chosen quoted manufacturing firms in Nigeria are examined.

#### **1.3. Objective of the Study**

The objective of this study is premise on the assumption that social and relational capital encapsulate reputational sustainable capital.

Hence, the objective of the study is to:

Evaluate the influence of reputational sustainable capital reporting (social and relationships capital reporting) on profitability of the listed manufacturing firms in Nigeria.

# **1.4. Research Question**

Does reputational sustainable capital reporting (social and relationships capital reporting) influence profitability of the listed manufacturing firms in Nigeria?

#### 1.5. Hypothesis of the Study

H<sub>0</sub>: Reputational Sustainable Capital reporting (Social and relationships capital reporting) does not significantly influence profitability of listed manufacturing firms in Nigeria

## 1.6. Scope of the Study

Examined in this research work is reputational sustainable reporting (social and relational capital) of the selected listed manufacturing firms in Nigeria from 2011 – 2020 financial years in the annual reports using IIRC (2013) disclosures index in relations to the sampled firms. The industry of study is manufacturing (industrial and natural resources) firms in Nigeria.

Data for the research were limited to the period between 2011 – 2020 because some selected firms' annual reports were not available outside this period. This study is only based on one sector with focus on the manufacturing sub-sector. Accordingly, the findings would not be generalized to other sectors of the Nigerian economy. Data were obtained through pooled-data technique for ten financial years' period for twenty-three (23) selected listed sampled firms under study. This gives a total of two hundred thirty (230) observation data set. The sustainable capital scores were based on nine areas of the 28 items/issues of the 2013 International Integrated Reporting Council (IIRC) Disclosures Index.

# 1.7. Significance of the Study

This research would be of relevance to the management of manufacturing firms in Nigeria; and specifically, highlighting to the need to ensure quality reputational sustainable capital reporting (social and relationship capital) in the annual reports and as a would-be benchmark to these firms. The study would create an awareness to the manufacturing firms and other sectors on how they can bring to the knowledge of stakeholders of their reputational sustainable capital performance and the extent of influence on profitability. The study would help to unveil level of involvement of the social capital image and encourage the firms to prepare integrated reports in line with IIRC (2013) disclosures guidelines. The findings of this study would provide empirical support for integration of reputational sustainable capital information with financial information in the firms' annual reports in Nigeria. It would provide information to capital market regulators and government agencies and other regulatory authorities in considering the policy to mandatory national and global sustainable capital disclosures for sustainable development reporting.

# **REVIEW OF RELATED LITERATURE**

# 2.1. Conceptual Review

This section, the concepts of reputational sustainable capital reporting – social and firms' performance were discussed.

(a) Social and Relationships Capital Reporting hereafter referred to Reputational Sustained capital concerns with the dialogue of social concerns, relations and responsibilities of the firm to wider stakeholders. Social capital also involve with the institutions and business communities that help to maintain and develop human capital in partnership with others; examples, families, communities, businesses, trade unions, schools, and voluntary organizations. The social and relationship capital is implanted in the links an organization has, both internal and external ones. Social capital is friends, colleagues, and more general contacts through which one receive opportunities to use his financial and human capital (Burt, 1992).

According to Riahi-Belkaoui (2004), social capital reporting encompasses the process of selecting firm-level social performance variables, measures and measurements procedures; systematically developing information useful for evaluating the Baker (2000) defined the corporate social capital as resources embedded in the inter-person relationship and firm relationship, including information, idea, clue, business opportunities, financial capital, power and influence, feeling support, goodwill, trust and cooperation. A firm can enhance the organizational capability through its social capital. Researchers argued that corporate social capital includes social norm, social value, context, strategic vision, and the network. They point out that social capital is an important way in which business can sustain competitive advantage under the new economy circumstance.

It is believed that social capital can help to explain the original dynamic power of organization, because it comprises the following strategic material: trust, reciprocal understanding, shared value and behavior, which make people contact actively and bundle the inter-person network and community members. How corporations supply of corporate social capital interacts with "non-social capital" such as firm size and price of resource. Firm's social performance and communication of such information to concerned social group, both within and outside the firm is very important (Junwei, and Haiyan, 2006).

Social capital refers to the industrious value of societal influences, where societal creativity is assumed not only in the narrow sense of the production of market goods and services (although this is an essential component) but in terms of the manufacturing of a wide-ranging of well-being products (Scrivens, 2013). Social capital includes durable assets such as awareness, institutions, culture, religion, among others (UNEP, UNU-IHDP, 2014).

Social capital reflects the aggregate resources embedded within, available through, and derived from the network of relationships possessed by an individual or organization, which are strengthen over time due to repeated interactions and trust (Andrew and Tsang, 2005). Individual actions can lead to strengthening/ erosion of trust, thereby leading to tangible changes (positive or negative) in the level of access to aggregate resources availed through networks (Coleman, 1988).

Fukuyama (1995) and the Organisation for Economic Co-operation and Development, OECD (2004) defined social capital as networks together with shared norms, values and understandings that facilitate co-operation within or among groups.

Previous researches have claimed that the profitability of companies could be affected by the level of disclosure of information by firms since it involve cost burden. Profitability is financial metric that indicates firms' ability to make incomes capable to cover its expenditures and operational costs during the operational period. Ability to make sufficient profit is the primary objective of every business, therefore, providing and insight to the level of performance. In other words, this is a company's capability of generating profits from its operations (Umoren *et al.*, 2015). Umoren *et al.* 

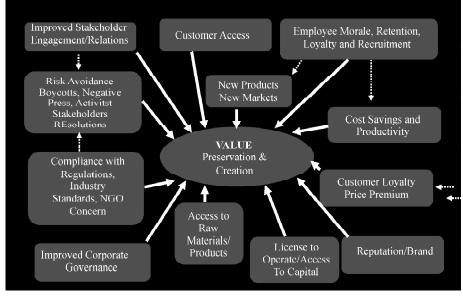


Figure 2.1: Perceived Benefits of Sustainable Capital Reporting

*Source:* Warren and Thomsen (2012)

(2015) and Udo (2019) found that profitable firms in Nigeria are unlikely to disclose more environmental information; this is because the firms see more disclosures as projecting the firms for more liabilities such as more taxes, royalties, and communities' compensation among others.

**The Conceptual Framework:** The variables indicates the statistics that are related to this study, as displayed in Figure 2.2 for the objective thus:

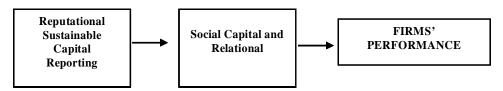


Figure 2.2: Researchers' Conceptualization (2022)

# 2.1.5. Reputational Sustainable Capital Disclosure Measurement

In order to measure the firms' reputational sustainable capital disclosures, the International Integrated Reporting Initiative (2013) is deployed. The IIRC (2013) provides guidelines to firms in reporting on their activities, and is the internationally accepted standard for sustainable capital reporting. Over the years, researchers have adopted and adapted the following methods to compute the sustainable disclosures scores as follows:

Unweighted Sustainable disclosure index.

It is calculated as : Each company; disclosed items Total No. of items expected to be disclosed by the company

This is the most common sustainable capital reporting (SCR<sub>it</sub>) index. The rating varies from author; the author (s) may have rating values from + 1 or 0. This method is most popular and was adopted in the studies of Malaysia (Nor *et al.*, 2016) Bangladesh (Ullah *et al.*, 2013) and United States of America (Razeed, 2010), Nigeria (Umoren et al., 2015) among oithers. This is limited in usage as it adopted a dichotomous procedure in which an item scores "I", if disclosed and "0" if not disclosed and no value for partial disclosure.

Proportion/Probability Sustainable disclosure index. It is computed thus:

 $SCR_{it} = \frac{\sum_{it} (disclosed items)}{\sum_{i} \sum_{t} (all \, possible \, cases \, of \, all \, companies \, disclosures \, for \, period)}$ 

Where; SCR = sustainable capital reporting, imt = company I in year t.

The rating under this index varies from + (full disclosure), =  $\frac{1}{2}$  (partial disclosure) to 0 (non- disclosure). Udo (2016) and Udo (2019) adopted the proportion/probability index

# 2.2. Theoretical Review

This theory was advocated by Max Weber in 1947 but was further developed by Lindblom in 1994 and Suchman Mark in 1995. The theory argued that businesses are out to ensure that they function within the boundaries and customs of the people. Max Weber opined the understanding that firms should engage in businesses that are legitimate, lawful and promote the well-being of the society in which they operate. Legitimacy theory is the further most deliberated theory in clarifying corporate reporting (Lindblom, 1994; Oba and Fodio, 2012) and environmental disclosure in corporate annual reports is a tool for maintaining legitimacy (Deegan, 2022). In this study, the legitimacy theory is to enlighten on how reporting of sustainable capital could be used to minimize the gap between organization activities and social expectations, and also, it would encourage firms to be environmentally, socially and economically responsible to the public as a whole.

	Results	Mixed results n	Mixed results	Mixed results	ect Mixed results n
	Research technique	Panel regression	Multiple regression model	Multiple regression model	Fixed effect regression model
ïrms' Performance	Methodology	Content analysis Panel regree	Ex-post facto research design, content analysis using GRI guidelines	Ex-post facto research design, Content analysis using GRI – G <sup>4</sup> guideliness	Ex-post facto research design, Content analysis using GRI – G4 guidelines
tal Reporting and F	Dependent	Grass income, market price per share	Financial performance	Market performance provied by Tobin's Q.	Financial performance
Table 2.1: Sustainable Capital Reporting and Firms' Performance	Independent	Sustainability disclosure index	Sustainability components (community, employees, environment and governance	Sustainability aspects (economics, environmental and social aspect)	Sustainability aspects (economics, environmental and social aspect)
Table 2	Scope of study	Banking sector, 22 banks 2014-2016	Listed India companies, 2010-2012	44 listed companies in year 2013	Global Fortune of 100 from 2007-2011
	S/N Author(s)/ year of study	Uwuigbe <i>et al.</i> (2018) Nigeria	Aggarwal (2013) India	Caesarial and Busuki (2017)	Hussain (2015) Global
	S/N		7	<i>ი</i>	4

# 2.3. Empirical Review

The empirical review is presented in a summarized format as sown on the Table 2.1

Multiple cross- Sustainability section analysis impact firms' performance

> Ex-post facto research design, content analysis

Firm performance (FP)

Sustainable capital reporting (SCR)

17 listed companies S in Zealand stock r Exchange (NZX) and 51 Australian Stock Exchange (ASX)

Reddy and Gordon (2010) New Zeland and Australia

Ŋ

and cross-section

contd. table

6         Loh, Thomas         502 companies and Wang (2017)         Sustainable capital reporting Singapore         Exchange (SGX) Exchange (SGX)         Multiple research design minoard, 2011-2016         Sustainability research design analysis         Multiple cumocle         Sustainability research design analysis           7         Sutopo, Kot         110 winners of and 10 not         Sustainability and 10 sot         Sustainability avard scores         Value relevance:         Ex-post facto         Multiple         Sustainability perfor           7         Sutopo, Kot         110 winners of and 10 sot         Sustainability avard scores         Value relevance:         Ex-post facto         Multiple         Sustainability perfor           7         Sutopo, Kot         110 winners of and 10 sot         Sustainability avard scores         Value relevance:         Ex-post facto         Multiple         Sustainability perform           8         Ching Gerab         All firms listed         Sustainable         Accounting and terestorh design         Regression         No in terestorh           9         Sir Lanka         Doilsted firms         Sustainable         Accounting and terestorh design         Regression         No in terestorh           10         Iuwekt, Lijumand         Doilsted firms         Sustainable         Accounting and terestorh design         Regression         No in terestorh <th>S/N</th> <th>S/N Author(s)/ year of study</th> <th>Scope of study</th> <th>Independent</th> <th>Dependent</th> <th>Methodology</th> <th>Research technique</th> <th>Results</th>	S/N	S/N Author(s)/ year of study	Scope of study	Independent	Dependent	Methodology	Research technique	Results
Sutopo, Kot110 winners of StafinabilitySustainability earnings per share earnings per share content analysisMultiple Regression Regression and 110 not award scoresMultiple earnings per share content analysisMultiple RegressionArialia (2018)and 110 winners of and 110 not from 2008 to 2016Sustainability avard scores change and book change and book change change and book change and book change and book change and book change change and book changeMultiple research design analysis market-based market-based change change change changeMultiple research design analysis research design analysis analysis analysis analysisChing Gerab and Prerenab and Pratono (2016) IndonesiaAlf irms listed in social socialSocial capital, market performance, RDEKultiple research design research design 	6	Loh, Thomas and Wang (2017) Singapore	502 companies listed on the Singapore Stock Exchange (SGX) Mainboard, 2011-2016	Sustainable capital reporting	Firms' performance	Ex-post facto research design using content analysis	Multiple regression model	Sustainable capital reporting is positively correlated to firm's performance
Ching, Gerab and TosteAll firms listedSustainable reportsAccounting and market-basedEx-post factoRegression(2017) Brazilien corporate sustainabilityreportsmarket-based market-basedresearch designanalysis(2017) Brazilsustainability Index 2008-2014corporate sustainabilityCorporate tresearch designResearch designanalysisSir Lanka200 listed firms in Dhaka StockCorporate Social disclosuresROA, market research designEx-post facto regressionMultipleSir Lanka200 listed firms in Dhaka StockCorporate Social disclosuresROA, market research designEx-post facto regressionMultipleUnwei, Lijunand101 firms listed in MarketSocial capital, performance, EPSMultiple research designregression regression2006) ChinaMarketsocial socialMarketEx-post facto performance, RDSMultiple regression2006) ChinaMarketsocial capital, performance, RDSMarketSocial capital, performance, RDESocial capital, performance, RDESocial capital, malysis	N	Sutopo, Kot Adiati and Ardila (2018)	110 winners of SRA (SRA firms) and 110 not received SRA (non-SRA firms) from 2008 to 2016	Sustainability capital reporting award scores	Value relevance: earnings per share, earnings per share change and book value per share	Ex-post facto research design, content analysis -GRI	Multiple Regression model	Sustainable Capital Reporting Award (SRA) contributes to relevancy of the information in financial statements.
Sir Lanka200 listed firmsCorporate SocialROA, marketEx-post factoMultipleBhuyan, Lodhin Dhaka Stockdisclosurescapitalization,research designregressionBhuyan, Lodhin Dhaka Stockdisclosurescapitalization,research designregressionand PererabExchange,(CDS)Tobin Q(2017) Bangladesh2011-2014Junwei, Lijunand101 firms listed inSocial capital,MarketEx-post factoMultipleand HaiyanChina Stocksocialperformance, EPSresearch designregression(2006) ChinaMarketresponsibility (SR)Partoro, Saputra390 respondentsSocial capital,MarketSocial capital,Pratono, Saputra390 respondentssocial capital,MarketSurvey researchMultiple(2016). Indonesiaresponsibility (SR)Performance, ROEdesignregression	x	Ching, Gerab and Toste (2017) Brazil	All firms listed ien corporate sustainability Index 2008-2014	Sustainable reports	Accounting and market-based variables	Ex-post facto research design	Regression analysis	No influence
Junwei, Lijunand 101 firms listed in Social capital, Market Ex-post facto Multiple and Haiyan China Stock social performance, EPS research design regression (2006) China Market responsibility (SR) Tatoroo, Saputra 390 respondents Social capital, Market Social capital, Pratoroo, Saputra 390 respondents social performance, ROE design regression (2016). Indonesia responsibility (SR) Tatoroo Saputra Social capital, Market Social capital, Performance, ROE design regression (2016). Indonesia Social capital (SR) Tatoroo Saputra Social capital, SR) Tatoroo Saputra Social capital, Market Social capital, Performance, ROE design regression and Pudjibudojo Tatoroo Saputra Social capital, SR) Social Capital, SR	6	Sir Lanka Bhuyan, Lodh and Pererab (2017) Bangladesh		Corporate Social disclosures (CDS)	ROA, market capitalization, Tobin Q	Ex-post facto research design	Multiple regression	Significant influence on ROA
Pratono, Saputra 390 respondents Social capital, Market Survey research Multiple and Pudjibudojo social social performance, ROE design regression (2016). Indonesia responsibility (SR) analysis	10	Junwei, Lijunand and Haiyan (2006) China	101 Chi Mai	Social capital, social responsibility (SR)	Market performance, EPS	Ex-post facto research design	Multiple regression	Significant effect on market performance
	11	Pratono, Saputra and Pudjibudojo (2016). Indonesia	390 respondents	Social capital, social responsibility (SR)	Market performance, ROE	Survey research design	Multiple regression analysis	Affect both market performance and ROE

216

S/N	S/N Author(s)/ year of study	Scope of study	Independent	Dependent	Methodology	Research technique	Results	
12	12 Jensen and Berg (2012) Developed Countries	309 leading companies	Qualitative characteristics of companies (institutional framework factors) Companies factors	Sustainable development reporting and integrated reporting	<i>Ex-post facto</i> research design using content analysis	Multiple Regression Model	Positive Significant influence	
13	13 Dienes, Sassen and Fisher	Listed companies in United States of America (USA)	Divers of sustainability reporting	Sustainability reporting	<i>Ex-post</i> facto research design, Content analysis	Least squares multiple regression		
14	Bhatia and tuli (2017) India	158 Indian selected firms from different industries.	Corporate attributes	Sustainable capital reporting	<i>Ex-post</i> facto research design, Content analysis	Multiple Regression model	Mixed results	
Soui	Source: Researchers' Compilation (2022)	mpilation (2022)						

đ

# 2.5. Gap in Literature

From the empirical reviewed, it seems that there is still no study collectively on constituents of sustainable capital reporting (environmental/natural capital reporting (ECR), Social and relationships capital reporting (SRCR), human capital reporting (HCR) and intellectual capital reporting ICR) and firms'' performance in emerged nations, specifically in the business context of Nigeria. On the other hand, previous researchers have found mixed results sustainable capital reporting. Hence, this study is sought to examine these issues in the listed manufacturing firms in Nigeria.

# 3. METHODOLOGY

# 3.1. Research Design

*Ex-post facto* research design was used in the research. The design was considered best for the study as it allow for the use of existing data that researcher cannot be manipulate

# 3.2. Population of the Study

The population is the twenty-eight (28) firms in the manufacturing industry (the industrial and natural resources companies) quoted and actively traded stocks on the floor of the Nigerian Stock Exchange from 2009 financial year to December 31, 2018. The selection of this population was centre on the point that, the firms belonging to the sector of the Nigeria economy that deploy greater sustainable capitals for value and wealth creation.

# 3.3. Sample Size

Taro Yamane's sample size formula was used to determine twenty-three (23) firms out to the total population of twenty-eight (28) firms at an error term of 8.755%.

# 3.4. Sampling Technique

Purposive sampling technique was applied in the research to select the twenty-three (230 sampled firms. this technique was used on the basis of the easiness with which the data can be collected from the firm' websites as actively traded listed companies. The study employed data from the twenty-three (23) manufacturing (industrial and natural resources) firms' covering ten (10) years period from 2009 to 2018.

# 3.5. Source and Nature of Data

Secondary sources of data were used and consisted of the annual reports and accounts of the selected firms and formed the main sources of data that were used in the study. Specifically, data from directors' reports, sustainability reports, financial statements and NSE compliance reports. The data were financial and non-financial in nature and were available both in soft copies and hard copies.

# 3.6. Method of Data Collection

The data were pooled from the twenty-three(23) sampled companies listed in the capital market. Both online and hard copies of annual reports and accounts of the sampled firms were collected from Lagos and Port Harcourt Branches of Nigerian Stock Exchange (NSE) for the period, 2009 to 2018 using content analysis method. Financial statements and sustainability reports of the selected firms were extracted, examined, coded, questioned and computed for the needed data. Secondary data were also obtained through reviewing relevant text-books, journals, and IIRC guidelines (2013).

# 3.7. Theoretical Specification of Model

This section is the theoretical specification of model, where performance is measured by profitability as proxy by Return on Assets (ROA) and reputational sustainable capital reporting (RSCR), as presented in Table 3.1, thus:

		remonnance		
Variables	Types	Measurement/Definition	A priori Sign	Source
Performance, (profitability) return on Assets (ROA)	Dependent	Profit before interest & tax (PBIT) Total Assets (TA)		Annual Report
Sustainable and reputational Capital Reporting (RSCR)	Independent	$\Sigma_{it}$ (Scores of RSCR per firm for the year) $\Sigma_i \Sigma_t$ (Scores of all possible cases of all the firms' RSCR for the year)	-	Annual Report

Table 3.1: Theoretical Framework of Reputational Sustainable Capital Reporting and
Performance

Source: Complied by Researchers (2022)

$Perf{it} = f(SCR_{it})$	Functional Relationship Equation
$Y_{it} = \alpha_0 + \alpha_1 x_{1it} \epsilon_{it}$	Econometric Equation
$ROA_{it} = \alpha_0 + \alpha_2 SRCR_{it} + \varepsilon_{it}$	<b>Conceptual Model Equation</b>

Where;

Perf. = Performance, measured as Profitability and Proxy by Return on Assets (ROA)

RSCRC = Reputational Sustainable (Social and Relationship) Capital Reporting  $(X_2)$ 

# 3.9. Method of Data Analysis

Descriptive and inferential statistics were used to analyze the data. In order to determine the level of sustainable capital reporting engaged by the selected listed manufacturing firms in Nigeria as well as to obtain sustainable capital reporting score/value, a checklist of 9 items in line with International Integrated Reporting Council (IIRC, 2013) was carried out using content analysis. Each firm was scored "1" for full disclosure, "1/2" for partial disclosure and "0" for non-disclosure under content analysis, which is presently the most widely used technique for analysis of accounts in annual reports.

Annual reports of the selected manufacturing firms from 2011 to 2020 were examined and extracted using content analysis for the level (quantity) of sustainable capital reporting was determined using probability disclosure score/index and based on IIRC (2013) sustainable disclosure index with 9 points checklist. It is to be noted that the Sustainable Capital Reporting (SCR<sub>it</sub>) score for each firm was computed by using the probability index based method as given thus:

$$SCR_{it} \frac{\sum_{it} (d_{it} \text{ disclosed of each capital's issues per firm for the year}}{\sum_{i} \sum_{t} (d_{it} \text{ all possible cases of the firms' capital disclosures for the year})}$$

 $\Sigma(d_{it} disclosed of each capital's issues per firm for the year = summation of disclosure scores of all the four categories of the capital of each sampled firm in a given year.$ 

 $\Sigma_i \Sigma_t (d_{it} \text{ all possible cases of the firms' capital disclosures for the year}) = Summation of the grand totals of all possible disclosures of all four categories of capitals' issues of all the firms in a given year.$ 

Disclosure score of 1 = Full disclosure, that is, both quantitative for each issue considered on social and relational capitals respectively provided in the annual report of the firm in line with IIRC (2013) guidelines;

Disclosure score of  $\frac{1}{2}$  = Partial disclosure, that is, only qualitative information or only quantity information are provided in the annual report of the firm on the item considered of each capital; and Disclosure score of 0

220

= Non-disclosure, if both quantitative and qualitative environmental information are not provided in the annual report of the company on the item considered.

Simple regression models were used to examine the influence of sustainable capital reporting on profitability. This was carried out with the help of Statistical Package for Social Sciences (SPSS) Version 20.0 at 5% level of significance in order to reach valid conclusions for the study.

# 4. DATA PRESENTATION, ANALYSIS AND FINDINGS

In this section, the data collected for the study, result of data analysis and discussion of the findings were presented as follows:

# 4.1. Presentation and Analysis of Empirical Results

This section is the computation of the reputational sustainable capital reporting scores to show the level of reporting of social and relational capital in each of the selected Firms' Annual Reporting from 2011-2020.

			RS	SCR
S/N	Firm Name	n	Mean	SD
1	Aluminum	10	0.24	0.051
2	Austinlaz	10	0.056	0.117
3	Bata Glass	10	0.088	0.098
4	Berger Paint	10	0.149	0.136
5	BOC Gases	10	0.037	0.069
6	CAP PLC	10	0.100	0.062
7	CCNN Plc	10	0.086	0.106
8	CUTOX	10	0.092	0.126
9	Dangote	10	0.223	0.269
10	DNM	10	0.113	0.088
11	First Allu	10	0.071	0.052
12	FTNCOCOA	10	0.095	0.201
13	Greif	10	0.122	0.164
14	LAferge	10	0.187	0.236
15	Livestock Feeds	10	0.035	0.077
16	Multiverse	10	0.114	0.197
17	NOTORE	10	0.161	0.055
18	Okomu Oil	10	0.058	0.139
19	PCMN	10	0.061	0.033
20	PP&P Nig	10	0.097	0.114
21	Premier	10	0.091	0.186
22	Presco PLc	10	0.075	0.088
23	THOMASWY	10	0.071	0.104

Table 4.1: Level of Social and Relational Capital Reporting in each of theSelected Firms in the Annual Reports from 2011 – 2020

Source: Computation by Researchers (2022) using SPSS version 20.0 SRCR – Social and Relationships Capital Reporting

Result in Table 4.1 shows the average level of SRCR capitals reporting in each of the manufacturing firms in the annual reports. From the results, it can be deduced that Dangote reported highest social and relationship capital reporting (SRCR) with 22.3%. from these results, it has been found that the sustainable capital mostly reported in the annual reports of the manufacturing firms is SRCR.

The findings of the study indicate that SRCR are still under developing and those firms operating in the manufacturing sector were reporting very little information about their performance on the sustainable capitals in Nigeria. This finding is not quite surprising as most multinational manufacturing firms operating in Nigeria are not quoted on the NSE, as such were not included in the study.

#### 4.2. Statistical Analyses of Data

In this section, the hypotheses of the study were tested and results were analysed to achieve the objectives of the study. It was carried out using inferential statistics with the help of statistical Package Science (SPSS) Version 20.0 at 5% level of significance.

	Ν	Mini- mum	Maxi- mum	Mean	Std. Deviatior	Skewness 1		kurtosis	
Social and relationship capital reporting	230	0.000	0.778	0.100	0.138	2.363	0.160	6.472	0.320
ROA	230	-0.516	1.732	0.110	0.207	3.561	0.160	23.716	0.320

Table 4.2: Descriptive Statistics for the Research

Source: Researchers' Computation (2022) using SPSS Version 20.0

Result in Table 4.2 presents the descriptive statistics for the research variables. Result shows mean of 0.100 and 0.110 with standard deviation of 0.138 and 0.207, Reputational Sustainable capital reporting, and ROA respectively. The skewness of 2.363 and 3.561 were obtained for Reputational Sustainable capital reporting and ROA respectively. The skewness obtained for all the variables were greater than 0 which means that the variables were all skewed to the right. This is an indication that within the period under study, the values of these variables increased more than it decreased. Result also yielded kurtosis of 6.472 and 23.716 for Reputational Sustainable capital reporting, and ROA respectively. The kurtosis obtained for the variables were all greater than 3.00 which is the kurtosis of the normal distribution which indicates that the research

variables were all leptokurtic (excess kurtosis). The normality of these variables were examined using Shapiro-Wilks test and the results presented in Table 4.3.

Variables			Shapiro-Wilk	
	Statistic	Df		P-value
Reputational Sustainable capital reporting	0.711	230		0.000
ROA	0.724	230		0.000

Table 4.3: Summary of Normality Test using Shapiro-Wilk test for the Research Variables

Source: Researchers' Computation (2022) using SPSS version 20.0

Table 4.3 reveals that all the research variables have probability values of 0.0000. the probability obtained for all the research variables were all less than 0.05 (p<0.05) which indicates that the distribution of the data obtained from these variables are not normally distributed.

 Table 4.4: Regression summary showing the influence of ROA with SRCR of the listed manufacturing firms in Nigeria

Model	R	R Square (R <sup>2</sup> )	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
	0.384	0.148	0.132	0.193	2.039

Source: Research's' Computation (2022) using SPSS Version 20.0

Table 4.4 present summary result of the influence of Reputational Sustainable capital reporting, on profitability of the manufacturing listed firms. From Table 4.4, a regression square (R<sup>2</sup>) coefficient of determination of 0.148 was obtained, which means that 14.8% was the overall contribution of independent variable, Reputational Sustainable capital reporting on the dependent variable (profitability). Result shows adjusted coefficient of determination of 0.132. that implies that 13.2% of the variation in profitability (performance) of the selected listed firms was explained by Reputational Sustainable capital reporting, the Durbin Watson statistic of 2.039 was obtained which is greater than 1 and less than 3.00 meaning that there is no evidence of autocorrelation (Field, 2009). Result of Analysis of Variance (ANOVA) showing whether there is a regression relationship between the dependent variable (profitability) and the independent variables Reputational Sustainable capital reporting is presented in Table 4.5.

Table 4.5: ANOVA result summary of ROA, RSCR, of the listed manufacturingg firms in Nigeria

Model	Sum of squares	df	Mean Squares	F-cale.	F-crit.	p-Value
Regression	1.453	4	0.363	9.735	2.412	0.000
Residual	8.396	225	0.037			
Total	9.849	229				

Source: Researchers' Computation (2022) using SPSS Version 20.0

From Table 4.5, the F-calculated of 9.735 was obtained with P-value of 0.000 as against the F-critical of 2.412 at 0.05 level of significance. Result shows that the F-calculated (9.735) is greater than F-critical (2.412) at p-Value of 0.000, which means that there is a significant regression relationship between the dependent variable (profitability of the listed manufacturing firms0 and the independent variable Reputational Sustainable capital reporting. This result also indicates that social and relationship capital reporting accounted for significant variation in the profitability of the listed firms. Parameter estimates of the multiple regression model were as presented in Table 4.6.

Table 4.6: Coefficients of the regression of ROA with SRCR of t eh listed manufacturing firms in Nigeria

Model	l	Instandardize coefficients	d	Standardized Coefficient	!	Collinearity Statistics	
	В	Std.	Beta	t-calc.	p-value	Tolerance	VIF
Reputational Sustainable capital reporting (RSCR)	-0.202	0.096	-0.135	-2.105	0.036	0.689	1.452

\*significant at 5% (P<0.05), t-critical = 1.97, Source: Author's computation (2019) using SPSS version 20.0

In Table 4.6, the regression coefficient for the model parameters were computed showing the influence of the independent variable on the dependent variable. The result shows that as Reputational Sustainable capital reporting, RSCR (b = -0.135, Std Error = 0.096, t-calc. = -2.105, p=0.036) have negative significant influence on profitability (ROA). This implies that as RSCR increase, ROA decreases and verse versa. This implies that as RSCR increases respectively, ROA decreases and vice versa.

The result also reveals standardized beta coefficient of -0.135 for RSCR, which indicates that if other variables are held constant, for every N1 increase in Reputational Sustainable capital reporting, the profitability of the selected listed firms will decrease by N0.135

Also, the Variance Inflation Factor (VIF) and tolerance level was checked from Table 4.6 results, tolerance of 0.927, for Reputational Sustainable capital reporting and VIF values of 1.079 respectively. The tolerance level were all greater than 0.1 while the VIFs were all less than 10 indicating that there is no evidence of multicollinearity.

Model Evaluation and Test of Hypothesis

The estimated model therefore is:

 $ROA_{it} = 0.053 - 0.135RSCR = e_{it}$ 

Test of Hypothesis

# Hypothesis 1

**H**<sub>0</sub>: Reputational Sustainable capital reporting do not significantly influence profitability of the manufacturing listed firms in Nigeria.

Result in Table 4.6 reveals that Reputational Sustainable capital reporting (b = -0.135, SE = 0.096, t-calc. = 2.105, p-value < 0.05) has negative influence on profitability of the selected listed firms. Result also reveals that the absolute value of the t-calculated (2.105) is greater than the t-critical (1.97) at the 0.05 level of significance. The null hypothesis is rejected. Therefore, Reputational Sustainable capital reporting has a significant influence profitability of the selected listed firms. The values of the standardized beta as well as the t-calculated are on the profitability of the selected listed firms. The values of the selected listed firms. This means that when there is a significant increase in Reputational Sustainable capital reporting, there will be a significant decrease in the profitability of the listed manufacturing firms.

# 4.3.2. Reputational Sustainable (Social and Relationship) capital Reporting (RSCR) Influence on Profitability (ROA)

The result from the regression analysis showed that RSCR has a significant negative influence on firms' profitability (ROA) as shown by the results in Table 4.6. This is confirmed as the p-value (0.036) for the influence of RSCR on ROA is less than 0.05 level of significance. The t-calculated of -2.105 indicated that RSCR has significant negative influence of firms' profitability. The result is in support of Mansaray, Yuanyuan and Brima (2017) that examined impact of Reputational Sustainable (corporate social responsibility disclosures) on financial performance (ROA) of firms in six Africa countries namely; South Africa, Kenya, Nigeria, Morocco, Egypt and Mauritius. Results all indicated that Reputational Sustainable reporting impacted the firms' ROA negatively. The authors added that the significant negative impact of RSCR on ROA is due to and extra costs burdent of corporate social responsibilities

to the firms. This result is also a fulfilment of the shareholders'/stockholder wealth, maximization and not any other stakeholder. The extra costs from RSCR include cost/expenses donations and charitable gifts, community support, contributions to the authorized bodies among others. These costs/ expenses must be recognized in the financial statements of the firms, of which eventually decrease the firms' profitability, Although, RSCR has significantly negative influence of profitability, firms still involve in RSCR for the following potential benefits. These include giving back to some stakeholders, better brand recognition, positive business reputation, increased sales and customer loyalty, operational costs savings, better financial performance in a long run, greater ability to attract talent and retain staff, organizational growth, and easier access to capital.

## 5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1. Summary

The major aim of this study was to examine reputational sustainable capital reporting and performance of quoted manufacturing firms' in Nigeria. Specifically, to examine the influence of Reputational Sustainable capital reporting (RSCR) on profitability (ROA) from 2011-2020 financial years. To achieve the objective, it was pertinent to evaluate the level of Reputational Sustainable (social and relationships) capital reporting (RSCR) in each of the selected firms in the annual reports using content analysis. These results formed the independents variable values for RSCR.

From the content and descriptive analysis of the annual reports and accounts of the 23 listed manufacturing firms in Table 4.2, the results revealed the maximum score and mean score as RSCR were 77.8%, 10.0% as at 31 December, 2020. Based on the findings on the level of reputational capital reporting, it has been revealed that the twenty- three (23) listed manufacturing companies operating in Nigeria are but little of Reputational Sustainable capital, scanty, qualitative or non-financials; ad-hoc information. It was found that the level of reputational capital reporting as at December 31, 2020 stood at an aggregate average of 25.5%.

From the regression analysis, the results of the study indicated that:

Social and relationships capital reporting have significant negative influence on profitability of the listed manufacturing firms.

# 5.2. Conclusion

In conclusion, some of the listed manufacturing companies in Nigeria were not reporting while others reported negligible information regarding social and relationship aspect in the annual reports which were not in line with IIRC (2013) Guidelines but based on the discretion of the management. It is clear the RSCR practices in the manufacturing firms in Nigeria have been far from satisfactory and hence poor in real sense of the term. Based on the findings and discussions of this study, it is concluded that Reputational Sustainable (social and relationship) capital reporting significantly influence performance of the manufacturing firms in Nigeria.

# 5.3. Recommendations

Based on the conclusion emanating from this study, the following recommendations are made:

- i. The regulatory authorities in respect of sustainability reporting social and relationship capital should not only make reporting alone mandatory but with stringent penalty on failure so as to enhance the quality and the level of RSCR of the manufacturing firms in Nigeria.
- ii. The manufacturing sector should continue to give priority to social and relationships capital practices and reporting. Efforts should be made by private and governments as well as donors to reward, honour and rank-best-performance in relation to social and relationships. This would boost and salvage the firms' profitability negatively influence by involvement RSCR.

# **5.4. Business Implications of Findings**

The major business implications of the findings are as follows:

- i. The manufacturing firms' management and practicing accountants are expected to have national guidelines and motivated from the findings to report their performance regarding social and relationships capital matters.
- ii. The researchers in sustainability reporting would make use of the issues raised in this study for more comprehensive studies in integrated reporting and reputational sustainable capital reporting.
- iii. The regulatory bodies (NSE, FRCN, MoE, MoP&L among others) are expected to realize the level of sustainable capital reporting in the annual reports as well as how the reporting social and relationships capital influence manufacturing firms' profitability in Nigeria. Also, those organizations responsible for sustainable capital regulations are expected to realize the true performance and activities of the firms and ensure compliance from the reporting firms.

iv. Investors and creditors are expected to realize whether the companies are socially, friendly as well as financially and ethically responsible in meeting the needs of all the stakeholders.

#### 5.5. Contribution to Knowledge

This research has created awareness on the reputational (social and relationship) capital reporting of the manufacturing companies in Nigeria and its influence on the listed firms' profitability in Nigeria. In this study, the reputational sustainable capital reporting has been conceptualized in line with the IIRC (2013) which is believed will act as guideline/framework and motivator to the manufacturing firms' management, industry and practicing accountants in reporting all the activities regarding sustainability matters.

## 5.6. Suggestions for Further Study

The main aim of this study was to examine Reputational sustainable capital reporting and performance of quoted manufacturing firms in Nigeria using a time frame of ten (10) years. The researcher suggests that further studies should be made on:

Reputational sustainable capital reporting on firms' profitability (using other sectors in Nigeria, with more financial years and more firms both listed and non-listed for more concrete conclusions) in Nigeria.

## References

- Abdullah, A. S. (2018). Social and environmental accounting effect on companies' profit: An empirical study of some companies in Erbil. Account and Financial Management Journal, AFMJ 3(7): 1621-1633.
- Abeysekera, I. and Guthrie (2002). Status of intellectual capital reporting in Sri Lanka: A research note. Research Note, Macquarie Graduate School of Management. Sydney: Australia, 1-19.
- Alubakar, A. A., Moses, S. and Inuwa, M. B. (2017). Impact of Environmental Disclosure on Performance of Cement and Brewery Companies in Nigeria. *Civil and Environmental Research*, (10): 40 - 46.
- ACCA, Association of Chartered Certified Accountants (2014). Sustainability matters. ACCA Policy Paper, 1 - 20. London.
- Adebawojo, O. A. (2017). Organizational Performance And Growth: The Mediating Role Of Human Asset Accounting In Nigeria Banking Industry. *Journal of Humanities And Social Science*, 22 (1, 1):24 - 29.
- Aggarwal, P. (2013). Impart 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)0): 61 70.

- Abmad, M., Waseer, W. A., Hussain, S. and Ammara, U. (2018). Relationship between environmental accounting and non-financial finns' performance: An empirical analysis of selected firms listed in Pakistan stock exchange, Pakistan. Advances in Social Sciences Research Journal, 5(1): 197-209.
- Albetairi, II., T. A., Kukreja G. and Hamdan, A. (2018). Integrated reporting and financial performance: empirical evidences from Bahraini listed insurance companies. *Accounting and Finance Research*, 7(3): 102 - 110.
- Al-Gamrh, B. and Al-Dhamari, R.A. (2016). Firm characteristic and corporate social responsibility. *International Business Management*, 10(8): 4283-4291.
- Alshehhi, A., Nobanee, H. and K.hare, N. (2018). The impact of sustainability practices on corporate financial performance: Literature trends, and future research potential. *Sustainability Review*, 10(494): 1-25.
- Andrew, C. and Tsang (2015). Reflections on the 2015 decade award social capital, networks, and knowledge transfer: An emergent stream of research. Academy of Management Review, 41(4): 1 - 8.
- Appiagyei, K., Djajadikkerta and Xiang, E. (2016). Integrated reporting and firm performance: A research framework. *Conference Paper December* 2016, 123 129.
- Asuquo, A. I., Dada, E. T. and Onyeogaziri, U. R. (2018). The effect of sustainability reporting on corporate performance of selected quoted brewery firms in Nigeria. *Journal of Business and Law Research*, 6(3):1-10, July-Sept.
- Baker, W. (2000). Achieving Success Through Social Capital: *Tapping the Hidden Resources in your Personal and Business Network.* San Francisco: Jossey-Bass Inc.
- Barako, D. (2007). Determinants of voluntary disclosures in Kenyan companies annual reports. African Journal of Business Management, (5): 113 - 128.
- Barkat, W. and Beh, ES. (2018). Influence of intellectual capital dimensions on knowledge process capability and organizational performance. *Asian Journal of Scientific Research*, 11 (3):308-318.
- Bassey, E. B., Effiok, S. 0. 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 of Nigeria. *Research Journal of Finance and Accounting*, 4(3): 57-78.
- Bhatia, A: and Tuli, Siya (2017). Corporate attributes affecting sustainability reporting: an Indian perspective. *International Journal of Law and Management*, 59(3): 322 - 340.
- Bhuyan, M., Lodh, S. C. and Perera, N. (2017). The effects of corporate social disclosure on firm performance: empirical evidence from Bangladesh. 2017 Accounting and Finance Association of Australia and New Zealand Conference, 1 - 36.
- Brand, F. (2009). Critical natural capital revisited: Ecological resilience and sustainable development. *Ecological Economics*, 68(3): 605 - 612.
- Buitendag, N., Fortuin, O. S. and Da Laan, A. (2017). Firm characteristics and excellence in integrated reporting. South African *Journal of Economic and Management Services*, 20 (1): 15-22.
- Burt, R. (1992). Structural Holes: The Social Structure of Competition. Cambridge, MA: Harvard University Press. 85p.

- Buys, P., 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.
- Caesaria, A. F. and Basuki, B. (2017). The study of sustainability report disclosure aspects and their impact on the companies' performance. *SHS Web of Conferences* 34, *Four A* 2016.
- Ching, H. Y., Gerab, F. and Toste, T. H. (2017). The quality of sustainability reports and corporate financial performance: Evidence from, Brazilian listed companies. *SAGE Open*, 2:1-9.
- Churet, C., and Eccles, R. 0. (2014). Integrated reporting, quality of management, and financial performance. *Journal of Applied Corporate Finance*, 26(1): 56 64.
- Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. The America *Journal of Sociology*, 94.
- Colman, R, (2004). Satisfied stakeholders. CMA Management, 78(1): 5 22.
- Deegan, C. (2002). The legitimizing effect of social and environmental disclosure: A theoretical foundation. Accounting, *Auditing Accountability Journal*, 4(1): 32-38.
- De Groot, R., Perk, 3. V-ID. and Chiesure, A. (2003). Importance and threat as determining factors for criticality of natural capital. *Ecological Economics*, 44(2-3), 187-204.
- Dess, G. D., and Picken, J. C. (1999). Beyond Productivity: How leading Companies achieve Superior Performance by Leveraging their Human Capital. New York: American Management Association, 23pp.
- Dess, G. D., and Picken, J. C. (2000). *Beyond Productivity: How Leading Companies Achieve Superior Performance by Leveraging Their Human Capital* New York: American. Management Association, 65pp.
- Diantimala, Y. (2018). The mediating effect of sustainability disclosure on the relationship between financial performance and firm value. *Journal of Accounting, Finance and Auditing Studies*, 4(2): 32-48.
- Dibia, N. and Onwuchekwa, J. (2015). Determinants of environmental disclosures in Nigeria: A case study of oil and gas companies. *International Journal of Finance and Accounting*, 4(3): 145-152.
- Dienes, D., Sassen R. and Fischer, J. (2016): What are the drivers of sustainability reporting? A systematic review. *Sustainability Accounting, Management and Policy Journal*, 7 (2): 154-189.
- Dobre, E., Stanila, G. 0. and Brad, L. (2015). The influence of environmental and social performance on financial performance: Evidence from Romania's listed entities. Sustainability, 7: 2513 -2553.
- Eccles, R. (2012). Get Ready: Mandated Integrated Reporting Is The Future Of Corporate Reporting. *MITSloan Management Review*: 1-5.
- Eccles, R., and Krzus, M. (2010). One Report: *Integrated Reporting for a Sustainable Strategy*. Hoboken, New York: John Wiley and Sons.
- Ekins, P., Simon, S., Deutsch, L., Folke, C. and DeGroot, R. (2003). A framework for the practical application of the concepts of critical natural capital and strong sustainability. *Ecological Economics*, 44(2-3), 165-185.

- Ekundayo, 0. U. and Odhigu, F. (2016). Determinants of human capital accounting in Nigeria. *Igbinedion University Journal of Accounting*, 1(2): 103 117.
- Elkington, 3. (1997). *Cannibals with Forks Triple Bottom Line of 21' Century Business. Stoney Creek*, CT: New Society Publishers, 234pp.
- Etale, L. M. and Otuya, S. (2018). Environmental responsibility reporting G and financial performance of quoted oil and gas companies in Nigeria. *European Journal of Business and Innovation Research*, 6 (6): 23 - 34.
- European Commission (2006). RICARDIS: Reporting Intellectual Capital to Augment Research, Development and innovation in SMEs. Accessed on June 23, 2018. http:// /ec.europa.euIinvest-in-researchIpdf/downloadepJ2oO62977b1.pdf
- Ewereoke, V. (2018). Effect of intellectual capital on performance of firms listed on Nigeria stock exchange. *Research Journal of Finance and Accounting*, 9 (8): 134-147.
- Ezejiofor, B. A. John-Akamelu, R. and Chigbo, B. E. (2016). Effect of sustainability environmental cost accounting on financial performance of Nigerian corporate organizations. *International Journal of Scientific Research and Management* (IJSRM), 4(8): 4536 - 4549.
- Fama, F. and M. Jensen (1985). Separation of ownership and control. *Journal of Law and Economics*, 25: 301-325.
- Field, A. P. (2009). Discovering Statistics using IBM SF88 Statistics: Series on Quantitative Applications in the Social Sciences, 07-092. Newbury Park, CA: Sage, 101pp.
- Freeman, R. (1984). Strategic Management: A Stakeholder Approach. Marshfield: Pitman.
- Frias-Aceituno, J.V., Rodriguez-Ariza, L. and Garcia-Sanchez, I. M. (2014). Explanatory factors of integrated sustainability and financial reporting. *Business Strategy and the Environment*, 23, 56 72.
- Fukuyama, F (1995). Trust: The Social *Virtues and the Creation of Prosperity*. New York: Free Press, l47pp
- Garg, P. (2015). Impact of sustainability reporting on firm performance of companies in India. *International Journal of Marketing and Business Communication*, 4(3) 38-45
- .Gatimbu, K. and Wabwire, J. (2016). Effect of Corporate Environmental Disclosure on Financial Performance of Firms Listed at Nairobi Securities Exchange, Kenya. *International Journal of Sustainability Management and Information Technologies*, 2 (2):1 - 6.
- Global Reporting Initiative (GRI) (2012). Sustainability reporting guidelines. Draft Version for Public Comment, GRI, Amsterdam, January 2- March 31.
- Gomes, M. (2012). Post-Convergence, what next? Accountants Today, 8 13pp.
- GRI (2011). Sustainability reporting guidelines, Version 3.1, 217pp.
- GRI (2013). The G4 sector specific disclosures for financial services. Version 4.1, 26 7pp.
- Grigoris, G., George, K., Eleni, Z. and Xanthi, P. (2016). The impact of corporate social responsibility on financial performance. *Investment Management and Financial Innovations*, 13(3-1)171-182.
- Gupta, P. and Nayar, N. (2007). Information content of control deficiency disclosures under the Sarbanes-Oxley Act: An empirical investigation. *International Journal of Disclosure and Governance*, 4(1):3 - 23.

- Higains, C., Stubbs, W., and Love, T. (2014). Walking the talks: Organizational narratives of integrated reporting. Accounting, Auditing and Accountability, 27(7): 1090 1119.
- Hussain, N. (2015). Impact of Sustainability Performance on Financial Performance: An Empirical Study of Global Fortune (N100) Firms. *Department of Management, Università Ca' Foscari Venezia Working Paper* No. 2015/0: 49pp
- Idekwulim, P. C. (2014). Teach Yourself Group Account (Fully IFRS Complied). Yaba (Lagos): Piccas Global Concept: 575 576.
- IIRC (2013). *The International IR Framework*. London: International Integrated Reporting Council. London: ACCA Publication, 32pp.
- Institute of Directors in Southern Africa (IoDSA) (2009). The King report on corporate governance for South Africa, September, retrieved 30 May 2016, from http://www.pwc.co.zalen!king3/38pp.
- Izedonnie, P. F., Odeyile, L. G. and Kuegbe, K. (2013). Human Resource Accounting and its Impact on Organisational Performance. *Journal of Economics and Sustainable Development*, 4(15): 50-56.
- Ismail, T. H. (2008). Intellectual capital reporting in knowledge economy: Evidence from Egypt. International Conference on Economic Directions III: The College Of Business Administration, Kuwait University, 34pp.
- Jensen, J. C. and Berg, N. (2012). Determinants of traditional sustainability reporting versus integrated reporting: An institutional approach. *Business Strategy and the Environment*, 21(5): 299-316.
- Jones, S. (2005). Notes of the university of sydney pacioli society: sustainability reporting in Australia: An empirical overview. *Abacus*, 41: 211-216.
- Junwei, S., Lijun, H. and Haiyan, F. (2006). The different effects of social capita' on corporate performance in China: an empirical analysis. *Canadian Social Science*, 2(2): 27—33.
- Kansal, M., Joshi, M. and Batra, G.S. (2014). Determinants of corporate social responsibility disclosures: Evidence from India. *Advances in Accounting*, 30(1): 217-229.
- Khlif, H. and Souissi, M. (2010). The determinants of corporate disclosure: A metaanalysis', International Journal of Accounting and Information Management 18(3), 198-219.
- Kiliç, M. and Kuzey, C. (2017). Factors Influencing Sustainability Reporting: Evidence from Turkey. SSRN :https://ssrn.com/abstract =30988 12 or http://dx.doi.org/ 10.2139/ssrn.30988 12; December 13, 15pp.
- Krus, P. M. (2011). Integrated reporting: If not now, when? IRZ, Heft 6, 271-276.
- Lai, A., Melloni, and G., Stacchezzini, R. (2014). Corporate sustainable development: Is integrated reporting a legitimation strategy? *Business Strategy and the Environment*, 23 (*online first publication*).
- Lindblom, C. (1994). The implications of organisational legitimacy for corporate social performance and disclosure. *Critical Perspectives on Accounting Conference*, New York, 23pp.

- Magara, R., Aming'a, N. and Momanyi, E. (2015). Effect of environmental accounting on company financial performance in Kisii County. *British Journal of Economics*, *Management & Trade*, 10(1)): 1-11.
- Makori, D. and Jagongo, K. (2013). Environmental accounting and firm profitability: An empirical analysis of selected firms listed in Bombay stock exchange, India. *International Journal of Humanities and Social Science*, 3(18): 248 — 256.
- Manescu, C. (2011). Stock returns in relation to environmental, social and governance performance: Mispricing or compensation for risk? Sustainable development, 19(2): 95-118.
- Mansaray, A. P., Yuanyuan, L. rima (2017). The impact of corporate social responsibility disclosure on financial performance of firms in Africa. *International Journal of Economics and Financial Issues, Econjournals*, 7(5): 137—146.
- Mays, S. (2003). Corporate sustainability investors perspective: *The Mays Report*. Assistant Secretary. Environment Protection Branch, Department of Environment and Heritage Retrieved 30 May 2018 from <u>http://www.arema</u> com.au/media/ mays-report.pdf, 33pp.
- Morros, J. (2016). The integrated reporting: A presentation of the current state of art and aspects of integrated reporting that need further development. Intangible Capitals, 12 (l):1-8.
- Neysi, S. H., Mazraeh, S. and Mousavi, Z. (2012). The importance of intellectual capital disclosure. *International Journal of Business and Social Science*, 3 (15): 307 310.
- Nor, N., Bahari, N., Adnan, N., Qamarul, S., Kamal, A. and Au, I. (2016). The effects of environmental disclosure on financial performance in Malaysia. *Procedia Economics and Finance*, 35: 117-126.
- Nugroho, P. and Arjowo, I. (2014). The effects of sustainability report disclosure towards financial performance. *International Journal of Business and Management Studies*, 3(3): 225-239.
- Nwobu, O. A. (2015). The Relationship between corporate sustainability reporting and profitability and shareholders fund in Nigerian banks. *The Journal of Accounting and Management*, 5 (3): 1-12.
- Nwobu, O. A. (2017). Determinants of corporate sustainability reporting in selected companies in Nigeria. PhD Thesis. Covenant University, Ota, Nigeria, 234pp
- Oba, V. and Fodio, M. (2012). Characteristics and the quality of environmental reporting in Nigeria. *Journal of Accounting and Management* (JAM) 2 (2): 33 - 48.
- OECD, Organisation of Economic Cooperation and Development (2004). *Principles of Corporate Governance*, 11p.
- Oko, S. U. (2018). Human asset accounting and its impact on the performance and financial position of firms: A study of selected companies. *Account and Financial Management Journal*, 3(8): 1703 1712.
- Okpako, P. 0., Atube, E. N. and Olufawoye, 0. H. (2014). Human resource accounting and firm performance. *Global Journal of Commerce and Management*, 3(4): 232 - 237.
- Okosa, I. and Amaeshi, K. (2017). Sustainability reporting: A strategic opportunity for the financial reporting council? *The Cable Contribute in Business*, 4p.

- Oladele, P. 0., Aribaba, F. 0., Abmodu, 0. L. and Omobola, M. A. (2018). An empirical study of human resource accounting disclosure on financial performance of selected listed firms in Nigeria. *Journal of Accounting and Management*, 8 (2): 70-82.
- Oladipupo, M., Mathias, O. and Mohammed, A. (2013). Integrated reporting: Another crisis of external dependence or a model for sustainable capital allocation? *European Journal of Globalization and Development Research*, (1): 492-506.
- Owen, 0. (2013). Integrated reporting: A review of development and their implications for the accounting curriculum. *Accounting Education*, 22 (4): 340-356.
- Perera, A. and Thrikawala, S. (2012). Impact of human capital investment on firm financial performances: An empirical study of companies in Sri Lanka. *Journal of Intellectual Capital*, 54 (3). 11 - 16.
- Pratono, A. H., Saputra, R. S. and Pudjibudojo, J. K. (2016). The social capital and firm performance: evident from Indonesia small businesses. *International Journal of Economics and Financial Issues*, 6(S7): 47 - 50.
- Qian, W., Burritt, R. and Monroe, 0. (2011). Environmental management accounting in local government: A case of waste management. Accounting, Auditing & Accountability Journal, 24 (1): 93 - 128.
- Razeed, A. (2010). Determinants of environmental disclosure practices of US resource companies: Hard copy versus internet reporting. *6th Asia Pacuic Interdisciplinary Research in Accounting Conference*. Sydney, The Sydney University, 74 p.
- Reddy, K and Gordon, L.W. (2010). The effect of sustainability reporting on financial performance: An empirical study using listed companies. *Journal of Asia Entrepreneurship and Sustainability*, 6(2): 19 42.
- Riahi-Belkaoui, A. (2004). Accounting Theory (5th ed.). USA: South-Western Cengage Learning, 281- 285pp.
- Roberts, R.W. (1992). Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory. *Accounting, Organizations and Society*, 17 (6): 595 -612.
- Robertson, F. A; and Samy, M. (2015). Factors affecting the diffusion of integrated reporting - a UK FTSE 100 perspective. *Sustainability Accounting, Management and Policy Journal*, 6(2): 190 -223.
- Sarumpaet, S. (2005). The relationship between environmental performance and financial performance of Indonesian companies. *Journal Akuntasi and Keuangan*, 7(2): 89 -98.
- Scrivens k., S. C. (2013). Four Interpretations of Social Capital: An Agenda for Measurement, OECD Statistics Working Papers, 2013/06. OECD Publishing, Paris, 89pp.
- Serafeim, 0. (2014). Integrated Reporting and Investor Clientele. *Journal of Applied Corporate Finance*, 27 (2): 1 15.
- Sidharta, I. and Affandi, P. (2016). The empirical study on intellectual capital approach toward financial performance on rural banking sectors in Indonesia. *International Journal of Economics and Financial Issues*, 6(3): 1247 1253.
- Stone, C. (1975). Where the Law Ends. New York: Harper & Row, 226pp.
- Sutopo, B., Kot, S., Adiati, A. K. and Ardilá, N. A. (2018). Sustainability reporting and value relevance of financial statements. *MDPI Sustainability Journal*, 10(678): 1-14.

- Suttipun, M. (2017). The effect of integrated reporting on corporate financial performance: Evidence from Thailand. Corporate Ownership & Control, 15(1): 133 142.
- TEEB (2010). The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A Synthesis of the Approach, Conclusions and Recommendations of TEEB, 69p.
- Tetlock, P. E. and Lemer, J. S. (1999). Accounting for the effects, of accountability. *Psychological Bulletin*, 125(2): 255-275.
- The World Business Council for Sustainable Development, WBCSD (2003). Sustainable development reporting: striking the balance. Geneva, Switzerland, 72p.
- Trencansky, D and Tsaparlidis, D. (2014). The effects of company's age, size and type of industry on the level of csr. The development of a new scale for measurement of the level of csr. Master Thesis, *UMEA University School of Business and Finance*, Sweden, 24p.
- Tundui, C. and Tundu, H. (2013). An empirical analysis of social capital and enterprise performance in Tanzania: The case of women owned businesses. *International Journal of Developing Societies*, 2W: 50 - 60.
- Turban, D. B. and Greening, D.W. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academic Management Journal*, 40(3): 658-672.
- Turker, I. and Sayar A.R.Z. (2014). The relationship between integrated reporting and financial reporting. *Management Studies*, 2(7): 465 - 478.
- Udo. E. J. (2016). Companies' financial attributes and environmental-accounting practices of the oil and gas industry in Nigeria. *AKSU Journal of Management Sciences* (*AJOMAS*,), 1(2): 60 74.
- Udo. E. J. (2019). Environmental accounting disclosure practices in annual report of listed oil and gas companies in Nigeria. *International Journal of Accounting & Finance* (IJAF,), 8(1): 2 - 21.
- Ullah, Md. H., Yakub, K. M., and Hossain, Md. P4. (2013). Environmental reporting practices in annual report of selected listed companies in Bangladesh. *Research Journal of Finance and Accounting*, 4(7): 45 58.
- Umoren, A. O., Edo, E. J., and George, B. S. (2015). Environmental, social and governance disclosures A call for integrated reporting in Nigeria. *Journal of Finance and Accounting*, 3 (6): 227 233.
- UNEP, UNU-IHDP. (2014). Inclusive Wealth Report 2014, Measuring Progress toward Sustainability. Cambridge: Cambridge University Press, 214pp.
- United States of America Environmental Protection Agency (1995). An Introduction to Environmental Accounting as a Business Management Tools. Key Concepts and Terms. USA: EPA Press, I86pp.
- Uwuigbe, U., Teddy, O., Uwuigbe, O. R., Emmanuel; O., Asiriuwa, O., Eyitomi, O. A. and Taiwo, O. 5. (2018). Sustainability reporting and firm performance: A bidirectional approach. Academy of Strategic Management Journal, 17 (3): 1 - 17.
- Uyar, A. (2012). Determinants of corporate reporting on the internet. *Managerial Auditing Journal*, 27(1): 87-104.

- Uyar, A. (2016). Evolution of corporate reporting and emerging trends. *Journal of Corporate Accounting & Finance*, 27(4): 27-30.
- Vergauwen, P. G. M. and Vanalem, F. J. C. (2005). Annual reports: Intellectual capital disclosure in the Netherlands, France and Germany. *Journal of Intellectual Capital*, 6: 89 -10.
- Wallace, R. S. 0. and Naser, K. (1995). Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the Stock Exchange of Hong Kong *Journal of Accounting and Public Policy*, 14: 311-368.
- Wang, M-C. (2017). The relationship between firm characteristics and the disclosure of sustainability reporting. *MDPl Sustainability Journal*, 9 (624): 1-14.
- Warren, J., and Thomsen, M. (2012). The case for corporate responsibility reporting: Valuing and communicating the intangibles. White Paper. *VT: One Report, Inc., 46pp.*
- Whetman, L. L. (2017). The impact of sustainability reporting on firm profitability'. *Undergraduate Economic Review*, 14(1) 4: 1 -21.
- Wild, S. and Van Stadem, C. J. (2013). Integrated reporting: Initial analysis of early reporters — an institutional theory approach. 7" Asia Pacific Interdisciplinary Accounting Research conference (Kobe): 26 - 28pp.
- Yahaya, O. A. (2018). Environmental reporting practices and financial performance of listed environmentally-sensitive firms in Nigeria. *Journal of Environmental and Social Sciences*, .24(2): 403 412.
- Zehri, C., Abdelbaki, A. and Bouabdellah, N. (2012). How intellectual capital affects a firm's performance? *Australian Journal of Business and Management Research*, 2 (8): 24-3 1.

# APPENDICE

# Appendix I: Determination of the Sample Size

Taro Yamane Formula

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

Where N = the population = 28 Firms  $e^2 = error term = 8.755\% (0.08755)$ 

$$= \frac{28}{1+28(0.08.755)^2}$$
$$= \frac{28}{1+0.21476}$$
$$= \frac{28}{1.21476}$$
$$= 23.04982$$
$$\approx 23 \text{ Firms}$$

# Appendix II: Lists of Sampled Firms Manufacturing Firms

- 1. Beta Glass Plc
- 2. Berger Paints Nigeria Plc
- 3. DN Meyer Plc
- 4. Cap Plc Chemical and Allied product Plc
- 5. Cement company of Northern Nigeria (CCNN)
- 6. Portland Paints and Products Nigeria Plc (PP&P)
- 7. Lafarge Africa Plc
- 8. Cutix Plc
- 9. Dangote Cement
- 10. PCMN-Paints and Coatings Manufacture Nigeria Plc
- 11. Premier paints Plc
- 12. Greif Nigeria Plc
- 13. Aluminum Extrusion industries
- 14. First Aluminum
- 15. B.O.C Gases Nigeria Plc
- 16. Multiuse Mining and exploration Pie
- 17. Okomu Oil Plam Pie
- 18. Presco Plc
- 19. Livestock Feeds Plc

- 20. Notore Chemical Industries Pie
- 21. FTN Cocoa Processors Pie
- 22. Austin Láz & Company Plc
- 23. Thomas Wyatt Nigeria Plc (Apex Mill)

# Appendix III: IIRC (2013) Sustainable Capitals Disclosures Index

# A. SOCIAL AND RELATIONSHIP CAPITAL

- 1. Great place to work" ranking
- 2. Litigations
- 3. Involvement in social actions
- 4. Involvement in cultural projects
- 5. Customer satisfaction index
- 6. Provision for social projects
- 7. Social investment (money spent on philanthropy)