

Effect of Corporate Social Responsibility on Financial Performance of Selected Oil and Gas Firms in Nigeria

MADICHIE, Christopher, Nwanosike

Department of Accountancy, Faculty of Management Sciences, Enugu State University of Science and Technology

NWEKWO, Marbel Ngozi PhD

Department of Accountancy, Faculty of Business Administration, University of Nigeria, Enugu Campus

NNADI, Chikezie Sunday Onoh

Department of Business Administration, Faculty of Management Sciences, Enugu State University of Science and Technology

Abstract

The paper examined the effect of corporate social responsibility and on the financial performance of a selected oil and gas firms in Nigeria for the period of 2012 to 2016 quoted on the Nigerian Stock Exchange. Data were collected from the audited financial statements of the selected firms for a period of five (5) years. Using Net profit margin, Return on Equity and Return on Assets as proxies for financial performance, correlation and regression analysis were conducted. It revealed that CSR has a positive and significant impact on the Net profit margin, Return on Equity and Return on Assets of Oil and Gas under study. The study concluded that firms that are socially responsible continues to flourish, partly as a result of CSR activities yielding it's return. Finally, the paper therefore recommends that Government as part of their responsibility should put in place policies that will create a good business environment for firms operating in Oil and Gas sector of the economy for them to increase their investment in Corporate Social Responsibility.

Keywords: Corporate Social Responsibility, Financial Performance, Net Profit Margin, Return on Equity, Return on Assets and Stakeholders.

1.1 Introduction

Over the past decade Nigeria firms' especially those in oil and gas sector has witnessed tremendous financial and social charges. As a result, business is encountering a lot of challenges and demands. One of the emerging issues that confront business now is that of corporate social responsibility. Due to interest in it and what it means, much research are been done in this area. In contrast, developing countries are slower in responding to the increased concern about the issue of corporate social responsibility (Gauobadia, 2000).

CSR has been defined as a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis (green paper promoting a European framework for Corporate Social Responsibility, 2001). A company is not only an economic entity but a social and political entity also. Most of the creditors, debtors, employees and the society at large in one way or the other (Kapdor \$Sahdhu 2010) as cited in.Uadiale & Fagbemi (2012).Promoters of CSR have argue that company should integrate economic, social and environmental concerns into their business strategies, their management tools and their activities going beyond compliance and investing more human,social and environmental capital.(Bela and Monium,2009),(Perrine,2006),(Lee and park,2010),(Nigesinghe and Senaraine,2011), has in their previous study observed that there is relationship between CSR and Financial performance.

This study was undertaken with a view to assessing the effect of CSR on the financial performance of oil and gas firms quoted on the Nigerian Stock Exchange as from 2012-2016.

1.2 Statement of the Problem

The pursuitof financial growth does not always lead to social development and is often detrimental to the environment, resulting in unhealthy workplaces, exposure to toxic substances and urban decay and sometimes death of the populace due to inhalation of toxic waste Shehu,(2013).Societal conflicts arise due to the concern of host Community of oil and gas firms over negative and potentially negative effects which business brings to the Community. Managers and practitioners are often criticized for being single minded about value maximization. The turn of events has pressurized firms to put serious efforts into a wide range of CSR activities.CSR has become a critical aspect in strategic decision making of companies primarily due to pressure from host community and a drop in investors' confidence.

Series of arguments based on researches are found in literature as to the relevance or otherwise of CSR on the host environment, as there are no unanimous agreement on the subject matter due to peculiarities of different

sectors and the variation in methodologies adopted by the studies. Some of the studies argue in favors of CSR, as it leads to profitability increments, societal and environmental stability (Freeman, 1984) and Donaldson and Preston as cited in (Amole, Adebisi, Awolaja, 2012), others argue that it is a waste and unnecessary leading to diversion of firm's resources to project motive (Amole et al 2012). This stimulated the need to undertake a study of a specific sector in order to ascertain the consequential effect of implementing CSR.

In view of the above, this study assessed the effect of CSR on the financial performance of firm's in oil and gas sector in Nigeria.

1.3 Objectives of the Study

The primary objective is to evaluate of corporate social responsibility on financial performance of oil and gas firms in Nigeria.. The study has the following specific objectives to:

1. Evaluate the effect of CSR on the Net profit margin of oil and gas firms in Nigeria.
2. Determine the effect of CSR on Return on Equity of oil and gas firm's in Nigeria.
3. Ascertain the effect of CSR on Return on Assets of oil and gas firm's in Nigeria.

1.4 Research Questions

The following questions were used to articulate answers from the achievement of the outlined objectives:

- (i) How does Corporate Social Responsibility affect Net profit margin of oil and gas firms in Nigeria?
- (ii) What is the effect of Corporate Social Responsibility on Return on Equity of oil and gas firms in Nigeria?
- (iii) How does Corporate Social Responsibility affect Return on Assets of oil and gas firms in Nigeria?

1.5 Statement of Hypotheses

The following hypotheses were formulated and addressed in this study:

1. Corporate Social Responsibility has no significant effect on Net profit margin of oil and gas firms in Nigeria from 2012-2016.
2. Corporate Social Responsibility has no significant effect on Return on Equity of oil and gas firms in Nigeria from 2012-2016.
3. Corporate Social Responsibility has no significant effect on on Return on Assets of oil and gas firms in Nigeria

Review of the related literature

2.1 Corporate Social Responsibility

Corporate social responsibility (CSR) defined by European Commission in (Joe & Kechi, 2013) a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis “ that companies should be aware that responsible behaviors leads to sustainable business success.

2.1 Theoretical Review

This section provide most common theories used to describe association between CSR and financial performance many of the theories are similar or overlap to some extent with another. Some of the theories are;

2.1.1 Legitimacy Theory

Legitimacy is a generalized perception or assumption that are actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values and definitions (Suchman, 1995) as cited in (Basse, Sunday and Okon, 2013). Legitimacy theory offers a powerful mechanism for understanding voluntary social and environmental disclosure made by corporations and that is understanding would provide a vehicle for engaging in critical public debate (Tilling, 2018). The problem for legitimacy theory in contributing to the understanding of accounting disclosures specifically and as a theory in general is that the term has occasionally been theory itself and the observation could be equally applied to a range of theories in a range of disciplines. Legitimacy theory suggests that a firm may be in one or four phases with regard to its legitimacy.

2.1.2 The Stakeholder Theory

Donaldson and Preston (1995) in their wide range of research paper, classified and formulated a three-part typology of the theories of stakeholder theory; descriptive instrumental and normative. Donaldson and Preston stated that stakeholder theory answers the following questions: What happens? (Descriptive) what happens if? (instrumental) and What should happen? (Normative).

To answer the first question: what happens (descriptive), the stakeholder theory describe corporate characteristics and behaviours and then the corporation is constructed as a constellation and competitive interests over intrinsic: what happens if (Instrumental), the connection between stakeholder approaches and generally desired objectives of firms such as profitability, growth and stability will be created. Finally, the question: what

should happen or a normative theory is used to explain the social function of organizations and identify their moral and philosophy of their operation.

The theoretical review under planning this study is stakeholder's theory because it is a theory of organizational management and business ethics that addresses morals and values in managing and organizations stakeholder is any individual or constituency that contribute in any firm.

2.2 Empirical Review

Amole, Adebisi and Awolaja (2012) carried out investigation on the casual relationship between CSR and profitability of Banks in Nigeria using First Bank of Nigeria Plc as a case study. Secondary data were obtained from documentary sources particularly the audited annual reports of the bank for the various years. The outcome of the regression analysis carried out revealed a positive relationship between CSR on profit after tax of the bank.

Adeyemo (2012), evaluate factors that influence CSR in Nigeria Companies. 10 respondent were selected purposively from each of the five firms used 50 respondents. Multiple regression was used to analyze the data. The result revealed that business organizations involve in CSR mostly because of competition ie to remain in global competitive environment. The study recommended that organization should see CSR as enlightened self-interest and should therefore handle it with a great concern. Arias and Petterson (2009) investigated the relationship between CSR's promotion and corporations. The study employed a critical review of scholarly and per-reviewed literature in an exploratory fashion. The result of the study revealed that multinational corporations continue their investment in CSR activities because it promotes improved reputation and facilitates customer loyalty.

Babalola (2012) conducted a study on listed firms in the Nigeria Stock Exchange using secondary data. The result of the study revealed that the amount expended on CSR vary from one firm to another and that in the whole, the firms invested less than ten percent of their annual profit on CSR. The study also reported a negative relationship between CSR investment and profit after tax of the firms.

Lee and Park (2010), carried out a study on socially responsible activities of airlines companies. The study primarily examine the impact of CSR in three different forms (ie Iinear, quadratic and cubic) on the financial performance of airline companies as represented by two measurement; value and accounting performance. Data were obtained from secondary sources especially audited annual reports of the selected companies. The result of the regression analysis between CSR and performance revealed that CSR has a statistically significant positive relationship with value performance but no impact of CSR in accounting performance in the selected firms.

Eleni and Medda (2011), in their study on CSR and financial performance in the airport industry, identified a virtuous circle between CSR and financial performance in the airport industry. They used methodology valuation multiples and applied it for the UK Manchester Airport. The NA/EBITDA (Net Asset/Earnings before interest Tax, Depreciation and Amortization) and BV/EBITDA (Book value/Earnings Before interest Tax, Depreciation and Amortization) were the financial performance ratio used in their study. They concluded that there is a negative or non-existent relationship between CSR and financial performance in the airport industry.

Uadiale and Fagbemic (2012), examine the impact of CSR activities on financial performance in developing economies, considering employee relations (ER), company performance (CP) and environmental management system (EMS) as independent variable while the individual dependent variables were measured with return on equity (ROE) and Return on Assets (ROA) in Nigeria Companies. The Study used a sample of 40 audited financial statements of quoted companies in Nigeria in the year 2007. Using content analysis for CSR, regression analysis model was used and the results showed that CSR has a positive and significant relationship with the financial performance measures.

Ekwe and Onyekwelu(2014) titled' Does Corporate Social Responsibility Predicate financial performance of firms'. The study made use of secondary data to study the effect of CSR on financial performance of banks in Nigeria. Time Series Data were sourced from the firms' financial statement using content analysis. Data were analyzed using Ordinary Linear Regression. The study reveals that the co-efficient of determination of the result shows that the explanatory variables account for changes or variations in selected banks. Performance in their gross annual revenues and profit before tax were caused by changes in investments in Corporate Social Responsibility (CSR) while a negative linear relationship could be established between the price for the shares and amount invested in CSR. The findings also show that the two banks invested less than ten percent (10%) of their annual profits to CSR.

Onyekwelu, Osisoma and Ugwuanyi (2014) carried out a research on Corporate Social Accounting and Enhancement of Information Disclosure among Firms in Nigeria. The broad object of this study was aimed at ascertaining if the inclusion of social accounting information in the financial statements will significantly enhance information disclosure. They adopted survey research design; primary and secondary data were used. A sample size of 108 was drawn from a total population of 148 using Taro Yamane formula. The research hypothesis were tested using chi square(X^2)finding reviews the inclusion and separate presentation of social costs incurred by organizations in the financial statements will enhance information disclosure in the statement.

Emejulu, Nwoha and Onyekwelu(2016), examined the effect of Corporate Social Responsibility on Financial Performance of Oil and Gas firms in Nigeria. A sample size of the study Population comprised of twenty (20) Companies in oil and gas sector that are currently listed and quoted in the Nigerian Stock Exchange (NSE). Subject to availability of sufficient and relevant data, three (3) firms (Oando Nig. Plc, Texaco Oil Nig. Plc, and Mobil Oil Nig Plc) were purposively drawn from the pool of twenty (20). The study used a simple regression analysis to obtain the results of financial performance of these firms over the period, 2004 - 2014. The relative statistical tools like ANOVA, Correlation and Coefficient of determination were employed for analysis and results obtained. The findings were that Corporate Social Responsibility cannot be determined by Earnings per Share (EPS). The implication of the findings is that Oil and Gas firms should renew their commitment to CSR and be more disposed to post extremely positive results of their financial performance.

Methodology

3.1 Research Design and nature of data

Ex-post facto design was used because the data for this study already exists and the researcher has no intentions to manipulate or control the variables. Secondary data were used in the study and the data were sourced from oil and gas firms annual reports. The variable were computed from data extracted from annual reports and accounts of the selected firms and they were in the form of ratios (NPM,ROA and ROE) computed from the figures as reported in the annual reports from 2012-2016.Total assets ,shareholders' fund equity , profit after tax and total amount spent on Corporate Social Responsibility for the period 2012-2016 were also used.

3.2 Sample Size Determination

A sample size of four (4) listed oil and gas firms on the Nigeria stock exchange were selected .Four (4) out of twelve (12) oil and gas firms were used because of the availability of the required data .The selected firms represent those that engaged in Corporate Social Responsibility. Judgmental sampling Technique were used in selecting four (4) out of twelve (12) oil and gas firm that were used and they were all listed on the Nigeria stock Exchange.

3.3 Description of variables

We have one independent variable corporate social responsibility (CSR) and three dependent variables which are for financial performance, namely Net profit margin (NPM), Return on Assets (ROA) and Return on Equity (ROE).

1. Corporate social responsibility: The independent variable used is measured based on donations made by these oil and gas firms for the relevant years as disclosed in their annual financial reports.

2. Net Profit Margin (NPM): it is an indicator of how profitable a firm is

$$NPM = \frac{\text{Net Income}}{\text{Turnover}}$$

3. Return on Assets (ROA): This is an indicator of how profitable a firm is in relation to its total assets.

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

4. Return on Equity (ROE): Measure a firms profitability by revealing how much profit the firm generates with the money shareholders have invested

$$ROE = \frac{\text{Net Income}}{\text{Shareholder's Equity}}$$

3.4 Model Specification

Model specification refers to the description of the process by which the dependent variable is generated by the independent variables (Inyama& Ezugwu 2016) each model represented a given hypothesis, respectively. For hypothesis one which states that there is no positive and significant impact of corporate social responsibility on Net Profit Margin of oil and gas firms' in Nigeria, is represented as:

$$NPM = F(\text{CSR}) \text{ ----- (i)}$$

Model (i) can be further specified as:

$$NPM = B_0 + B_1, \text{ CSR} + U_t \text{ ---- (ii)}$$

For hypothesis two which states that there is no positive and significant effect of corporate social responsibility on Return on Equity of oil and gas firms in Nigeria. It is represented as:

$$ROE = F(\text{CSR}) \text{ ----- (iii)}$$

Model (iii) can be further specified as:

$$ROE = B_0 + B_1, \text{ CSR} + U_t \text{ ---- (iv)}$$

For hypothesis three which states that there is no positive and significant influence of corporate social responsibility on Return on Assets of oil and gas firms in Nigeria. It is represented as:

ROA = F (CSR) ----- (v)
 Model (v) can be further specified as:
 $ROA = B_0 + B_1 CSR + U_t$ ----- (vi)

Where:

CSR – Corporate Social Responsibility
 NPM – Net Profit Margin
 ROE – Return on Equity
 ROA – Return on Assets

3.5 Tools of Data Analysis

The researcher makes use of three different analysis tools in his testing of hypotheses. They are

a) T-Statistical

This test was used to carry out the test of individual regression coefficient. The justification of the t-statistical is that it was employed to analyze the statistical significance of the individual regression coefficient. A two-tailed test was conducted at – 5% level of significance. The null hypothesis was tested against the alternate hypothesis.

b) Test for Goodness of Fit (R^2)

To test for the explanatory power of the independent variables, the coefficient of determination, R^2 was applied the essence of the application of this statistics is that it was used to measure the explanatory power of the independent variables over the dependent variable. This statistic was used as a test of goodness of fit R^2 lies between zero and one. The closer R^2 is to 1, the greater the proportion of the variation in the dependant variable attributed to the independent variable.

c) F-Statistical

To test the statistical significance of the joint force regression plane, the F-ratio were used. The test was conducted at 5% level of Significance.

t^* = computed t-value

$t_{0.025}$ = tabulated t – value

f^* = computed f-value

$f_{0.05}$ = tabulated f – value

Data Presentation and Analysis

4.1 Data presentation

The study used regression model in order to provide basis for testing the three hypotheses. Simple regression model has been employed to predict the impact of the independent variable (CSR) on the dependent variable (NPM, ROE and ROA).

Table 4.1: Average values of the variables of the study as computed from Excel

S	/	N	Y	e	a	r	L	o	g	C	S	R	N	P	M	R	O	E	R	O	A											
1	.	2	0	1	2	4	.	5	8	2	2	0	.	1	5	6	4	0	.	1	5	6	4	0	.	0	6	0	0			
2	.	2	0	1	3	4	.	5	8	4	7	0	.	1	0	8	2	0	.	1	1	9	2	0	.	0	5	9	7			
3	.	2	0	1	4	5	.	5	8	0	0	-	1	.	7	8	9	2	-	0	.	7	7	3	0	-	0	.	0	1	8	5
4	.	2	0	1	5	3	.	8	7	5	0	-	1	.	6	6	1	0	-	0	.	1	8	4	8	0	.	0	1	9	4	
5	.	2	0	1	6	3	.	8	5	2	9	-	1	.	1	7	2	3	4	-	0	.	4	7	7	8	0	.	0	5	5	9

Source: Researcher’s computation from the Annual Reports of firms under study, 2012 – 2016

Table 4.1 presents the averages values of model proxies. The data from which average were derived are in Appendix 1.

4.1: The effect of CSR on NPM of oil and gas firms in Nigeria from 2012 – 2016

Table 4.2: Average percentage change in CSR and NPM of oil and gas firms in Nigeria.

S	/	N	Y	e	a	r	Average % change in CSR					Average % change in NPM																				
1	.	2	0	1	2	-						-																				
2	.	2	0	1	3	0				2	5	-	4											8								7
3	.	2	0	1	4	9				9	5	1	8																			7
4	.	2	0	1	5	-	1	7			0	5	-	5	8																	2
5	.	2	0	1	6	2				2	1	2			9																	3

Source: Researcher’s computation using Excel

Table 4.2 represent the trend of average percentage change in CSR and NPM in Nigeria oil and change in CSR and that of NPM followed the same trend of increase / decrease over the years. Between 2012-2013, average percentage change in CSR is 0.25% while there was a negative average percentage change of -4.87% in NPM in that same period.

The following periods, 2014 and 2016 has a positive percentage in terms of CSR of 9.95% and 2.21% and a

negative percentage of 17.5% as of 2015 for CSR. Equally there was also positive percentage for NPM for 2014 as 18.97% and 2016 as 29.3% and also a negative percentage in 2015 of -58.82%. With the above results we conclude by saying that CSR has a positive effect on NPM of oil and Gas firms under study. This result is in line with the findings of (Amole et al, 2012) who found a positive impact of CSR on PAT.

4.3: The effect of CSR on Return on Equity of oil and gas firms in Nigeria from 2012 – 2016

Table 4.3 Average percentage change in CSR and ROE of oil and gas firms in Nigeria

S / N	Y e a r	Average % change in CSR	Average % change in ROE
1	2 0 1 2	-	-
2	2 0 1 3	0 . 2 5	- 3 7 . 2 0
3	2 0 1 4	9 . 9 5	- 6 5 . 3 8
4	2 0 1 5	- 1 7 . 5	8 . 2 1
5	2 0 1 6	2 . 2 1	2 9 . 3 0

Source: Researcher’s computation using Excel

Table 4.3 represent the trend of average percentage change in CSR and ROE in Oil and Gas firms in Nigeria over the period under review. Between 2012-2013, average percentage change in CSR is 0.25% while there was a negative average percentage change of -37.20% in ROE in that same period.

The following periods, 2014 and 2016 has a positive percentage in terms of CSR of 9.95% and 2.21% and a negative percentage of 17.5% as of 2015 for CSR. Equally there was also positive percentage for ROE for 2016 which was 29.30% and also a negative percentage in 2014 and 2015 as -65.38% and -58.82%.

With the above results we conclude by saying that CSR has a positive effect on ROE of oil and Gas firms under study. This result is in line with the findings of (Uadiale & Fagbemi, 2012), who found a positive relationship between CSR and ROE. This, however, contradicts the findings of (Wissink, 2012), who could not establish any relationship between CSR and ROE.

4.4: The effect of CSR on Return on Assets of oil and gas firms in Nigeria from 2012 – 2016

Table 4.4 Average percentage change in CSR and ROA of oil and gas firms in Nigeria

S / N	Y e a r	Average % change in CSR	Average % change in ROA
1	2 0 1 2	-	-
2	2 0 1 3	0 . 2 5	- 3 . 0 0
3	2 0 1 4	9 . 9 5	- 4 . 1 2
4	2 0 1 5	- 1 7 . 5	9 . 0 0
5	2 0 1 6	2 . 2 1	3 . 6 5

Source: Researcher’s computation using Excel

Table 4.4 represent the trend of average percentage change in CSR and ROE in Oil and Gas firms in Nigeria over the period under review. Between 2012-2013, average percentage change in CSR is 0.25% while there was a negative average percentage change of -3% in ROA in that same period. The following periods, 2014 and 2016 has a positive percentage in terms of CSR of 9.95% and 2.21% and a negative percentage of 17.5% as of 2015 for CSR. Equally there was also positive percentage for ROA for 2015 and 2016 which was 9.00% and 3.65% respectively and also a negative percentage in 2014 as of -4.12%. With the above results, we conclude by saying that CSR has a positive impact on ROA of oil and Gas firms under study.

4.5 Test of Hypotheses

The hypotheses stated earlier in this research we tested using regression method. Three steps were used to test the hypotheses. In step one, the hypotheses were restated in null and alternate forms. In step two, the results were analyzed and in step three, decisions were made. The decision rule involved the rejection or acceptance of the null or alternate hypotheses based on criterion of the techniques of analysis.

4.5.1 Test of Hypothesis one

Step one: Restatement of hypothesis in null and alternate forms.

Ho: There is no significant effect of corporate social responsibility on net profit margin of oil and gas firms in Nigeria.

Hi: There is significant effect of corporate social responsibility on Net profit Margin of oil and gas firms in Nigeria.

Decision Rule: If the coefficient estimate of CSR has a positive sign and its probability less than 0.05, the null hypothesis is rejected and the alternate hypothesis is accepted. on the other hand, if the coefficient estimate of CSR do not have a positive sign and its probability greater than 0.05, the null hypothesis is accepted and the alternate hypothesis is rejected.

Sept Two: Analysis of regression results

Table 4.5: Corporate social responsibility and net profit margin dependent variable; NPM

Method Least square

Sample (adjusted): 2 20

Included observations: 19 after adjusting end points

Variable	Coefficient	Stand. Error	t – Statistic	Prob .
C S R	0 . 0 0 8 4 6 7	0 . 0 0 6 6 4 7	2 . 2 7 3 8 0 0	0 . 0 0 5 8
C	0 . 0 8 5 5 7 7	0 . 0 1 4 0 1 6	6 . 1 0 5 5 3 2	0 . 0 0 0 0
R-squared	0.716452	Mean dependant variable		0.098586
Adjusted R-squared	0.606313	Standard dev, dependent variable		0.095821
S.E of regression	0.095518	Akaike info Criterion		1.839008
Sum square resid.	0.884998	Schwarz Criterion		1.786582
Log Likelihood	93. 03092	F-statistic		1.622567
Durbin-Watson Stat	2.710260	Prob(F-statistic)		0.205778

Source: Researcher’s E-view Results.

Table 4.5 shows the result of the simple regression analysis of the effect of Corporate Social Responsibility on Net profit margin of Oil and Gas firms in Nigeria from 2012-2016. The coefficient of determination R SQUARE which measures the goodness of fit of the model, indicates that 72% of the variations observed in the dependent variable were explained by the independent variable. This was moderated by the Adjusted R-SQUARED of 61% . The result shows that Corporate Social Responsibility has a positive and significant effect on Net profit margin of the Oil and Gas firms in Nigeria ($a= 0.008, p=0.005<0.05$).

Since the coefficient estimate of Corporate Social Responsibility is positive, null hypothesis is rejected and alternate accepted. Thus, CSR has positive and significant impact on Net profit margin of Oil and Gas firms in Nigeria.

Test of Hypothesis Two

Step one: Restatement of hypothesis in null and alternate forms.

Ho: There is no significant effect of corporate social responsibility on net profit margin of oil and gas firms in Nigeria.

Hi: There is significant effect of corporate social responsibility on Net profit Margin of oil and gas firms in Nigeria.

Decision Rule: If the coefficient estimates of Corporate Social Responsibility has a positive sign and it’s probability less than 0.05, the null hypothesis is rejected and the alternate hypothesis accepted. On the other hand, if the coefficient estimate of Corporate Social Responsibility does not have a positive sign and it’s probability greater than 0.05, the null hypothesis is accepted and the alternate rejected.

Step Two: Analysis of Regression Result

Table 4.6: Corporate social responsibility and Return on Equity(ROE)

Dependent Variable: ROE

Method Least square

Sample (adjusted): 2 20

Included observations: 19 after adjusting end points

Variable	Coefficient	Stand. Error	t – Statistic	Prob .
C S R	0 . 0 0 4 7 1 0	0 . 0 0 5 8 0 9	2 . 8 1 0 8 3 9	0 . 0 1 9 4
C	0 . 0 7 5 5 1 4	0 . 0 1 2 2 5 0	6 . 1 6 4 6 9 3	0 . 0 0 0 0
R-squared	0.566732	Mean dependant variable		0.082751
Adjusted R-squared	0.453508	Standard dev, dependent variable		0.083332
S.E of regression	0.083478	Akaike info Criterion		2.108480
Sum square resid.	0.675947	Schwarz Criterion		2.056053
Log Likelihood	21.3698	F-statistic		3.657459
Durbin-Watson Stat	2.86316	Prob(F-statistic)		0.419443

Source: Researcher’s E-view Results.

Table 4.6 shows the result of the simple regression analysis of the effect of Corporate Social Responsibility on Return on Equity of Oil and Gas firms in Nigeria. The coefficient of determination R^2 , which measures the

goodness of fit of the model, indicates that 57% of the variations observed in the dependent variable were explained by the independent variable. This was moderated by the Adjusted R^2 of 45%. The results shows that Corporate Social Responsibility has a positive and significant effect on Return on Equity of Oil and Gas firms in Nigeria ($a=0.004, p=0.02 < 0.05$).

Test of Hypothesis Three

Step one: Restatement of hypothesis in null and alternate forms.

Ho: There is no significant effect of corporate social responsibility on net profit margin of oil and gas firms in Nigeria.

Hi: There is significant effect of corporate social responsibility on Net profit Margin of oil and gas firms in Nigeria.

Decision : If the coefficient estimates of Corporate Social Responsibility has a positive sign and it's probability less than 0.05, the null hypothesis is rejected and the alternate hypothesis accepted. On the other hand, if the coefficient estimate of Corporate Social Responsibility does not have a positive sign and it's probability greater than 0.05, the null hypothesis is accepted and the alternate rejected.

Step Two: Analysis of Regression Result

Table 4.7: Corporate social responsibility and Return on Asset(ROA)

Dependent Variable: ROA

Method Least square

Sample (adjusted): 2 20

Included observations: 19 after adjusting end points

Variable	Coefficient	Stand. Error	t – Statistic	Pr o b .
C S R	1 0 . 6 4 4 3 8	5 . 0 8 5 6 0 0	2 . 0 9 3 0 4 4	0 . 0 3 9 0
C	3 9 . 1 4 4 7 6	1 0 . 7 2 4 0 4	3 . 6 5 0 1 8 9	0 . 0 0 0 4
R-squared	0.743212	Mean dependant variable		0.279010
Adjusted R-squared	0.633348	Standard dev, dependent variable		0.198187
S.E of regression	73.08195	Akaike info Criterion		11.44104
Sum square resid..	518074.3	Schwarz Criterion		11.49346
Log Likelihood	2.661457	F-statistic		4.380833
Durbin-Watson Stat	3.307798	Prob(F-statistic)		0.038955

Source: Researcher's E-view Results.

Table 4.7 shows the result of the simple regression analysis of the effect of Corporate Social Responsibility on Return on Assets of Oil and Gas firms in Nigeria. The coefficient of determination R^2 , which measures the goodness of fit of the model, indicates that 74% of the variations observed in the dependent variable were explained by the independent variable. This was moderated by the Adjusted R^2 of 63%. The results shows that Corporate Social Responsibility has a positive and significant effect on Return on Assets of Oil and Gas firms in Nigeria ($a=0.004, p=0.02 < 0.05$).

Decision: Since the coefficient estimate of Corporate Social Responsibility is positive, the null hypothesis is rejected and the alternate accepted but with the provision of probability value being less than 0.05, we conclude therefore, that Corporate Social Responsibility has a positive and significant effect on Return on Assets of the Oil and Gas firms in Nigeria.

Summary of the findings:

1. CSR has a positive and significant effect on Net profit margin of oil and gas firms in Nigeria.
2. CSR has a positive and significant effect on Return on Equity of oil and gas firms in Nigeria.
3. CSR has a positive and significant effect on Return on Assets of oil and gas firms in Nigeria.

Conclusion

The researcher concludes that CSR has a positive effect on financial performance of oil and gas firms in Nigeria.

5.2 Recommendations

1. Government needs to put machinery in place to monitor firms' investment in CSR so as to serve as motivation for their involvement in social responsibility activities, particularly in their immediate environment.
2. CSR projects should be well structured and implemented for maximum effect. This would enhance the well being of the beneficiaries.
3. Firms should liaise with community head to identify areas or opportunities available to them to better the lives of the people through the provision of social amenities. This will go a long way to improve the general living standards of the people. Oil and gas firms in Nigeria should increase their investment in CSR as this would enhance their marketability of their products and increase their profits before tax and even turnover.

References

- Adebayo,O.,Oluatoyosi,O.,\$ Olurin,E.(2012).Corporate social responsibility reporting and financial performance of money deposit banks in Nigeria. *Prime Journal of Business Administration and Management* 2(11):758-769S
- Adeyanju,O. D. (2012). An assessment of corporate social responsibility on Nigeria Society. *Universal Journal of Marketing and Business Research* 1(1):17-43.
- Adeyemo et al (2013). An evaluation of factors influencing corporate social responsibility in Nigeria Manufacturing companies. *International Journal of Academic Research in Economics and Management Sciences* 2 (6).
- Ako,A.E., & Agbonifoh, B.A (2013). Corporate social responsibility in Nigeria Petroleum Industry. *Journal of Review of Social Science and Humanities*, 6 (2) 214-238.
- Amole, B.B. Adebisi, S.O. and Awolaja, A.M., (2012).. Corporate social responsibility and profitability in Nigeria Banks: *A casual Relationship Research Journal of Finance and Accounting* 3(1) Pp6 – 17
- Arias, J.C; and Petterson, K., (2009). Relationship between corporate social responsibilities; promotion and corporate performance in the multinational corporations. *Business Intelligence Journal*, 2(1), 93 – 112.
- Babalola, Y.A., (2012), The impact of corporate social responsibility on firms, profitability in Nigeria. *European Journal of Economics, Finance and Administrative Sciences* 39 – 50
- Bassey,E.B.,Sunday,O.E., & Okon,E.E., (2013). The effect of environmental accounting and reporting on organizational performance of selected oil and gas companies in Niger Delta Region of Nigeria. *Research Journal of Financial and Accounting*. 4 (3).
- Bessong,P.K. \$ Tapang,A.T. (2012).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 Financial and Accounting*.4 (3).
- Belal, A and Momin, M. (2009) Corporation Social Reporting in Emerging Economies: A Review and Future Direction. *Research in Accounting in Emerging Economies* 9. 119 – 143
- Bolanle, A.B. Olanrewju, A.S & Muyideen, A.A. (2012), Corporate Social Responsibility and Profitability of Nigeria Banks a Casual Relationship. *Research Journal of Finance and Accounting*. 3(1), 6 – 17
- Brine,M.,Brown,R. & Hackett,G. (2006).Corporate social responsibility and financial performance in the Australian context, *Corporations and Financial services Division*, the Australian treasury.
- Choi, J. Kwak, Y. and Choe, C. (2010) Corporate Social Responsibility and Corporate Financial Performance; Evidence from Korea *Australian Journal of Management*, 35(3), pp 291 – 311
- Donaldson,J. \$ Preston,L., (1995). “The stakeholder’s theory of corporation:Concepts,Evidence,and Implication.*Academy of Management Review*,20:65-91.
- Eleni,R \$ Medda, F. (2011) . “Corporate Social Responsibility and financial performance in the Airport Industry” *Quantitative \$ Applied Spatial Economic Research Laboratory*.
- Freeman,R.E.(1984). *Strategic Management: A stakeholders perspective*,Englewood Cliffs: Prentice Hall USA.
- Friedman,M. (1970). The social Responsibility of Business is to increase it’s profits: .*The New York Times Magazine*, 13 September 1970, (assessed 20123).
- G8 Summit, Growth and Responsibility in the World Economy, G8 Summit Declaration (2007).47.
- Gray, R.H.,Owen, D. \$ Adams, C. (1996). *Accounting and accountability: Changes and Challenges in Corporate Social Environmental Reporting* . Hemel Hempstead, Prentice Hall.
- Gunu,U (2008). The Influence of Corporate Social Responsibility on the performance of Banks” A case study of Zenith Bank plc. *Journal of Faculty of Management Sciences*. 2:1670-1685.
- Guobadia A. (2002) Protecting Minority and Public Interest in Nigeria Company Law: The Corporate Affairs Commission as a Corporations Ombudsman, in: F. McMillan (ed) *International Company Law Annual*, vol. pp 81 – 145.
- Harpreet,S.B. (2009). Financial performance and Social Responsibility: Indian Scenerio”<http://ssm.com/abstract=1496291>(assessed 20 July 2013).
- Helg,S. (2007). Corporate Social Responsibility from a Nigerian Perspective,Master’s Thesis No 591013. *Handelshogsklan Vid doteborgs University* .pp 1-101.
- Inyiama,O.I. & Ezugwu, C.I.,(2016).*Research Methodology: A Practical Approach*.,Jomap Press.Ogui N/Layout Enugu,Nigeria.
- Joe, D. & Kechi,K. (2013). Implication of corporate social responsibility for Nigerian Firm’s. *Advance in Management and Applied Economics*. 3(5): 78-87.
- Keffas,G. & Olulu-Briggs,O.(2011). Corporate social responsibility :How does it affect the financial Performance of Banks? *Journal of Management and Corporate Government*: 3(3),8-26.
- Lee, S., and Park, S., (2010). Financial impact of social responsible activities in Airline Companies. *Journal of Hospitality and Tourism Research*, 34(2), 185 – 203
- McWilliams, A. & Siegel, D. (2000). Corporate social Responsibility and Financial Performance: Correlation or

- Misspecification? *Strategic Management Journal*, 12(5), 603 – 609
- Mutasim, D. and Salah, T.A.,(2012), The effect of corporate social responsibility on the profitability of the Industrial Companies in Jordan. *Canadian Social Science*, 8(3). 32 – 37
- Oba, V.C. (2009). Impact of corporate social responsibility on market value of quoted conglomerates in Nigeria. (Unpublished M.Sc Thesis) Ahmadu Bello University Zaria.
- Ojo, O. (2007). An Appraisal of the Practice of Social Responsibility by Business Organations in Nigeria Covenant University, Ota, Nigeria. Retrieved from <https://www.researchgate.net/publication/42437392>.
- Onyekwelu, U.L. (2015). *Firm foundation in accounting and finance Research*. His Glory Publications Enugu, Nigeria.
- Orlitzky, M., Schmidt, F.L. & Rynes, S.L. (2003). Corporate social and financial performance: A meta-Analysis *Organization Studies* 24(3):403-441.
- Perrine, F., (2006). SMEs and CSR Theory: Evidence and Implication from an Halian Perspective: *Journal of Business Ethics* 67(3), 305 – 316
- Porter, M.E. & Kramer, M.R. (2002). The competitive advantage of corporate philanthropy, *Harvard Business Review*. 80 (12):558.
- Porter, L.E. & O. Bannon, D.P., (1997). The corporate social financial performance relationship: A typology and analysis: *Business and Society*, 36, 419 – 42
- Shehu, A. (2013). The influence of corporate social responsibility on total asset of quoted conglomerate in Nigeria *Journal of Business Administration and Management Science Research*. 3(1), 012-021.
- Tilling, M. (2004). Communication at the edge.. Voluntary social and environmental reporting in the annual report of legitimacy threatened corporation. APIRA conference proceedings Singapore.
- Uadiale, O.M. & Fagbemi, T.O., (2011). Corporate Social Responsibility and Financial Performance in Developing Economies: The Nigerian Experience”, The 2011 New Orleans international Academy conference, UK. Evidence from Disaggregate measures, *Financial Management*, 35 :97-116
- Wissink, R. (2012). Testing the relation between corporate social performance and corporate financial performance. (Master Thesis), R.B.A Wissink University of Twente Business Administration.

APPENDIX 1

: NPM, ROE, ROA and CSR of the oil and gas firms under study

S / N	F i r m	Y e a r	N P M	R O E	R O A	CSR (#)
1	ET ER NA PLC	2 0 1 2	0 . 0 0 8 5	0 . 1 2 6 0	0 . 1 4 3 0	3,650,000
2	ET ER NA PLC	2 0 1 3	0 . 0 0 6 0	0 . 0 8 8 2	0 . 1 2 3 0	3,500,000
3	ET ER NA PLC	2 0 1 4	0 . 0 1 5 2	0 . 1 5 7 1	0 . 1 8 8 3	2,800,000
4	ET ER NA PLC	2 0 1 5	0 . 0 1 3 6	0 . 1 3 6 5	0 . 1 5 3 9	3,400,000
5	ET ER NA PLC	2 0 1 6	0 . 0 1 4 2	0 . 1 4 5 7	0 . 1 9 1 9	3,324,000
6	MRS OIL NIGERIA PLC	2 0 1 2	0 . 0 0 2 6	0 . 0 1 1 0	0 . 0 1 6 6	2,200,000
7	MRS OIL NIGERIA PLC	2 0 1 3	0 . 0 0 7 2	0 . 0 3 2 3	0 . 0 4 6 5	2,190,000
8	MRS OIL NIGERIA PLC	2 0 1 4	0 . 0 0 8 1	0 . 0 3 6 9	0 . 0 5 0 8	1,200,000
9	MRS OIL NIGERIA PLC	2 0 1 5	0 . 0 1 0 7	0 . 0 4 4 6	0 . 0 5 9 8	5,373,500
1 0	MRS OIL NIGERIA PLC	2 0 1 6	0 . 0 1 3 4	0 . 0 6 6 1	0 . 0 8 6 1	768,500
1 1	O A N D O PLC	2 0 1 2	0 . 5 9 5 1	0 . 0 7 6 2	0 . 0 1 9 3	173,438,302
1 2	O A N D O PLC	2 0 1 3	0 . 3 9 9 5	0 . 0 2 2 2	0 . 0 0 8 9	130,302,238
1 3	O A N D O PLC	2 0 1 4	- 7 . 2 0 2 4	- 3 . 6 1 8 1	- 0 . 3 6 8 4	162,772,763
1 4	O A N D O PLC	2 0 1 5	- 6 . 6 9 2 2	- 1 . 2 2 4 7	- 0 . 1 9 5 3	93,840,486
1 5	O A N D O PLC	2 0 1 6	- 6 . 9 7 2 9	- 2 . 7 5 0 9	- 0 . 1 6 2 6	145,223,688
1 6	TOTAL NIGERIA PLC	2 0 1 2	0 . 0 2 1 4	0 . 4 1 3 3	0 . 0 6 0 9	4,000,000
1 7	TOTAL NIGERIA PLC	2 0 1 3	0 . 0 2 0 2	0 . 3 3 4 0	0	34,346,514.90
1 8	TOTAL NIGERIA PLC	2 0 1 4	0 . 0 2 2 0	0 . 3 3 2 1		56,428,951
1 9	TOTAL NIGERIA PLC	2 0 1 5	0 . 0 2 3 8	0 . 3 0 4 6		523,84,990
2 0	TOTAL NIGERIA PLC	2 0 1 6	0 . 0 5 0 9	0 . 6 2 7 8	0 . 1 0 8 1	4,799,000

Source: Researcher's computation from the Annual Reports of firms under study, 2012 – 2016