EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON THE FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN NIGERIA.

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Abstract
This research investigated the effect of corporate social responsibility on financial performance of manufacturing industries listed firms on Nigerian Stock Exchange (NSE). Competitiveness of financial sector has increased manifold and the issue of corporate social responsibility (CSR) has become an indispensable concern parallel to concentrating on profitability enhancement. Businesses are consider as social units, they have to serve stakeholders, and tend to execute CSR on priority basis and subsequent disclosure as well. Unhealthy CSR policies may cause externalities and eventual relinquished customers and their societies. The main purpose of study is to shed light on the effect of CSR on financial performance (FFP) of manufacturing firms of Nigeria, using a sample of 20 firms listed with Nigerian stock exchange for the period of 12 years from 2005 to 2016, selected based upon first tier and market capitalization. We applied fully modified regression (FMOLS) and Engel-Granger cointegration models to investigate the effect of CSR on FFP. Empirical findings signify the robustness of FMOLS model that documented a positive and significant effect of CSR on return on assets. This premise holds that CSR has positive and significant effect on FFP of selected manufacturing firms of Nigeria. Based upon key findings, this study postulates CSR phenomenon is consider as an essential growth element and FFP-boosting tool by manufacturing industry of Nigeria. Eventually, mainstream of the studies on CSR are in context of well-established companies in the country, however, developing nations are least emphasized, thus the findings of this study greatly contribute in body of knowledge as well as offer pivotal implications for policy makers and governance of industrial sector.

Keywords: Corporate Social Responsibility, Financial Performance, Manufacturing Firm
Introduction
The view of incorporating corporate social responsibility (CSR) has been accepted in today's business environment as stakeholders show the greatest attention in the latest decades. The modern concept of corporate social responsibility (CSR) has been evolved in 1950s, in 1960s the concept has formalized and in 1970s it was proliferated. Post (2003) given the argument that the motivational factor for firm to make investment in corporate social responsibility activities is driven by the stakeholder theory. The concept of stakeholder theory explained by Pirsch, Gupta & Grau (2007) that the survival and success of organizations are contingent to satisfy economic objectives as well the non-economic objectives of the firms to fulfill the needs of all stakeholders of companies.

According to Jan and Baloch (2011) CSR is set of ethical, legal, and socio-economic expectations of society towards the business organizations operating within its premises. Carroll (1979) is one of the early Corporate Social Responsibility theorists explained corporate social responsibility concept “business encompasses the economic, legal, ethical and discretionary expectations that society has of organization at a given point in time”. The World Business Council for Sustainable Development (1999) suggests that: ‘CSR is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large’. Crowther & Guler (2008) described that corporate social responsibility is a concept which has become a dominant aspect of business reporting, broadest corporate social responsibility definition is what is? Or should be, Corporate social responsibility is the relationship of global corporations, government of countries and as well individual as a citizens.

Jooh et al., (2010) in their study shown that in the current decade the sustainability approach is become one of the important area for business researchers because, from one side the business create value for stockholders and from another side for sustainable world provide social responsibility obligations. From the financial performance perspective of firms it is a generally accepted phenomenon that the primary goal of any firm is maximization of profit. Those firms which perform their operational in efficient way will generate maximum profit. In modern business the concept of social responsibility is develop to play an important role in companies’ success therefore, in today business era companies also focus and spend on corporate social responsibility in term of employees’ salaries, wages, pension benefits and donations and other financial help of society. From the common theoretical perspective it is general view of researchers and other experts that all those firms which spend more on different corporate social responsibility activities their financial performance will high. From the research perspective this is concluded from more empirical evidence that corporate social responsibility and financial performance has positive and significant relationship. The financial performance of firms are calculated by different proxies in different research work.

Although various studies on the effect of corporate social responsibility on financial performance of companies carried out in Nigeria gave less attention to manufacturing sector which is at its growing stage (see McWilliams & Siegel, 2001; Ojo, 2007; Gunu, 2008; Oba, 2009; Uadiale and Fagbemi, 2011; Ahmad, 2015). However, most of these studies present inconclusive and contradictory results over the effect of corporate social responsibility on financial performance of manufacturing firms and as such more studies
are needed in this area and this justify the need for this research. Therefore, the conduct of this study is going to fill the gap left by researchers. Also, empirical studies have presented mixed reviews with some indicating a positive correlation between CSR and firm performance (Arx & Ziegler, 2008; Mittal, Sinha & Singh, 2008; Ling, Yang & Liou, 2009; John, Akinyomi & Olutoye, 2013; Hassan, 2014), some indicating a negative relationship (Mutuku, 2005; Mittal Sinha & Singh, 2008; Fauzi, 2009), although others revealed no relationship (Bird et al., 2007; Maxfield, 2008). With such conflict in the findings, the theoreticians and the empiricists maintain their unresolved dispute. The inconsistent results provide reason for concern for both academicians and practitioners.

The resolution of this issue for the practical conduct of operations in the manufacturing sector seems important. Accordingly this paper explores the link between CSR and financial performance of manufacturing sector, contributing towards the existing empirical evidence of organizational performance implications of CSR. Furthermore, the empirical data that have been used to test this proposition have predominantly derived from firms in developed countries; there is therefore the need to test the robustness of this proposition in a different environment and more importantly in a developing country. It is in the light of these conflicting views the study attempts to investigate the effects by analyzing a CSR question from a Nigerian business environment. This has served as a motivation for the current paper.

Therefore, the objectives of this study is to empirically examine the effect of CSR on the financial performance of manufacturing firms in Nigeria, to determine the relationship between CSR and the financial performance of manufacturing firms in Nigeria. This study was guided by the following research questions: 1) what is the effect of CSR on the financial performance of manufacturing firms in Nigeria? 2) what is the relationship between CSR and financial performance of manufacturing firms in Nigeria?

In line with the research questions, this study tested the following hypotheses: H01: There is no significant effect of CSR on the financial performance of manufacturing firms in Nigeria. H02: There is no significant relationship between CSR and financial performance of manufacturing firms in Nigeria. The paper is organized into five sections given the introduction as section one. The rest of the paper is organized as follows: Section two presents the literature review. In section three, the methodology adopted for this study is presented. Presentation of results is done in section four and conclusion is drawn in section five with policy implication.

LITERATURE REVIEW

The empirical literature provides mixed and conflicting evidence with respect to the CSR and financial performance effect in different studies. Beginning with the pioneering researches in the area (see Gunu, 2008; Uadiale & Fagbemi, 2011; Bolanle et al., 2012; Oba, 2009; Fauzi, 2009) This phenomenon can be attributed to a number of factors, including estimation techniques and or statistical/econometric technique, choice of variables, study period, and level of development of the country being studied, among other things.

A number of empirical research works on the literature brings one quickly to the key question of whether the ‘mix’ in CSR of a firm really matters. The review of literature in this research work is organized as: all previous studies in other countries as supporting of positive, negative and no relation of CSR and financial performance, and then review the
studies in Nigeria in this perspective. In a study by Arx and Ziegler (2008), where they examined the effect of CSR on corporate financial performance. The study examined two different regions, which were USA and Europe. Results from the econometric analysis showed that environmental and social activities of a firm compared with other firms within the industry are valued by financial markets in both regions. However, the respective positive effects on average monthly stock returns between 2003 and 2006 appear to be more robust in USA and, in addition, showed to be nonlinear.

Tsoutsoura (2004) examined "corporate social obligation and money related execution assessing the relationship between social exercises and fiscal execution of the association. She clarified that it is key to fuse the social execution inside all the operations of firm for accomplishing achievement. Two measures were utilized for information. KLD Rating information is utilized for CSP and diverse productivity degrees returns on assets, returns on equity and returns on sales (ROA, ROE, and ROS) were utilized for CFP within 1996-2000. Speculation was tried by cross-sectional time arrangement relapse dissection. The finished results betoken that there is a positive relationship between social exercises of the firm and budgetary execution. Organizations that have included in social exercises are accepted less dangerous as far as gift, debasement, paid overwhelming fines and negative social occasions.

Also Hossein, et al. (2012) examined the “link between CSR and economic performance by examining different impacts of positive and negative CSR activities on financial performance of hotel, restaurant and airline companies, theoretically based on positivity and negativity effects. Findings suggest mixed results across different industries contributing to companies appropriate strategic decision-making for CSR activities by providing more precise information regarding the impacts of each directional CSR activity on financial performance.

Zaccheaus, Oluwagbemiga, and Olugbenga. (2008) investigates the effect of Corporate Social Responsibility Performance on stock prices of Nigerian listed manufacturing companies. The objective was to carry out an empirical study of the relationship between Corporate Social Responsibility Performance and stock prices of listed manufacturing companies in Nigeria. They attempt to measure the perception and reaction of financial markets to the companies’ socially responsible behaviours, and try to find out if an improvement in firm corporate social responsibility (CSR) actions has effects on stock prices. Their empirical analysis revealed evidence of no relationship between corporate social responsibility performance and stock prices and evidence of no significant effect on stock prices of listed manufacturing companies in Nigeria they measured corporate social responsibility performance in terms of monetary contributions made or expenditure incurred by companies in respect of their social responsibility activities concerning environment, community and employment activities. The findings show that listed manufacturing companies in Nigeria, Corporate Social Responsibility Performance (CSRP) has no effect on their stock prices and it further revealed a negative non-significant correlation between stock prices and corporate social responsibility (CSR) activities.

There are some theoretical models which investigate the effect of CSR and financial performance of manufacturing firms using a Legitimacy Theory. The relevance of the Legitimacy Theory is that there is a relationship between groups, firms and society. Organizations are just a part of society and they exist if they are considered legitimate by
groups in society. The theory implies that organizations seek to operate within what is considered accepted in society which is the essence of Corporate Social Responsibility. The Corporate Social Responsibility (CSR) Theory is very directly linked to this study in that “business, apart from wealth creation, also has responsibilities for social problems created by business or by other causes, beyond its economic and legal responsibilities. This includes ethical requirements and discretionary or philanthropic actions carried out by business in favour of society. The theoretical framework for this research work was established based on the review of Tsoutsoura & Margarita (2004).

$$ FFP_t = \beta_0 + \beta_1 LDHE_t + \beta_2 LSIZ_t + \beta_3 LEVE_t + \beta_4 LSWE_t + \epsilon_t $$

(1)

FFP is firms financial performance, which is a proxy for return on asset, the subscript i stands for the ‘i’th cross-sectional unit and the subscript t, stands for the ‘t’th time period of the study; $\alpha_0$ and $\beta_1$ are the intercept and coefficients to be estimated while LDHE, LSIZ, LEVE and LSWE represents natural logarithm of donation on health and education, natural logarithm of size, leverage and natural logarithm of salaries and wages on employees respectively; $E$ is the random disturbance term.

Methodology
In this research, the effect of CSR on financial performance of manufacturing firms was analyzed using a data over the period of 2005-2016. This was accomplished by utilizing the econometrics technique of Engel and Granger (1987) cointegration test and Fully Modified Regression. Previous studies on corporate social responsibility and financial performance are investigated by the methods of short run and long run. Most of researchers used the long run approach in empirical studies. The results of these studies are mixed, means some support the view that there is positive relationship of corporate social responsibility and financial performance of firm while others conclude negative relation and some studies found no significant impact of corporate social responsibility on financial performance. Tsoutsoura & Margarita (2004) explained that the methodology of the studies on corporate social responsibility and financial performance are of two types, in first the researchers used the concept of event study, it reveal the financial performance of firms and their corporate social responsibility relation in short run by using the abnormal return concept. From the second aspect researchers used the long run approach of financial performance measurement and corporate social responsibility by using the accounting measurement. From these two methods the researchers conclude the mixed results. First concept used by Wright & Ferris (1997) and found positive relationship of corporate social responsibly and financial performance, Posnikoff (1997) concluded negative relationship of corporate social responsibility and financial measurement, while Welch & Wazzan (1999) conclude that there is no relation of financial performance and corporate social responsibility. The second type of methods used by Cochran & Wood (1984) and found positive relation of financial performance and corporate social responsibility, Aupperle, Carroll & Hatfield (1985) conclude from their study no significant relation of financial performance and corporate social responsibility.

Data Source and Nature of Data
The data used in this study are collected from the annual reports of the sample firms, nature of data is secondary and is time series.

**Population and Sample of the study**
Population of this study is the manufacturing firms listed on Nigeria Stock Exchange, time period of this study is 2005-2016, like some previous studies the time period of this study is also lengthy. Ding (2014) during long run the corporate social responsibility increase the financial performance of firms. Population of this study is manufacturing firms listed on Nigeria Stock Exchange. Out of ninety one listed firm twenty one were included in this study on the basis of the availability of their annual reports during the study time period, due to non-availability of the data one firm is not included in the study.

**Variables of the Study and its Measurements**

**Independent Variable**
Since the regression model is econometric, it is crucial to correctly quantify the CSR. Corporate social responsibility is use as independent variable, proxy use for it as salaries and wages spending on employees, donation in the form of health and education. Proxy used by Kiran et al., (2015).

**Dependent Variable**
The FFP is used as the dependent variables to test the effect of CSR on FFP. Data meant for this study will be obtained from secondary sources. The data relevant to this study will be derived from the annual audited reports and accounts of the firms for the periods 2005-2016 and these were collected from the Nigeria Stock Exchange. As in this study examined the effect of corporate social responsibility on financial performance of firms, proxy used for the financial performance is return on assets. Tsoutsoura and Margarita (2004) used the same proxy. Return on Assets is measure by net income divided by total assets, Iqbal et al., (2012) and Cheruiyot (2010), Hull and Rothenberg (2008), Mahoney & Roberts (2007), Waddock & Graves (1997), Lee et al., (2009), D’Arcimoles & Trebucq (2002), Aras et al., (2010), Setiawan & Darmawan (2011), Bhagat & Bolton (2008), Cornett, Otgontsetseg, & Hassan (2014) and Fernandez-Sanchez & Sotorrio (2007).

**Control Variables**
In this study, I will incorporate Size of firms and leverage are used as control variables of the study, Tsoutsoura and Margarita (2004). Size is measure as measured by Tsoutsoura and Margarita (2004), natural log of total assets. Natural log of total assets is also used by Ding (2014). While, leverage of firms will be measured the ratio of long-term debt to the total value of asset as control variables in the fully modified ordinary least square (FMOLS) regression and Engel-Granger cointegration analysis.

**Model of the Study**
The regression model use for the analysis of data as used by Tsoutsoura and Margarita (2004), Iqbal et al., (2012), Kiran et al. (2015). Nelling & Elizabeth (2009) for the analysis of data used the time series data models.
FFP\(_i\) = \(\beta_0 + \beta_1 LDHE_t + \beta_2 LSIZ_t + \beta_3 LEVE_t + \beta_4 LSWE_t + \epsilon_t\) \(\epsilon_t\) represents the random disturbance term.

To answer the research questions, the research would design and make use of the model below:

**Empirical Results and Discussion**

**Correlation between dependent and independent variables**

Table 4.2.2 presents the correlation matrix of all variables in the regression model for the sample firms in this study. Particularly, I care about the correlation between CSP and FFP (ROA). The correlation level in this table are significant at the 0.01 level and 0.05 level.

When variables are highly correlated in the regression model, it is difficult to identify the contribution of each independent variable in explaining the dependent variable.

**Interpretation of Correlation Analysis**

From the Table 4.2.2, ROA is negative and significantly correlated with LDHE at the significance level of 1%, similarly, ROA is negatively correlated with LSIZ at the significance level of 1%. Besides, there is a positive and significant correlation between ROA and LEVE at the significance level of 1%. While, ROA and LSWE also have a negative correlation at the significance level of 5%. Thus, it implies the importance of control variables suggested by Inoue & Lee, 2011; Wang & Bansal, 2012. The correlation matrix is used to determine the degree of relationship between the dependent and independent variables of the study as well as independent variables themselves.
associations among the variables of the study are presented in the below table. The full results are contained in the appendix.

The correlation matrix do not serve as a basis for generalization on the actual relationship between among the variables, as such, correction matrix only gives a mere degree of association between the dependent variable and the independent variables themselves. Therefore, we need to apply the fully modified least square regression (FMOLS) and Engel-Granger cointegration tests to investigate the integration of all the variables involved.

**Estimation of Fully Modified Ordinary Least Squared (FMOLS)**

As indicated earlier, a fully modified ordinary least squared (FMOLS) regression was estimated using the variables presented and the residuals from this FMOLS regression was tested for the analysis, and also, E-views 9.0 has an in-built Engel-Granger Cointegration test both with Tau-statistic and Z-statistic values as reported in table 4.2.3. There was strong evidence of cointegration relationship between financial performance and the explanatory variables presented in the model (CSR). The implication is that, a linear combination of the variables will follow a stationary process hence convergence to long-run equilibrium is possible. Since the present of cointegration is established, a long-run relationship is said to exist among the variables of the study. The null hypothesis of no long run relationship between CSR and firms financial performance is therefore rejected.

The results of the cointegration regression based on FMOLS are presented in Table 4.2.3. All the variables presented in the model were statistically significant to exert strong effect of CSR on firm’s financial performance in the long-run for Nigeria.

**Table 4.2.3: Results of FMOLS Cointegration Test**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Std. Error</th>
<th>t-Test</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDHE</td>
<td>0.340176</td>
<td>0.106667</td>
<td>3.189140</td>
<td>0.0005***</td>
</tr>
<tr>
<td>LSIZ</td>
<td>0.414673</td>
<td>0.082775</td>
<td>5.385359</td>
<td>0.0000***</td>
</tr>
<tr>
<td>LEVE</td>
<td>0.372084</td>
<td>0.045440</td>
<td>8.188468</td>
<td>0.0000***</td>
</tr>
<tr>
<td>LSWE</td>
<td>0.215602</td>
<td>0.019260</td>
<td>11.19429</td>
<td>0.0000***</td>
</tr>
</tbody>
</table>

R-squared = 0.813934,  Adjusted R-squared = 0.802058.

*Source: Researchers computation using EVIEWS software version 9.0. *(**)*** denote rejection of the null hypothesis of no level impact at 1%, 5% and 10% respectively.

**Interpretation of Fully Modified Ordinary Least Square (FMOLS) Tests Results**

The empirical results in Table 4.2.3 are robust and satisfactory as well. The regression had a coefficient of determination of about 80% adjusted for the degrees of freedom. This means that about 80% of the variations in firm’s financial performance in Nigeria could be attributed to the explanatory variables presented and therefore presents a good fit of the regression model. This reinforces the existence of a long-run linear relationship among return on asset (ROA), natural logarithm of donation on health and education (LDHE), natural logarithm of firm size (LSIZ), leverage (LEVE) and natural logarithm of salaries and wages of employees (LSWE). All their signs showed as expected. From the results, a positive relationship is found to exist between CSR and FFP. This is consistent to the a priori expectation indicating that a 1% increase in natural logarithm of donation on health and education brings about 34% increases in firms financial
performance over the long run horizon. This of course is found to be highly significant judging from the t-statistics of approximately 3.2 which is greater than the standing rule of 2.7. Thus, in the long run, donation on health and education affects firms’ financial performance positively in Nigeria.

The positive sign of natural logarithm of donation on health and education suggest that policies that aim to cause an improvement in health, life expectancy and education tend to raise financial performance of industries in the long run since this variable was statistically significant at 1% error level. This is because as the companies tries to improve the health status, life expectancy of the population and the level of education of the communities then it must also improve their financial performance, in order to achieve these gains of making the society happy, healthier and performance. It is implied that increase in the financial performance is because of improvement in the health status, life expectancy and more development in the level of education of the communities.

Discussion of Findings
This study empirically investigate the effect of CSR on financial performance of manufacturing firms in Nigeria by using fully modified ordinary least square (FMOLS) and Engel-Granger cointegration method. However, the FMOLS indicates that, the regression had a coefficient of determination of about 80% adjusted for the degrees of freedom. This means that about 80% of the variations in firm’s financial performance in Nigeria could be attributed to the explanatory variables presented and therefore presents a good fit of the regression model. This reinforces the existence of a long-run linear relationship among return on asset (ROA), natural logarithm of donation on health and education (LDHE), natural logarithm of firm size (LSIZ), leverage (LEVE) and natural logarithm of salaries and wages of employees (LSWE). All their signs showed as expected.

Conclusion and recommendations
The main objective of the study is investigated the effect of corporate social responsibility and financial performance of manufacturing firms using annual time series data from Nigeria for the period 1985-2016 and various econometrics and descriptive statistical analysis such as mean, standard deviation, minimum, maximum, correlation matrix analysis, Engel-Granger cointegration and fully modified ordinary least squared tests were applied. The correlation analysis matrix of the linear relationships indicates a negative relationship between corporate social responsibility and financial performance of manufacturing firms except leverage which shows a positive association in Nigeria. Also, the corporate social responsibility have had positive and significant impact relationship on the financial performance of manufacturing firms as it impact their return on asset positively in Nigeria, while, the empirical findings indicate that corporate social responsibility has long run relationship on the financial performance of manufacturing firms in Nigeria. There is long run equilibrium relationship between corporate social responsibility and financial performance of manufacturing firms in Nigeria. There is significant long run relationship between the dependent and independent variables in Nigeria.

Based on the findings of this study, it necessitated some policy directions which may be useful recommendations for policy authorities. Therefore, the study recommends that manufacturing firms should increase their allocations for investments in corporate social
responsibility. This is because the firm does not exist in a vacuum and has impact on the community in which they operate in. Also, it recommends that manufacturing firms should hence continue to engage in corporate social responsibility to further improve its financial performance. The organization should therefore view corporate social responsibility as an avenue for profit maximization. Since both the fully modified regression and Engel-Granger results shows good connection between donation on health and education, firm size, leverage and salaries and wages of employees (corporate social responsibility) and the financial performance of manufacturing firms (return on asset) in the long run, there is need for policy cohesion and coordination among the sectors and communities concerns in Nigeria since corporate social responsibility and the financial performance of manufacturing firms are closely connected, both being integral part of the same process. The relative stability of these variables over time, in addition to their levels, is crucial. This calls for concerted efforts and coordination among the policy makers in industries, trade and investment.
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