

## Social Cost and Revenue Growth in Listed Oil and Gas Companies in Nigeria

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**Abstract:** In essence, there is nothing new about environmental and social issues. They have, of course, always been with us and no decent business entity entirely ignores them. What is new is the preference of their ranking in different corporate agenda. Interestingly, the last two to three decades witnessed an increase in matters relating to organizations' interactions with their physical environment and operating society which is also widely accepted as central, even crucial, to the future well-being of both the business and those who are affected by it. In view of that, this paper is an empirical examination into the influence of Social Cost on revenue growth in the listed oil and gas companies of the Nigerian economy. The central aim was to investigate how infrastructural related cost, health related cost and education programme cost influences revenue growth in the listed oil and gas companies in Nigeria. A sample of selected oil and gas companies in the country were surveyed. This survey focused on Ex post facto sourcing of data from the Annual financial Reports of the relevant oil and gas companies between 2009 to 2017 fiscal years. Moreover, the generated data were analyzed using descriptive and inferential statistics while regression analysis model was adopted for estimating the test result. However, findings revealed a significant positive influence by a segment of the social cost (health and education) on revenue growth as against insignificant influence by another segment of the social cost (infrastructure) on revenue growth in the listed oil and gas companies in Nigeria. It was therefore concluded that the social cost contributed to revenue growth in the long range of the listed oil and gas companies in Nigeria. Since oil and gas companies pay corporate tax and return personal income taxes of their employees to relevant governments in Nigeria, it was recommended that the government should dominate the base of corporate social responsibility in the aspect of providing basic infrastructures to the relevant communities. Nevertheless, social goods and services in this context should be supported by the oil and gas companies as a strategy for boosting their economic returns in the long range, though in moderation to avoid negative effect on their revenue growth.

**Keywords:** Social Cost, Revenue Growth and Listed Oil and Gas companies

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### I. Introduction

Every company in the world and Nigeria in particular has a goal of maximizing its revenue. Such goal will always remain the priority of most companies, even at the expense of lower profits but larger market share in either short or long range (Baumol, 1959). Therefore, revenue according to Adam (2006) is the fund required by companies to finance its activities. These funds are generated from different sources depending on the nature of each company's business model. Put differently, revenue is money and money surrogate received or receivable by companies or other types of business establishments through their operating activities (Hornby, 2015). Again, Dandago and Alabade (2000) described revenue as income required by businesses to finance its growing expenditure. Summarily, revenue may also be described as any derived or accrued income by a business entity through direct business activities, interests, dividends, and so on. Inferring from the foregoing definitions therefore, revenue simply is the total amount of income accruing to a firm from various sources within a specified period of time (Ekpoese, Umanah, Akpan and Okafor, 2019)

Revenue growth is fundamental for any company to significantly advance towards its set goals. It entails sustaining existing revenue position by a firm in an industry while strategising for successive revenue increment through business and market expansion in a competitive business environment (Ostrom, 2010). However, attaining such target requires strategic management decisions which in turn increase the revenue margin. Effective management also stabilises business cash flow and provides greater visibility in streams of revenue (Fang and Steenkamp, 2008). Furthermore, revenue growth describes the increase or the decrease in the rate of converting a firm's goods or services into cash and cash equivalent from one business period to another.

It is therefore one of the trend indicators of business direction in terms of performance in income level. Thus, revenue is one of the popular measures for assessing the economic health of business entities.

Considering the obvious interdependence between income and expenditure, a business with poor revenue growth may not cope with social cost. More so, as social cost is rapidly ranking among critical success factors within businesses across the globe and many firms cannot completely dissociate from committing some resources for the benefit of their operating society. The concept therefore encourages firms to be accountable to varied set of stakeholders rather than just shareholders, in addition to demonstrating concern for environmental protection, employees' welfare, operating community, and a broader segment of the society in a sustainable manner. Aside from these, Daft (2008) posited that social cost is the obligatory actions by management of companies to make reasonable choices that would contribute to the welfare of stakeholders and the organization. In another opinion, Brusseau (2016) asserted that social cost consists of two meanings. Firstly, it is a general concept regarding the actions of a firm that emphasize both responsibilities to make wealth and that of interacting ethically with the surrounding community. Secondly, it is a specific idea of the responsibility to make profit and also relating with the underlying questions of community welfare. Nonetheless the seeming rationale for companies to globally adopt social cost as an important determinant of their financial performance, Griffin & Mahon (1997) asserted that previous examinations of such relationship in different sectors across the world significantly yielded inconclusive, inconsistent, and sometimes contradictory results. To this extent, it becomes pertinent to probe further into the association between social cost and revenue growth among business entities, especially the oil and gas companies in Nigeria.

Hence, the central objective of this study is to determine the influence of social costs (SC) on revenue growth as reported by listed oil and gas companies in Nigeria. However, the determinants for social costs are Health related cost (HRC), education programmes cost (EPC), and infrastructural related cost (IRC) such as roads, water and power among others. In a related approach, revenue growth is measured as absolute change in annual revenue figures (i.e, the difference between the current year's revenue and that of immediate past year's revenue). Meanwhile, the choice of listed oil and gas companies in Nigeria for this empirical study stems from their influential and significant contribution to the economy, in addition to their numerous and sometimes agitating stakeholders. Moreover, the issues of environmental degradation and depletion of the natural resources, especially in the Niger-Delta region of Nigeria are increasingly attracting local, national, and international concerns. Thus, resulting to an increasing public outcry by greater chunk of the stakeholders for more corporate social responsibility (CSR) in form of incurring additional social cost by such companies. While the influence of social cost on revenue growth is still subject to empirical investigation in this study, the researchers assume the following hypotheses:

**H<sub>01</sub>:** There is no significant influence of infrastructure related cost on revenue growth of listed oil and gas companies in Nigeria.

**H<sub>02</sub>:** There is no significant influence of health-related cost on the revenue growth of listed oil and gas companies in Nigeria.

**H<sub>03</sub>:** There is no significant influence of education programme cost on the revenue growth of listed oil and gas companies in Nigeria.

This paper started with an introduction in section one. The remainder is divided into five sections. Section two, which is theoretical framework and empirical literature is followed by section three, which is methodology. While section four is data analyses and interpretation, section five is discussion of findings. The final section is conclusion and recommendations.

## **II. Theoretical Framework and Empirical Literature**

Social cost is often a financial upshot of the social actions and investments undertaken by companies for the benefit of their operating environment and always in response to the externalities resulting from their activities. If the externality causes loss of welfare, it is referred to as negative externality but if it gives rise to increase welfare, it is a positive externality. An important feature of externality is that the corresponding costs termed social cost should be borne by the agent causing the externality. Therefore, social cost refers to all effects of the activities, including direct and indirect ones appropriated by the causative party and borne by others (Akbar, 1995). This implies that social costs should be incurred to mitigate externalities wholly and exclusively created by the operations of the causative business entity.

It is obvious that companies also bear social costs after settling their legal obligation to the government which is mainly responsible to cater for social activities. This consensus is based on the principle of environmental economics known as Polluter pays principles (PPP). The PPP is far from being applied everywhere because it is difficult to connect a specific loss of environmental value to a specific polluter. Thus, there are basic components of social costs to ease estimation and inclusion in most social cost analyses of environmental policies.

According to Eric and Kurt (2001), the basic component of social costs for easing estimation and inclusion in social costs analyses of environmental policies are, real resources compliance cost which involves direct costs and the principal component of total social costs which are associated with purchasing, installing, and operating new pollution Prevention equipment, changing the production process by using different inputs, or capturing the waste product and selling or reusing them. The real resources costs include unpriced resources that have opportunity cost associated with unpaid labour diverted from other productive uses and extra administrative costs associated with compliance. It also involves government regulatory costs which include monitoring, administrative, and enforcement costs associated with new regulations. Another aspect of real resources cost is spent for setting up a new market when incentive-based regulations such as tradable permits are established among others.

Eric and Kurt (2001) in addition brought about alternative methods for social cost management. These include, the Direct Compliance Cost Method which involves sample approach used in estimating social cost. Here, social cost for a policy is simply set equal to the initial engineering compliance options the firm is likely to adopt. If only compliance cost is calculated, the private costs are likely to be overstated. In addition, when the resulted changes in consumer surplus are calculated at the higher prices, consumer welfare losses are also likely to be overestimated, since a change in consumer behaviour will not be taken into account. Nevertheless, using direct compliance cost as an approximation of actual social costs can only be reasonable for a policy when price and quantity changes are small and where there are few indirect effects among others.

In the same vein, social costs for the purpose of managerial control are designed to support and facilitate the achievement of an organization's own objectives. According to Gray (2000), organization are seen to benefit from implementing social costs in a number of ways, namely; increase information for decision making, more accurate product or service costing, honouring stakeholders right of information, increasing transparency of corporate activities, and identifying social cost of economic success among others.

Apart from the benefit, Social costs poses several challenges for companies, especially in differentiating their social responsibilities from those of the public sector. Determining the extent of their obligations in the supply chain and decide until what point in the future they should anticipate and plan for the consequences of their activities, especially in the case of utilising natural resources. Pragmatism in social costs is essential because despite the many issues it can address, social cost cannot substitute for the role of government in enforcing laws and international standards (Babalola, 2012). Therefore, the apparent conflict between social costs and the objectives of a firm was noticed early by Milton Friedman - the nobel laureate who had declared that any effort to use corporate resources for purely altruistic purposes would constitute socialism. In fact, Friedman recommended that corporation law should be modified to discourage social costs (Manne, 2006). Yet, more than thirty years after Friedman made his declaration, social cost is fast becoming a generally acceptable norm. Nonetheless, a wide range of empirical researches have indicated positive neutral and even negative impacts of social costs on revenue growth or performance. While social costs skeptics may explain the practice as a result of pressure from society, an explanation benchmarked on profit motive as the force behind social cost appears more reasonable for explaining the source of the social pressure. It is worthy of note that social costs practices provide information about performance of a company in relation to its interaction with its physical and social environment (Gray, Collison and Bebbington, 1998). Therefore, social costs include health and safety records, training, employment, education programmes, infrastructural facilities among others. Moreover, social costs can be disclosed using different reporting frameworks, such as Global Reporting initiative (GRI), financial and International Standards Organization (ISO), Among others, But GRI reporting principle is widely accepted as fundamental to achieving transparency in sustainability reporting.

Considering the value relevance of social cost, revenue Growth may still be possible even in times of economic turbulence. Maintaining the financial health of a company and effectively managing revenue growth is often the deciding factor on whether the firm will lose market share during the crisis or whether it will use the downturn as an opportunity to grow. Every company, big or small strive to achieve their growth targets in profitability and revenue. In order to optimize revenue and returns, companies need a disciplined approach to revenue management. By carefully managing revenue growth and adhering to the modern principles of revenue performance management, rapidly expanding business can identify the major drivers and challenges to revenue, measure them and plan out the best course of action. Hence, persistence market research identifies the most practical strategies for companies to plan, manage and help increase revenue growth. Based on a company historic and current trends, one can rightly identify the recurring and non-recurring streams and work toward building a reliable income stream. For entrepreneurs however, launching a new business often mean walking a time line between pursuing earning growth and growing the top line revenue. A business cannot be successful in the long range without earning a profit but it also must reinvest some of its profit to grow beyond a startup, expanding into a new market or geographical territories. By driving revenue upwards, the profitability of a business is enhanced. Therefore, revenue growth, becomes the engine for investment, attracting and acquiring talented workforce, developing new capabilities, introducing additional products, and acquiring other companies by expanding and attaining even more growth and profit in the business. Consequently, the growth of revenue is

a normal aspect of the phenomenal growth of a company. Apart from the possible merits derivable from revenue growth by a firm, there are still certain factors that could debar the operation of a good revenue growth in a company. These include but not limited to inadequate management of cashflow, not responding to competition, not nurturing a great company, not properly learning when to delegate and to involve in specific tasks, not keeping up with the market changes, and not deciding when to abandon a strategy. Be that as it may, revenue growth as measured by total revenue for the current business period minus total revenue for the immediate prior period. In addition, an entrepreneur may also adopt the following approaches for a better outcome. These include brainstorming in locating how the problem emanated, using critic and experience in solving certain issues of revenue growth, adopting new strategy, good approach to revenue managements, and staying alive for all competitions. Nevertheless, revenue growth is a reliable tool for business survival (Tajnikar, Ponikvar and Bonca, 2016).

Moreover, the theories underlying this study are the shareholder and the stakeholder. In line with the popular appriori expectation however, the researchers adopted stakeholder theory. This theory was introduced by Edward Freeman in 1988. The theorist emphasizes that taking all constituent groups into account is the better way to maximize overall performance in a business concern. Stakeholder theory does not view maximization of shareholders wealth as the most efficient way to competitive advantage for companies.

However, Friedman is against the stakeholders theory which does not consider wealth maximization as the ultimate goal of business. He insists that there is one and only one social responsibility of business, which is the use of its resources and engaging in activities designed to increase its profit. To him a manager is an employer of the shareholders whose loyalty, first and foremost is to them. Hence, his sole objective must be to make profit and keep the company alive. He also asserted that when managers are allowed the freedom to use organizational resources for the good of the society, rather than strictly upholding the interest of the owners, such manages are being conferred with arbitrary ownership which they may misuse. Friedman further added that increasing social cost of companies ultimately means slowing growth and that since companies pay taxes to government, it would be exploitative to expect the company to engage in social responsibilities (Aluko, Odughesan, Gbadamosi and osuagwu, 2004). The stakeholder theory although complex in nature is able to handle the issue of social costs as a priority, even against the dictate of Friedmand. Hence, it provides background support to the concept of social cost upon which the study is based.

Many researchers have investigated topics that are related to this study. Part of such researchers are Effiong, Akpan, and Oti (2012) who examined corporate governance, wealth creation and social responsibility accounting. Their main objective was to identify the inter-relationship between corporate governance and social responsibility; how social responsibility accounting can help organizations achieve good corporate image. Data were collected from secondary source basically from the annual report of deposit money banks and analysed using the Pearson Product Moment correlation Coefficient. The study revealed that social responsibility accounting creates wealth for the shareholders and strengthened corporate governance. It was concluded that any means, method, procedure, or medium which provides information that keeps the firm awake to its social responsibility is also a measure that can ensure good corporate governance. The researchers however recommended that every good corporate governance should aim to embrace social responsibility accounting. Summarily, social responsibility accounting demonstrated a significant positive impact on corporate governance and corporate image of deposit money banks.

Again, Oti, Effiong and tiesieh (2012) studied the implication of Environmental costs on the return on investment of Selected Manufacturing Companies in Nigeria. Their main objective was to examine if any relationship exists between environmental practices and firm performance. Data were collected from both primary and secondary sources and analysed using the Ordinary Least Square Technique. Findings demonstrated that investment in social and environmental responsibilities such as Employee Health and Safety (EHS), Waste Management (WM), Community Development (CD) are related to improved return on investment of the environmentally responsible firms among others. The researchers concluded that money expended on settling disputes could be channeled towards enhancing corporate liquidity capable of aiding management for better planning and decisions to avert avoidable disputes. It was recommended among others that environmental regulatory authority should compel manufacturing companies to introduce environmental disclosures into the traditional accounting systems of manufacturing companies.

Shehu (2013) examined the influence of corporate social responsibility on profit after tax of selected deposit money banks in Nigeria. Adopting content analysis research design, secondary data were obtained from financial reports of relevant banks for the period, "2006 to 2010". The data were analysed through the use of Regression and correlation models, and result indicated a weak positive relationship between corporate social responsibility and profit after tax. In another related study, Babalola (2012) examined the relationship between corporate social responsibility and profitability of randomly selected firms in Nigeria. Also relied on secondary data for 10 years financial reports and financial summary which covered between 1999 to 2008, ordinary least square was employed for data analyses. Findings from the analyses showed that the sampled firms invested less than ten percent of their annual profit in social responsibility, thus the result obtain was a negative relationship.

It was noted that the reviewed studies showed a mix results of the relationship between concerned dependent and independent variables, which makes the research in this area inconclusive. For instance, many researchers conducted their studies using different disclosure indices and different measures for dependent and independent variables. Again, most previous researchers adopted profit after tax and before tax as preferred measure of performance. As a way of complementing the gap observed in previous literature in this subject area, the current researchers deemed it important to examine social cost and revenue growth in the oil and gas sector of the Nigerian economy.

### III. Methodology

#### Research Design

Due to historical nature of annual financial reports which is the main source of data for this study, the researchers adopted ex post facto research design. To that extent, secondary panel data were obtained from the relevant firms through contents analyses, summarized using descriptive statistics, and tested through regression model. However, the population of the study consists of 12 oil and gas companies listed on the Nigerian stock exchange from 2009 to 2018. Utilising Yamane’s sample size determination technique, five of these companies form the sample. The sample units were purposively selected on the basis of a pilot precondition of consistence in publishing social costs for the years under review. Moreover, the sample companies are Mobil oil Plc, Forte Oil Plc, Oando Oil Plc, Total Oil Plc, and MRS Oil Plc.

#### Operational Definition of Variables

Revenue growth represents the dependent variable of the study. Whereas the main independent variables are infrastructural related cost (IRC), health related cost (HRC), education programme cost (EPC); leverage (LEV) is a control independent variable. However, the value of revenue growth, infrastructure related cost, health related cost, education programme cost are determined by the absolute annual amount earned from or incurred on them as the case may be, while leverage is expressed as a percentage of capital.

#### Theoretical Model

The theoretical model specified for this study is social costs (SC) model drawn from corporate social responsibility. The model describes the relationship between SC and revenue growth and is represented as follows;

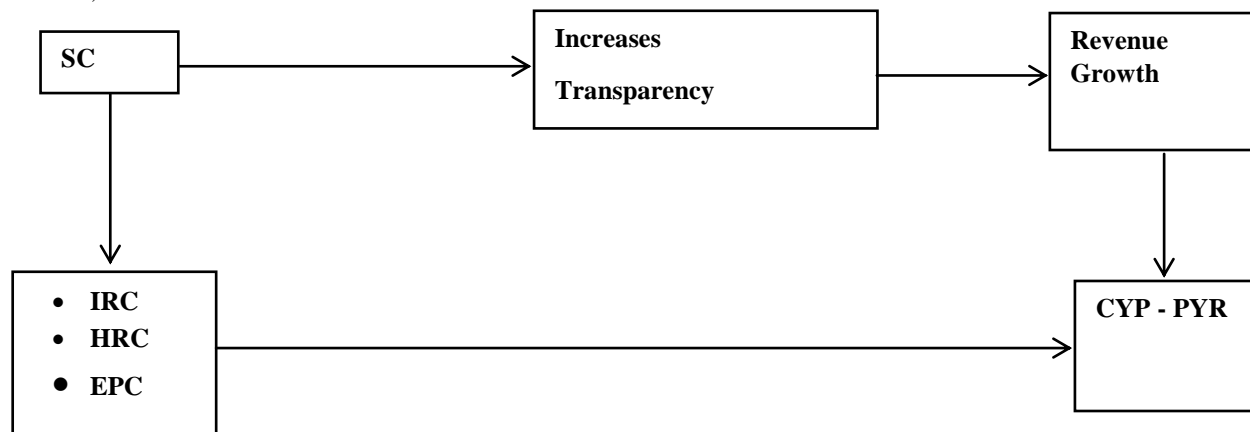


Figure 3.1: Social Cost Model

Source: Researcher’s Design (2019)

Social costs represented in this study as infrastructural related cost (IRC), health related cost (HRC), and education programme cost (EPC) are theoretically expected to positively influence revenue growth. Moreover, revenue growth is calculated as the difference between current year’s revenue and immediate prior year’s revenue.

#### Model Specification

Multiple regression analysis is adopted for estimating the test result in this study. The model is stated as:

$$(CYR - PYR)_{it} = \beta_0 + \beta_1(IRC)_{it} + \beta_2(HRC)_{it} + \beta_3(EPC)_{it} + \beta_4(LEV)_{it} + e_{it}$$

Where:

CYR - PYR = difference between current year’s revenue and immediate prior year’s revenue;

$\beta_0$  = constant;

$\beta_1, \beta_2, \beta_3,$  and  $\beta_4$  = coefficients of the independent variables- Infrastructural Related Cost (IRC), Health Related Cost (HRC), Education Programme Cost (EPC), and Leverage (LEV) respectively;

Leverage = the fraction of a firm’s capital financed through debt instruments;

I = number of companies;  
t = number of years; and  
e = error term.

**IV. Data Analyses and Interpretation**

The three independent variable components of the hypotheses were tested as isolated cases in a multiple regression model using Statistical Package for Social Sciences (SPSS) version 20 at 5% level of significance. Moreover, data used for the analyses are shown in appendix I.

**Descriptive Statistics of Social Cost represented by Infrastructural related, Health related, and Education programme costs variables of relevant companies in the oil and gas sector of Nigeria.**

**Table 4.1: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Revenue Growth (₦)	45	57,918,415,000.0	488,518,160,000.0	14,486,073,666.6	77,123,246,280.9	5.475	.354	34.037	.695
Infrastructure Related Cost (₦)	45	.0	165,277,421.0	7,828,335.3	23,779,730.0	6.195	.337	41.190	.662
Health Related Cost (₦)	45	.0	78,689,709.0	6,232,383.1	14,713,743.5	3.525	.337	13.532	.662
Education programme Cost (₦)	45	.0	288,513,349.0	31,934,504.1	70,319,033.5	2.511	.337	5.737	.662
Leverage (%)	45	.0	94.0	69.500	23.2	-2.171	.337	4.318	.662
Valid ₦ (list wise)	45								

Source: Data processing via SPSS (2020).

The result of the descriptive statistics as shown in Table 4.1 has a minimum value for each of the independent variables as zero (0) while the minimum value for the dependent variable (revenue growth) was - ₦57,918,415,000.0. Similarly, the maximum values for each of the variables were; revenue growth (₦488,518,160,000), infrastructure related cost (₦165,277,421.0), health related cost (₦78,689,709), education programme cost (₦288,513,349.0) and leverage (94%) respectively. On the average, the selected companies had a revenue growth of ₦14,486,073,666.6 within the period under review. The sampled companies spent on average ₦ 7,828,335.3 in infrastructure related cost ₦6,232,383.1 on health-related cost and ₦31,934,504.1 on education programme cost. The average leverage of the companies was 23.2%. Table 4.1 also indicated that the data set are normally distributed the as revealed by the standard deviation, skewness and kurtosis.

**Test of Hypotheses**

The guiding decision rule for the test states that the null hypothesis should be rejected if t-calculated is greater than the critical value of t and p-value is less than 0.05 level of significance. The result of the regression analysis is shown thus;

**Table 4.2 Regression Model Summary of Social Cost with Revenue Growth in the listed Oil and Gas Companies in Nigeria.**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.616 <sup>a</sup>	.380	.318	63,703,603,007.5290	2.828

a. Predictors: (Constant), LEVERAGE, HEALTH RELATED COST, EDUCATION PROGRAMME COST, INFRASTRUCTURE RELATED COST

b. Dependent Variable: REVENUE GROWTH

Source: Data processing via SPSS (2020)

**Table 4.3 ANOVA Result for the regression of Social Cost with Revenue Growth in the listed Oil and Gas Companies in Nigeria.**

Model	Sum of Squares	df	Mean Square	Fcal	Sig.
1 Regression	99,385,823,698,471,580,000,000.0	4	24,846,455,924,617,896,000,000.0	6.123	.001 <sup>b</sup>
Residual	162,325,961,445,634,330,000,000.0	40	4,058,149,036,140,858,000,000.0		
Total	261,711,785,144,105,900,000,000.0	44			

a. Dependent Variable: REVENUE GROWTH

b. Predictors: (Constant), LEVERAGE, HEALTH RELATED COST, EDUCATION PROGRAMME COST AND INFRASTRUCTURE RELATED COST  
 Source: Data processing via SPSS (2020)

**Table 4.4 Coefficients of the Regression of Social Cost with Revenue Growth in the listed Oil and Gas Companies in Nigeria.**

Model	Unstandardized Coefficients		Standardized Coefficients	t cal	Sig.
	B	Std. Error	Beta		
(Constant)	12,959,046,359.839	28,942,618,821.160		.448	.657
1 INFRASTRUCTURE RELATED COST	-6,044.505	1,993.611	-.568	-3.032	.004
HEALTH RELATED COST	1,247.179	971.294	.249	1.284	.207
EDUCATION PROGRAMME COST	615.854	154.314	.586	3.991	.000
LEVERAGE	-9,839,722.142	409,486,801.032	-.003	-.024	.981

a.Predictor (Constant),SOCIAL COST b.Dependent Variable: REVENUE GROWTH  
 Source: Data processing via SPSS (2020)

**H<sub>01</sub>:** There is no significant influence of infrastructure related cost on revenue growth of listed oil and gas companies in Nigeria. The regression coefficient shown in Table 4.4 indicates that the t-calculated value of -3.032 is less than the critical t-value of 2.015 and the p-value of 0.004 is less than 0.05; hence, the null hypothesis one is accepted. This implies that there is no significant influence of infrastructure related cost on revenue growth of the listed oil and gas companies in Nigeria.

**H<sub>02</sub>:** There is no significant influence of health-related cost on the revenue growth of listed oil and gas companies in Nigeria. The regression coefficient as shown in Table 4.4 indicates that the null hypothesis two is accepted because the t-calculated value of 1.284 is less than the critical t-value of 2.015 and the p-value of 0.207 is greater than 0.05. This also implies that there is no significant influence of health-related cost on revenue growth of listed oil and gas companies in Nigeria.

**H<sub>03</sub>:** There is no significant influence of education programme cost on the revenue growth of listed oil and gas companies in Nigeria. The regression coefficient as shown in Table 4.4 reveals that the t-calculated value of 3.991 is greater than the critical t-value of 2.015 and the p-value of 0.000 is less than 0.05; therefore, the null hypothesis three is rejected. This means that there is a significant influence of education related cost on revenue growth of listed oil and gas companies in Nigeria.

Note: it is also important to highlight that there is no significant influence of Leverage (LEV) position on revenue growth of listed oil and gas companies in Nigeria. The regression coefficient shown in Table 4.4 indicates that the t-calculated value of -0.024 is less than the critical t-value of 2.015 and the p-value of 0.981 is greater than 0.05; hence, the control variable has no significant influence on revenue growth.

### V. Discussion of Findings

The multiple regression analysis reveals an R-Square value of 0.380, which indicates that 38.0% of the variation in the revenue growth of oil and gas firms in Nigeria is jointly contributable by their infrastructural related cost, health related cost, and education programme cost. This means that social costs exert a significant influence on the revenue growth of oil and gas firms in Nigeria as confirmed by the p-value of 0.000, which is lower than 0.05 in Table 4.3.

The result of the analysis in table 4.4 specifically indicates a better value of -0.568 for infrastructural related cost. This implies that if other variables are held constant, every unit change in infrastructural related cost results to -56.8% variation in the revenue growth of listed oil and gas companies in Nigeria. Such negative influence indicates that the larger the infrastructure related cost, the lower the growth of revenue of the firms. Moreover, this negative direction is in tandem with the findings in a study by Babalola (2013).

Another isolated result shown in table 4.4 furnishes a better value of 0.249 for health-related cost. This means that if other variables are held constant, a unit change in health-related cost results to 24.9% variation in the revenue growth of listed oil and gas firms in Nigeria. The positive influence indicates that the larger the health-related cost, the better the growth of revenue of the firms. Coincidentally, this result is convergent with the outcome of a study by Oti, Effiong and Tiesieh (2012) who concluded that investment in social environmental responsibility, especially in the areas of employees' health and safety is a panacea for

management and community development; hence, waste management improved the return on investment of the reviewed firms.

Similarly, another analysis in table 4.4 resulted into a better value of 0.586 for education programme cost. This also implies that if other variables are held constant, every unit change in education programme cost results to 58.6% variation in the revenue growth of listed oil and gas companies in Nigeria. The positive direction of the influence indicates that the larger the education related cost, the better the growth of revenue of the firms. This finding is in agreement with those of some previous researchers. For instance, Effiong, Akpan and Oti (2012) concluded that social responsibility accounting created wealth for shareholders and strengthens the corporate governance structure. In a related study, shehu (2013) also concluded a positive relationship between corporate social responsibility and profit after tax.

However, table 4.4 further indicated a beta value of -0.003 for Leverage (LEV). This means that if other variables are held constant, a unit change in leverage position results to -0.3% variation in the revenue growth of listed oil and gas companies in Nigeria; and -0.3% is approximately a neutral or no variation.

## **VI. Conclusion and Recommendations**

Drawing from the test result of this study, there are negative influences by infrastructure related cost and health related cost on the revenue growth of listed Oil and Gas companies in Nigeria; whereas there is a positive influence by education programme cost on the revenue growth of the companies. Therefore, the researchers recommend the following:

- (i) As these oil and gas firms pay corporate tax and return personal income taxes of their employees to the federal and state governments as the case may be, the government should champion corporate social responsibility in area of basic infrastructures to the host communities. Nevertheless, social activities in this aspect should be supported by the oil companies as strategy for boosting their financial returns in the long range, but with moderation to avoid negative effect on their revenue growth.
- (ii) Investment in Health programmes by oil and gas companies are expected to improve the health condition of their operating communities, especially during serious disease outbreaks or pandemic like the corona virus (COVID 19). Thus, the researchers recommend some show of health concerns by such firms as a way of bringing about significant financial return in form of revenue growth in the long range.
- (iii) Education programmes are crucial factor as building bricks of the society; therefore, oil and gas companies should reinforce corporate social responsibility in such direction as means of improving their revenue growth.
- (iv) Although, investment in Social Activities is not obligatory for companies in Nigeria because social development is neither part of their business objectives nor within the core competence and expertise of their managers, but the incidents of environmental degradation and other health and economic hazards associated with their operations make it imperative for them to engage in such activities.

## **References**

- [1]. Adams, R. (2006). *Public Sector Accounting and Finance*. Revised Edition. Lagos: Corporate Publishers Ventures, P.36
- [2]. Akbar, S. (1995). Social Responsibility Accounting, Sustainability Accounting and Islam. *Ph.D Thesis*. University of Wollongong. P.285.
- [3]. Aluko, M., Odugbesan, O., Gbadamosi, G. and Osuagwu, L. (2004). *Business Social Responsibility and Management Ethics*. Lagos: Longman. Pp.141-151.
- [4]. Babalola, Y. (2013). An impact of Audit on corporate performance: Analyses of Nigeria manufacturing firms. *Research Journal of Finance and Accounting*, 4(3): 96 - 101.
- [5]. Baumol, W. (1959). *Business Behaviour, Value and Growth*. New York: The Macmillan Company. P.164
- [6]. Brusseau, J. (2016). *The Business Ethics Workshop*. Flat World Education Inc
- [7]. Daft, R. (2008). *New Era of Management*. Second International Students Edition. South- Western: Cengage Learning.
- [8]. Dandago, K. and Alabade, J. (2000). *Taxation and Tax Administration in Nigeria*. Kano: Triumph Publishing Company Ltd, pp.1-11
- [9]. Effiong, S.A., Akpan, E.I. and Oti, P.A. (2012). Corporate Governance, Wealth creation and Social Responsibility Accounting. *Journal of Management Science and Engineering*, 6(4):110-114.
- [10]. Ekpoese, J., Umanah, N., Akpan, R. and Okafor, U. (2019). Revenue Generation and Capital Expenditure in Selected Local Government Areas of Akwa Ibom State. *International Journal of Business and Management Innovation*, 8(12):16-32
- [11]. Eric, W. and Kurt, D. (2001). *Environmental Contract: Comparative Approaches to Regulatory Innovation in the United States and Europe*. London: KLUWER Law International, p.447.
- [12]. Fang, E. and Steenkamp, J. (2008). Effect of Service transition strategies of firm value. *Journal of marketing*, 72(5):1-14
- [13]. Friedman, M. (1988). "The limitations of tax limitations". *Policy Review*, 5(89): 7-14.
- [14]. Gray, R. (2000). Current Developments and Trends in Social and Environmental Auditing, Reporting and Attestation. *International Journal of Auditing*, 4(3): 247-268.



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- [15]. Gray, R., Collison, D. and Bebbington, J. (1998). Environmental and social accounting and reporting. *Centre for Social and Environmental Accounting Research*, 1-9.
- [16]. Griffin, J. and Mahon, J. (1997). The corporate social performance and corporate financial performance debate: Twenty-five years of comparable research. *Business and Society*, 36(1):5-31.
- [17]. Hornby, A. (2015). *Oxford Advance Learners Dictionary*. 8<sup>th</sup> Edition. Oxford: University Press, P.1266.
- [18]. Manne, S. (2006). Couple-focused group intervention for women with early stage breast cancer. *Journal of Consulting and Clinical Psychology*, 2005(73):634-646.
- [19]. Ostrom, E. (2010). "Beyond markets and states: polycentric governance of complex economic systems". *American Economic Review*, 100 (3): 641-672
- [20]. Oti, P.A., Effiong, S.A. and Tiesieh, T.A. (2012). Environmental Costs and its implication on the returns on Investment: An evaluation of selected manufacturing companies in Nigeria. *Global Journal of Management and Business*, 12(7) : 1-5
- [21]. Shehu, A. (2013). The influence of corporate social responsibility on Profit after Tax of some selected Deposit Money Banks in Nigeria. *Educational Research*, 4(11):722-732.
- [22]. Tajnikar, M., Ponikvar, N. and Bonca, P. (2016). Characteristics of firms with different types of growth: The case of Slovenia. *Ekonomski Anali*, 61(208):27-47.

### Appendix

NAME OF COMPANY	YEAR	REVENUE (N)	REVENUE GROWTH (N)	IRC (N)	HRC (N)	EPC (N)	LEV( %)
MOBIL OIL PLC	2009	116,261,415,000.00	(57,918,415,000.00)	1,096,500.00	559,000.00	494,500.00	81.00
MOBIL OIL PLC	2010	58,343,000,000.00	3,756,515,000.00	2,250,000.00	1,150,000.00	1,000,000.00	75.00
MOBIL OIL PLC	2011	62,099,515,000.00	18,702,432,000.00	4,450,000.00	2,100,000.00	2,700,000.00	77.00
MOBIL OIL PLC	2012	80,801,947,000.00	(2,057,847,000.00)	1,750,000.00	4,500,000.00	1,250,000.00	80.00
MOBIL OIL PLC	2013	78,744,100,000.00	839,638,000.00	2,500,000.00	3,500,000.00	2,050,000.00	76.00
MOBIL OIL PLC	2014	79,583,738,000.00	(15,362,837,000.00)	4,100,000.00	1,000,000.00	3,000,000.00	72.00
MOBIL OIL PLC	2015	64,220,901,000.00	29,886,782,000.00	3,500,000.00	2,000,000.00	4,500,000.00	71.00
MOBIL OIL PLC	2016	94,107,683,000.00	31,143,426,000.00	-	-	-	39.00
MOBIL OIL PLC	2017	125,257,109,000.00	39,352,426,000.00	-	-	-	63.00
MOBIL OIL PLC	2018	164,609,535,000.00	-	-	-	-	-
FORTE OIL PLC	2009	159,858,809,000.00	(27,168,251,000.00)	870,000.00	120,000.00	70,000.00	63.00
FORTE OIL PLC	2010	132,690,558,000.00	(15,691,117,000.00)	2,740,000.00	250,000.00	70,000.00	64.00
FORTE OIL PLC	2011	116,999,441,000.00	(38,077,699,000.00)	100,000.00	50,000.00	50,000.00	90.00
FORTE OIL PLC	2012	78,921,742,000.00	38,619,692,000.00	250,000.00	-	100,000.00	81.00
FORTE OIL PLC	2013	117,541,434,000.00	39,173,406,000.00	4,100,000.00	-	1,000,000.00	81.00
FORTE OIL PLC	2014	156,714,840,000.00	(47,860,985,000.00)	1,000,000.00	488,091.00	3,000,000.00	87.00
FORTE OIL PLC	2015	108,853,855,000.00	22,760,107,000.00	3,250,000.00	1,000,000.00	5,885,500.00	80.00
FORTE OIL PLC	2016	131,613,962,000.00	(45,437,952,000.00)	-	-	-	84.00
FORTE OIL PLC	2017	86,176,010,000.00	48,530,296,000.00	1,792,000.00	971,600.00	500,000.00	79.00
FORTE OIL PLC	2018	134,706,306,000.00	-	-	-	-	-
OANDO PLC	2009	4,207,854,000.00	144,146,000.00	165,277,421.00	7,350,970.00	3,533,038.00	91.00
OANDO PLC	2010	4,352,000,000.00	3,770,502,000.00	12,619,800.00	52,440,305.00	7,248,886.00	88.00
OANDO PLC	2011	8,122,502,000.00	(763,621,000.00)	34,167,800.00	78,689,709.00	251,956,725.00	53.00
OANDO PLC	2012	7,358,881,000.00	(1,475,577,000.00)	18,010,169.00	42,217,795.00	109,665,938.00	74.00
OANDO PLC	2013	5,883,304,000.00	8,334,164,000.00	2,762,814.00	970,500.00	126,568,924.00	59.00
OANDO PLC	2014	14,217,468,000.00	(5,764,806,000.00)	24,586,624.00	8,719,795.00	129,467,950.00	89.00
OANDO PLC	2015	8,452,662,000.00	1,781,950,000.00	3,490,865.00	3,610,000.00	86,739,621.00	84.00

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OANDO PLC	2016	10,234,612,000.00	(10,234,612,000.00)	18,971,113.00	4,208,952.00	122,043,623.00	94.00
OANDO PLC	2017	-	488,518,160,000.00	-	-	253,804,314.00	75.00
OANDO PLC	2018	488,518,160,000.00	-	-	23,072,165.00	288,513,349.00	-
TOTAL NIG. PLC	2009	178,570,273,000.00	(17,966,169,000.00)	2,800,000.00	400,000.00	800,000.00	85.00
TOTAL NIG. PLC	2010	160,604,104,000.00	13,344,850,000.00	2,800,000.00	400,000.00	800,000.00	83.00
TOTAL NIG. PLC	2011	173,948,954,000.00	43,894,777,000.00	3,400,000.00	200,000.00	400,000.00	82.00
TOTAL NIG. PLC	2012	217,843,731,000.00	20,319,429,000.00	3,200,000.00	200,000.00	600,000.00	85.00
TOTAL NIG. PLC	2013	238,163,160,000.00	2,455,533,000.00	8,837,864.00	13,208,650.00	12,300,000.00	83.00
TOTAL NIG. PLC	2014	240,618,693,000.00	(32,591,005,000.00)	9,400,000.00	20,329,451.00	26,699,500.00	83.00
TOTAL NIG. PLC	2015	208,027,688,000.00	82,924,832,000.00	15,865,605.00	13,250,000.00	25,819,785.00	80.00
TOTAL NIG. PLC	2016	290,952,520,000.00	(2,889,870,000.00)	-	3,540,000.00	1,259,000.00	83.00
TOTAL NIG. PLC	2017	288,062,650,000.00	19,925,246,000.00	-	17,313,674.00	114,978,183.00	74.00
TOTAL NIG. PLC	2018	307,987,896,000.00	-	-	-	-	-
MRS OIL PLC	2009	74,603,050,000.00	178,875,000.00	13,000,000.00	-	-	82.00
MRS OIL PLC	2010	74,781,925,000.00	(3,828,989,000.00)	7,100,000.00	-	100,000.00	54.00
MRS OIL PLC	2011	70,952,936,000.00	8,774,413,000.00	400,000.00	200,000.00	600,000.00	73.00
MRS OIL PLC	2012	79,727,349,000.00	8,058,974,000.00	300,000.00	100,000.00	1,800,000.00	65.00
MRS OIL PLC	2013	87,786,323,000.00	4,539,082,000.00	1,200,000.00	-	990,000.00	70.00
MRS OIL PLC	2014	92,325,405,000.00	(5,226,189,000.00)	700,000.00	368,500.00	1,221,500.00	65.00
MRS OIL PLC	2015	87,099,216,000.00	22,535,838,000.00	3,950,000.00	-	1,423,500.00	68.00
MRS OIL PLC	2016	109,635,054,000.00	(2,546,707,000.00)	-	-	-	73.00
MRS OIL PLC	2017	107,088,347,000.00	(17,535,528,000.00)	4,828,192.00	3,140,000.00	1,721,371.00	63.00
MRS OIL PLC	2018	89,552,819,000.00	-	-	-	-	-

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