# TRIPLE-BOTTOM LINE ACCOUNTING AND SUSTAINABLE DEVELOPMENT IN NIGERIA

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#### **ABSTRACT**

This study scrutinizes the correlation stuck between Triple Bottom-Line accounting and sustainable development in Nigeria. In other to achieve this purpose, theory was formulated and examinations of correlated collected works were researched upon. Ex-post facto design was the research method carried. Oil and gas manufacturing firms registered in the Nigerian Stock Exchange Fact Book for the year 2015 was the restricted sample for the study. Accessible archives recognized just seven (7) firms. The studied data upon which the research is formulated is the secondary data on triple bottom line accounting and sustainable development wherein respondents were collected by means of the Central Bank of Nigeria Statistical Bulletin of several years, Financial Statements of oil and gas companies listed in the Nigeria Stock Exchange and Bertelmann's Transformation Index of the World Bank Group. The researched Data were studied by means of inferential and descriptive statistical tools with the support of statistical package for social sciences version 22. Succinctly, the research discoveries made from this study discovered that there is a succinct positive significant impact of triple-bottom line on sustainable development in Nigeria. This suggests that, a rise in the implementation of Triple-Bottom Line accounting will straightaway leads to a growth in sustainable development. Centred on the available outcomes of this study. We therefore draw conclusion with a model which displays that Triple bottom-line accounting has a very high significant relationship with sustainable development in Nigeria. It was suggested that Triple-Bottom Line accounting as a point of need should be assumed by operational business firms, the government should as well introduce regulatory measures to enforce its adoption, and all recognized accounting boards should improve standards to escort the measurement and acknowledgment of social and environmental performances in the financial statements of organizations if only sustainable development by oil and gas producing companies must be a realism.

Keywords: Business accounting, Environmental accounting, Social accounting, Environmental performance, Social performance, Triple-bottom line accounting and Sustainable development.

#### INTRODUCTION

Very succinctly, the 'triple-bottom line accounting catchword was devised through Elkington (1994), towards developing the environmentalist plan of those at work in the direction of triple-bottom line, as a result, it further clearly integrates a social element by way of Elkington (2004). In the same token, Magee & Scerri (2002) postulated that, triple-bottom line accounting donates to the asset and progress of its communal area by means of things such as, proper in addition to adequate health care and educational infrastructures for example: social, economic and commercial. Brown et al. (2006) asserted above all that, triple-bottom line accounting organizations unveiled riches in addition financial profitability found missing as at when financial inflows 'money' was the sole driving force.

According to Onyali (2014), Triple-bottom line accounting refers to the incorporation of threefold cardinal areas of social, environmental as well as economic value performance that shows vital exercises for the continued going concern of the contemporary organizations. Bernard's (2005) in his thought of view, asserts that the degree at which the marginal propensity to consume available resources 'natural' should be equitably distributed in that, the available resources can be sustained to meet the demand of the future users sustainability development.

# **Literature Review**

## **Stakeholders' Theory**

Old-style definition of a stakeholder is "any individual or group who have emotional impact or is affected the by way of the attainment of the organization's purposes" Freeman (1984) cited in Fontaine, Harman & Schmid (2006). The over-all idea of the stakeholders' idea is a redefinition of the society. In general, the concept stands around what the organization ought to be and in what way it should be conceptualized. Friedman (2006) in Fontaine et al (2006) enunciates that the organization herself, have a duty to be thought of as group of stakeholders in addition the purpose of the organization ought to be to accomplish their needs and views.

From the catch point of Freeman (2004) in Fontaine et al (2006) describes stakeholders as 'individual or group of persons, whose organizational activities are very significant to the successes and going concern of the corporation.' In his similar book, Freeman (2004) in Fontaine et al (2004) got a modern theory, which shows the latest tendency in stakeholder's theory. In his recent and modern principle, he postulates that a maximum attention be ascribed to the perspectives of the stakeholders and their operations considered very significant to the corporate decision making of companies.

In the words of Freeman, Parmer& Wicks (2004) that literal and theoretical assumptions marks the inception of stakeholders theory, which entails that values or goodwill are essential and a part of venturing into business. It advocates that the creative sense of values embedded by managers should be shared and articulated amongst stakeholders. In a similar vein, the theory compels managers to exhibit the spirit of transparency on the way forward the business should go. Thus, Popa, Blidisel& Bogdan (2009), maintains that stakeholder concept remain founded on the principle that the resilient the corporations' relations be situated with further interested parties, stress-free it will remain to accomplish its corporate goals.

Besides, Perrini&Tencati (2006) postulates that threefold dimensions of firms accounting depends on the threefold dimensions of stakeholders accounting relations; a functional company should not give considerations solely to its employees, clients and shareholders, on the other hand considers public authorities, local or national (based on the capacity of the organization), suppliers, financial associates and human-right watch etc.

## **Triple-Bottom Line Accounting**

In accordance to an author, John Elkington (1994) the all-inclusive originator of a consultancy firm situated in Britain, lay claim to the threefold aspect of accounting "Triple-bottom line accounting" Elkington (1998; 2004). Based on his envelopment of triple-bottom line accounting concept, he postulated that business organizations be duty-bound to making threefold dimension of accounting in a different way but then distinct bottom lines. That comprises the old-style measure of company turnover which stands as the bottom line 'profit.' Furthermore, is a measure of possible ways companies have positively impacted on the society 'people' via CSR and if socially responsible to the society, will show a positive bottom-line of a company's people.

Modern corporations that have adopted the use of threefold dimension of accounting, made it a grave-concern over the good fortune of work and mutually supporting of interest accrued to stakeholders. Firms into threefold dimensions of accounting practices end-up not at the detriment of any individual or groups neither take advantage of the stakeholders unknown but rather ensures that its constituency of residence benefits.

## **Business Accounting**

According to Jackson, Boswell & Davis (2011), business accounting is an additional reporting of entirely contributions made, for instance cost associated with idle-cash. Conversely, turnover 'profits' accrued from an organization practicing the threefold dimension of accounting is more assessable, distinct from the old-style fashion of profit making. As a matter of fact, it should be a

prerequisite for modern businesses to integrate extra information cutting-edge the information provided to well communicate through interested party 'stakeholders'. This means that business accounting did not only aim at profit, on the other hand communal as well as ecological aspect of business.

Business bookkeeping termed as Value Added statement is the restatement of the monetary movements cutting-edge the traditional Turnover in addition to Forfeitures Showing diverse investor and stakeholder groups profited on or after those flows. It's a representation of economic impacts made on diverse communities via organizational activities and operations. The threefold dimensions of accounting is a proved significant aspect of firm's value added statement, it support modern companies in having a larger visions of financial inflows accruable to shareholders and resident community. They can be used to allow Triple-bottom line accounting marks to be well-defined in rapports by what method the capital Made is to be shared between the a number of groups. The SIGMA Project (2003).

# **Social Accounting**

Overview of social accounting had initial problem of definition. According to Briston (2011), economist associated it with National Income Accounting and officially defines it as: A comprehensive, systematic, reliable performance of the actualities of monetary lifecycle, fashionable the thoughts, meanings and interpretations accepted, that provide themselves to real dimension that are within limits agree to individuals which give the impression in monetary concept and therefore can remain used for cost-effective study.

Social accounting is an aspect of social welfare theory of accounting which is entirely a new phase in accounting and which also has its genesis in the social development revolution in recent years. According to Mathews (2009), the societal welfare concept of accounting entails that the concern of trade unions, consumers, employees and the peoples have to be taken into account and that the old-style discrepancy in effect to the source of information ought to be modified.

# **Environmental Accounting**

In the words of Irish times (2000), he enunciated that ecological accounting encompasses every accurate and timely information relative to all facet of the environment. For instance, ecological benefits accrued from product processes and expenses made on the environment. Environmental accounting faithfully performs these functions. It is a new concept and is gaining continuous popularity because of greater environmental awareness. Environmental dimension of triple-bottom line accounting remains frequently assumed as a sun umbrella, describing a comprehensive arena of study then practice as an accounting concept.

#### **Sustainable Development**

Any positive impacts or growth that is eco-friendly, societal successes and monetarily balance is assumed a development worthy of sustainability, hence, ensuring that the present attainment of communal needs will infringe not on the needs of generation yet to come. Citing the views of "The Ecologist and Developmentalist Conference" convened in United Nations (2008) opined sustainable development as one comprising the impacts made on societal successes, eco-friendly and organizational profitability, measurement of peoples well-being, the number of indigenes gainfully employed, is there a retrogressive or progressive correlation subsisting between the rich or poor? Does salary of workers worth it? Is there additional or fewer begging in the society? What degree of indigenes are without a roof over their head? What is the portability of water level in the urban areas?In the opinion of Bernardez (2005), that any operation or intake of productive resources, should as a matter of grave concern equate the replenishment and consumable level of such productive resources. On the other hand, it is assumed a progress made in accomplishing the expectations of the current age group devoid of the yet to come age group its chances of meeting up their future expectations.

# **Empirical Review**

As hooked on Elkington (1994), the expression "Triple-Bottom Line Accounting" stood in the beginning lay claim to by him, as the forefather or originator of a consult situated in Britain called the Bottom-Line (1998; 2004). He opined that functional or operating organizations must make a tripartite presentation of the business statement distinct from each other. To begin with, is the old-fashioned method of determining profit or loss which shows the end point of income statement analysis. Furthermore, comprises of the bottommost point of organizational "societal or peoples accounting" this is a yardstick on which firm's influences on society is estimated.

The 3<sup>rd</sup> and last "eco-friendly or planet" specifically estimates the impacts made on the ecosystem within an accounting year. In the catchword of Elkington (1995; 1997), Netherlands became more focus on the theory of tripartite presentation of eco-friendly, societal and turnover accounting. In subsequent, Shell Dutch Oil Exploratory Corporation indorsed to sustainability developmental goal introduced by Elkington (1997), this endorsement propelled other countries to incept the adoption of triple-dimension of accounting.

## **METHODOLOGY**

In this study, triple bottom line accounting is the explanatory (predictor) variable operationalized as business accounting, social accounting and environmental accounting: whereas, the measures of sustainable development (criterion) variable are the social performance and environmental performance for the period of (1999-2015). This is as captured in the model specified below: In functional form. Our model is:

```
SOP = f(BA) ..... (iv)
SOP = f(SA) \dots (v)
SOP = f (EA) ..... (vi)
ENP = f(BA) \dots (vi)
ENP = f(SA) ..... (vii)
ENP = f(EA) ..... (ix)
TBL = f (GP) \dots (x)
In statistics form, our model is:
SOP = f \left[ \infty_0 + \beta_1 BA + \beta_2 SA + \beta_3 ENA + \beta_4 GP + \dots \right] (xii)
ENP = f[x_0+\beta_1BA+\beta_2SA+\beta_3ENA+\beta_4GP+-----1(xiii)]
Where:
SOP
         Social Performance
ENP
     =
         Environmental Performance
         Business Accounting
BA
     =
SA
         Social Accounting
     =
EΑ
         Environmental Accounting
GP
          Government Policies
      =
          Regression Constant
     =
\infty
β
      =
          Regression Coefficient
```

### **DATA PRESENTATION**

**Table 4.6:Relationship Between Business Accounting and Social Performance** 

|     |                     | BA    | SOP   |
|-----|---------------------|-------|-------|
| ВА  | Pearson Correlation | 1.000 | 889   |
|     | Sig. (2-tailed)     |       | .000  |
|     | N                   | 17    | 17    |
| SOP | Pearson Correlation | 889   | 1.000 |
|     | Sig. (2-tailed)     | .000  |       |
|     | N                   | 17    | 17    |

**Source:** SPSS Version 22 Window Output

The result presented in Table 4.6 revealed a correlation that indicates a significant relationship. This implies that business accounting has a negative significant relationship with social performance as a measure of sustainable development in Nigeria.

Table 4.7:Relationship Between Business Accounting and Environmental Performance

| <u> </u> |                     |       |       |  |
|----------|---------------------|-------|-------|--|
|          |                     | BA    | ENP   |  |
| ВА       | Pearson Correlation | 1.000 | 721   |  |
|          | Sig. (2-tailed)     |       | .000  |  |
|          | N                   | 17    | 17    |  |
| ENP      | Pearson Correlation | 721   | 1.000 |  |
|          | Sig. (2-tailed)     | .000  |       |  |
|          | N                   | 17    | 17    |  |

**Source:** SPSS Version 22 Window Output

The result presented in Table 4.7 revealed a correlation coefficient (R) of -0.721, which is negative and high. This suggests that there is a strong negative relationship between BA and ENP. The p-value (0.000) which is less than 0.05 level of significance indicates a significant relationship. This implies that business accounting has a negative significant relationship with environmental performance as a measure of sustainable development in Nigeria.

**Table 4.8:Relationship Between Social Accounting and Social Performance** 

|     |                     | SA    | SOP   |
|-----|---------------------|-------|-------|
| SA  | Pearson Correlation | 1.000 | .911  |
|     | Sig. (2-tailed)     |       | .000  |
|     | N                   | 17    | 17    |
| SOP | Pearson Correlation | 911   | 1.000 |
|     | Sig. (2-tailed)     | .000  |       |
|     | N                   | 17    | 17    |

**Source:** Statistical Package for Social Sciences Version 22 Window Output:

Results existing in Table 4.8 shown a correlation coefficient (R) of 0.911, which stands positive then very high. It recommends that there remains a strong positive relationship between SA as well as SOP. The p-value shows (0.000) that is less than 0.05 level of significance, shows a significant relationship. This suggests that social accounting maintains a significant relationship using social performance as a measure of sustainable development in Nigeria.

Table 4.9:Relationship Between Social Accounting and Environmental Performance

|     |                     | SA    | ENP   |  |
|-----|---------------------|-------|-------|--|
| SA  | Pearson Correlation | 1.000 | .503  |  |
|     | Sig. (2-tailed)     |       | .014  |  |
|     | N                   | 17    | 17    |  |
| ENP | Pearson Correlation | .503  | 1.000 |  |
|     | Sig. (2-tailed)     | .014  |       |  |
|     | N                   | 17    | 17    |  |

**Source:** SPSS Version 22 Window Output

The result existing in Table 4.9 shown a correlation coefficient (R) value of 0.503, meaning it is positive then moderate. This recommends that there stands a moderate positive relationship stuck between SA and ENP. The p-value shows (0.014) meaning it is less than 0.05 level of significance, it indicates a significant relationship. Implying that social accounting has a significant relationship using environmental performance as a measure of sustainable development in Nigeria.

Table 4.10:Relationship Between Environmental Accounting and Social Performance

|     |                     | EA    | SOP   |
|-----|---------------------|-------|-------|
| EA  | Pearson Correlation | 1.000 | .765  |
|     | Sig. (2-tailed)     |       | .009  |
|     | N                   | 17    | 17    |
| SOP | Pearson Correlation | .765  | 1.000 |
|     | Sig. (2-tailed)     | .009  |       |
|     | N                   | 17    | 17    |

**Source:** Statistical Package for Social Sciences Version 22 Window Output

The result existing in Table 4.10 shown a correlation coefficient (R) value of 0.765, meaning it is positive and high. It recommends that there remains a strong positive relationship stuck between EA and SOP. The p-value of (0.000) shows it is less than 0.05 level of significance, it indicates a significant relationship. It also implies that environmental accounting maintains a significant relationship with social performance as a measure of sustainable development in Nigeria.

Table 4.11:Relationship Between Environmental Accounting and Environmental Performance

|     |                     | EA    | ENP   |
|-----|---------------------|-------|-------|
| EA  | Pearson Correlation | 1.000 | .906  |
|     | Sig. (2-tailed)     |       | .000  |
|     | N                   | 17    | 17    |
| ENP | Pearson Correlation | .906  | 1.000 |
|     | Sig. (2-tailed)     | .000  |       |
|     | N                   | 17    | 17    |

**Source:** Statistical Package for Social Sciences Version 22 Window Output

Results existing in Table 4.11 shown a coefficient relationship (R) of 0.906 that is positive and very high. It recommends that there stands a strong positive correlation stuck between EA in addition to ENP. The p-value of (0.000) which remains less than 0.05 level of significance shows a significant relationship. It implies that environmental accounting takes a significant relationship using environmental performance as a measure of sustainable development in Nigeria.

Table 4.12:Influence of Government Policy in Moderating Relationship stuck between Triple-Bottom Line Accounting in addition to Sustainable Development in Nigeria

| Model | R     | R Square | Adjusted R<br>Square | F     | Sig. |
|-------|-------|----------|----------------------|-------|------|
| 1     | 0.784 | 0.615    | .539                 | 4.118 | .001 |

Predictors: (Constant), GP, TBL

**Source:** Statistical Package for Social Sciences Version 22 Window Output

Results existing in Table 4.12 shown a manifold relationship coefficient (R) of 0.784 that is positive in addition to close one. It recommends a strong influence of government policy in moderating the correlation stuck between triple bottom-line accounting in addition sustainable development in oil plus gas firms in Nigeria. Multiple coefficient of determination (R²) of 0.615, shows nearly 61.5% of sustainable development, is attributed to changes in government policy in its relationship with triple bottom-line accounting. In other words, about 34.9% change in sustainable development is due to other variables other than GP; hence the model is nicely fitted. The p-value (0.001) of the model is less than 0.05 level of significance, this indicates a significant impact. This implies that government policy significantly mediates the influence of triple bottom-line accounting on sustainable development in oil in addition to gas firms situated in Nigeria.

# **CONCLUSION**

Triple-bottom or else threefold dimension of accounting shows a relationship that is significant in addition sustainable development existent in Nigeria Scerri (2012). It therefore depicts that sustainability degree shown by operating corporate organizations resident here in Nigeria is expedient to assume vital obligation by endorsing the use of the concept triple-bottom or else threefold dimension accounting techniques Slaper& Hall (2011). The concept threefold or else triple-bottom line accounting has an agenda comprises of societal, ecological in addition monetary Henry &Journeault (2007). The aforementioned discoveries is intender with the postulations of Dixon (1994) as well as Kaufman (2011). From the research conducted, at about 61.5% spontaneous rise in sustainable development is geared towards an equitable adoption or else by way of accepting triple-bottom line accounting in Nigeria.

#### **RECOMMENDATIONS**

Based on the discoveries of this learning or else study in addition to the assumption drawn, the succeeding commendations or else recommendations remain prepared:

Oil and gas firms should as a matter of urgency consider the reporting and disclosure of social issues in their financial statements, oil and gas firms should as a matter of urgency also consider the reporting and disclosure of environmental issues in their financial statements, procedures must remain set in place by way of government towards ensuring strict compliance of oil and gas firms in reporting and disclosing social and environmental Enforcement issues.

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