Impact of Aggregated Cost of Human Resources on Profitability: An Empirical Study

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Abstract

In Nigeria, the past decades have witnessed a transition from manufacturing to service based economics. The fundamental difference between the two sectors lies in the very nature of their assets. The former sector is driven by physical asset like plant, and machinery while the later sector is driven by knowledge, skill and attitude of the employee. This had lead to a paradigm shift in expenditure on those assets and interest. As expenditure on human resource increases also lead to the demand for its inclusion in financial report. Expenditure on human resource has two components, the expense and the investment. Conventional accounting treat both as revenue expenditure, this aggregated approach has a negative effect on the profitability. This study examined the relationship between (1) The aggregated cost of human resource and organizational profitability. (2) The effect of the disaggregated cost of human resources on organization profitability. Data was extracted from internal source using a structured information card and annual financial report. Regression analysis was used. The findings show that there is a positive relationship between profitability and human resource cost. It also shows that changes in profitability can be explained when the expenditure on human resource are segregated into revenue expenditure and capital expenditure. The study recommends amongst other, that BETA NIG PLC should imbibe the culture of capitalizing and reporting all investment on human resource that improve the quality and productivity.

JEL Classification: M32

Keywords: aggregated human resource cost, human capital investment, disaggregated human resource cost

1. Introduction

The past decades have witnessed a global transition from manufacturing to service based economics. The fundamental difference between the two sectors lies in the very nature of their assets. The former sector is driven by physical asset like plants, machinery, material etc while the later is driven by knowledge, skills and attitude of the employee. For instance in the case of an IT firm, the value of its physical assets in negligible when compared with the value of the knowledge and skills of its personnel. In hospital, academic institutions, consulting firms the total worth of the organization depends mainly on the skills of its employees and the services they renders. Hence, the success of these organizations is contingent on the quality of their human resource, its knowledge,
skills, competence, motivation and understanding of the organizational culture. The present century is knowledge driven; as Nigeria intensify effort to actualize vision 20:20:20 it is imperative that the human resource (knowledge and skill) that will drive the economy be recognized as an integral part of the total worth of an organization. Organizations in Nigeria uses the conventional accounting report the cost of human resource as an expense in their statement of comprehensive income, while some of the service rendered by the human resource span more than one accounting period. The total cost incurred on human resource are treated as expense in the statement of comprehensive income, while the benefit of some of the cost element (acquisition, development, training) last more than one year. Charging the investment in human resource as expenses in statement of comprehensive income is traceable to the inability of organization to separate the expense element (salaries, wages, commission, bonus, maintenance, allowances) from the capital expenditure element (acquisition, recruitment, training, development and retraining).

Human resource is the most vital part of any organization; it is the melting engine between financial and all other physical resource toward the achievement of organizational objectives and goals. The impact of the wrong classification on the organization profit annually is unimaginable, as analyst and investor who rely on the report tend to under value the organization, managers may be judged as non performance, the report generated using the conventional accounting will show a distorted net income.

This is the crux of the issue. Expensing the investment on human resource reduces the operating profit and consequently the low stock valuation

1.1 Significance of the Problem
The findings will have a great significance to accounting student and beneficial to manager as it provides the justification of capitalizing the investment cost of human resources and reporting human resource assets.

1.2 Conceptual Definition
The concept of human resource was first developed by Sir William Petty in the year 1691 but research into human resource Accounting began in the 1960 by Rensis Likert.

The American Accounting Association Committee on Human Resource Accounting (1973) defined Human Resource Accounting as “the process of identifying and measuring data about human resource and communicating this information to interested parties”.

Human resource accounting denotes just this process of quantification, measuring and reporting of human resource in organization, it objective is to facilitate the effective and efficient management of human resources (Porwal, 1993).

1.2.1 Historical Development of Human Resource Accounting
The historical background of human resource accounting can be traced to the medieval European practice of calculating the cost of keeping a prisoner versus the expected future earning from him. The prisoners were seen to be the general property of the capturing side, consequently, after the victory a quick decision regarding whether to capture a prisoner or to kill him had to be taken based on the cost involved in keeping him and the benefit accruing from killing him (Sveiby, 2004).

However, the development of human resource accounting as a systematic and detailed academic activity began in sixties (Flamholtz, 1972). The development can be divided into five stages they are:

- **First stage (1960-66):** This marks the beginning of academic interest in the arena. However, the focus was primarily on deriving human resource accounting concept from
other studies like economic theory of capital, psychological theories of leadership effectiveness as well as the measurement of corporate goodwill.

- **Second stage (1966-71):** At this stage, the focus was to develop and validate various models/tools that help organizations manage their Human Resources. One of the earliest studies was carried out by Hermanson (1964) on the problem of measuring the value of human assets as an element of goodwill.

- **Third stage (1971-76):** This period was marked by a widespread interest in the field of human resource accounting leading to rapid growth of research in the area. The focus in this stage was on the application of human resource accounting in business organization, the development of measurement and reporting model. Experiment was carried out in R.G Barry, the findings contributed substantially during this stage (R.G Barry Corporatio, 1973).

- **Fourth stage (1976-1980):** This period witnessed a decline in the arena of human resource accounting due to lack of sponsorship in the area of research. The complex issue that needed to be explored which required much deeper empirical research then was needed for the earlier simple models and the lack of sponsorship in area of research.

- **Fifth stage (1980-till date):** This period witnessed a sudden renewal of interest in the field due to the shift from manufacturing to service economic occasioned by globalization. Since the survival growth and profitability of organization were dependent more on intellectual assets than physical assets. The outcome of this renewal interest was the adoption of various models to suit organization requirement. Today, human and intellectual capital are perceived to be the strategic resources and therefore clear estimation of their value has gained significant important.

The increased pressures for corporate governance and corporate code of conduct demanding transparency in accounting have further supported the need for developing methods of measuring human value. In Nigeria human resource valuation and reporting has not yet been institutionalized.

1.2.2 *Measurements in Human Resource Accounting*

The major challenge in Human Resource Accounting is that of assigning monetary values to different dimension of human resource costs/investment and the worth of employees. There are various model suggested for the measurements of human assets, they are classified into two, they are:

- Cost Based Approach/Model
- Economic Based Approach/Model

1.2.2.1 *Cost Based Approach/Model*

Under this approach, there are many models they include:

a. Historical cost model
b. Replacement cost model
c. Opportunity cost model
d. Standard cost model

**Cost Based Model**

Cost is a sacrifice incurred to obtain some anticipated benefit or service. Costs have two elements visa vis the expense and the assets element. The expense element is that which provides benefits
during the current accounting period, where as the asset portion is that which is expected to give rise to benefit in the future.

A. Historical Cost Model
The historical cost of human resources is the sacrifice that was made in getting the human resource. It attempts to equate the actual cost incurred-in recruiting selecting, hiring, training and development of employee. Those costs are capitalized and amortized over the expected useful life of the human resource. If the asset is liquidated prematurely losses are recorded and written off to profit and loss in the year and if human assets has a longer life than estimated, revision are made in the amortization schedule. This model treats the historical cost of human resource much like the cost of physical fixed assets. This model related cost to revenue and provides basis for evaluation of company’s return on investment. It weakens steam from its inability to estimate the useful like of the assets.

B. Replacement Cost Models
The replacement cost of human resource is the amount that would have to be incurred if the present employees are to be replaced. It deals with estimating the current market value. Using this model, human resource is to be valued on the assumption that a new similar organization has to be created from the scratch and the cost to the firm is calculated if the existing resources were required to be replaced with other persons of equivalent talents, skill and experience. Cost incurred by an organization in replacing terminated employees for instance includes, advertisement, pre-employment administrative function, interviews, traveling cost etc, and this approach is more realistic as it incorporates the current value of the organization human assets in its financial statement. It’s a good surrogate in determining the economic value of the human resource as it considers the market value in reaching a final figure. It weakness is as a result of the inability of firm to replace knowledge, compete loyalties of an individual exactly.

C. Opportunity Cost Model
This model is also known as market value method, it is based on the economist concept of opportunity cost. The value of an asset when there is an alternative opportunity of using it. Using this model, there is no opportunity cost for those employees who are not scarce, so only scarce people should form part of the human resources. An employee is scarce when it employment denies their competitors his talent skill and experience. Therefore the opportunity cost of an employee is determined by the offer made or to be made by others on the employee.

D. Standard Cost Model/Approach
Using this model employee of an organization is categorized into different groups based on their hierarchical position, standards. Cost is then fixed for each category and their value is calculated. This method advocate the standard costs of recruiting, hiring, training and developing each grade of employee be determine year after year. The standard cost arrived at becomes the value of the employee. The weakness of this approach is that it does not take into consideration difference in employees output in the same group.

1.2.2.2 Economic Approach
The value of asset in the present value of the service that it is expected to render in future. Similarly, the economic value of human resource is the present worth of the service that they are likely to render in the future. The method of calculating the value of individual may be classified into monetary and non-monetary methods.

Monetary Measure
In the monetary value based approach, the value of human resource of an organization is determined according to their present value to the organization. The future earnings of various
groups of employee are estimated up to the age of their retirement and are discounted at a predetermined rate to obtain the present value of the future earnings.

i. Present Value of Future Earning Model (Lev and Schwartz Model):
Using this model, the value of human resource of an organization is determined according to their present value to the organization. This model was developed by Lev and Schwartz (1971). They opined that the total of a firm’s labor force is an extension of the measurement procedure of an individual value to the organization. They advocate the use of cost of capital as rate for the purpose of capitalizing the present value.

The formula,

\[ V_T = \sum_{i=\tau}^{T} \frac{I(t)}{(1 + r)^{t-\tau}} \]

ii. Reward Valuation Model (Flamholtz Stochastic Model)
This model is based on the assumption that an individual generate value as he occupied and move along organizational roles and renders service to the organization. It presupposes that a person will move from one state in the organization to another during a specified period of time. The model is a direct way of measuring a persons expected conditional value and expected realizable value. Flamholtz (1972) believe that a person expected conditional value and expected realizable value will be equal if the person is certain to remain in the organization throughout his expected service life.

iii. Goodwill Model
This is used for group valuation, when a company makes return on its investment which are above the average of the industry, some proponents of capitalization infer that unstated human resource value are presented within the organization and are responsible for the excess earnings. Hermanson (1964) opines that super normal earning is indication of resources not shown on the balance sheet. Determining this involves forecasting future earnings and allocating any excess above normal expected earnings to human resources.

The weakness of this model is that it underestimates the value of Human resources by limiting Human resource to amount of earnings in excess of normal earning ignoring the human resource base required to carry out normal operation. The model also uses the earnings of the most recent years as a basis ignoring forecast of future earning which are useful for managerial decision making.

iv. Economic Value Model
This model advocates that group value should be determined by estimating their contribution to the total economic value of the firm. Under this model, the firm forecast future earnings will be discounted to reflect the present value and a portion of these earning will be allocated to human resource according to their contribution. The weakness of this model steam from the determination of the contribution (quantification of the contribution).

1.2.3 Cost of Human Resource: Classification
To make the accounting for the cost of human Resource more meaningful and to justify its inclusion in statement of financial position as asset, the cost incurred need to be classified into two categories; Capital Expenditure and Revenue Expenditure, (capital expenditure and revenue expenditure) according to nature.
Capital Expenditure – This aspect/element of the cost that is expected to give or generate future benefit that will exceed current accounting period. It includes; Acquisition, recruitment, development, retention, training and retraining.

Revenue Expenditure – The aspect of the cost that the company benefited from or used up within the accounting year, this include; Salaries, wages, commission, bonus, allowance and short term motivation (Cascio, 1998).

The capital expenditure should be capitalized and recorded in the balance sheet as intangible assets and amortized over the useful life of the human asset. The amortized value should be recorded as expenses in the statement of firm position while the revenue expenditure is charge to revenue in the statement of comprehensive income. This will be the only the human resource cost is represented in the financial statements.

The capital expenditure can be treated as investment in human resource asset under intangible assets. Intangible assets have no general accepted definition since the word usually accompanies different concept including investment assets, resources (Canibano, García-Ayuso, Sánchez, & Olea 1999). Woodruff Jr. (1970), Mirvis and Macy (1976) posits that the logic behind this treatment is that the development costs provide benefits beyond the current accounting period. Investors and management needs information about the Human Resource Asset of Organization.

Investors: Present and potential shareholder of a company are interested in information about the value of human resource assets of the organization this information assist them in making decision to acquire, retain or dispose off stock of the organization. As human asset is the lifeline of the future.

Management: The conventional accounting treats all money spent by management to build human resource as expense in the year it is incurred. Management investing in human resource assets is to enhance future earning power of the organization, charging this investment to the statement of compressive income as expense will produce relatively lower net profit in the current year. This will appear as if management is doing poorly when they are doing very well. This will lead to conflict between long-term and short-term interest by management. Reporting human resource as assets, the service they are expected to render is the real asset to the organization not the people. Therefore the money spent on getting the right people and developing them to acquire the right knowledge beneficial to the organization is the investment in assets.

1.2.4 Methods of Reporting Investments in Human Assets
Flamholtz (1972) suggested four methods of reporting investment in human asset in corporate annual report, they are:

a. Chairman letter/address
b. In statement of intangible asset
c. In unaudited Pro forma supplementary financial statement.
d. In conventional financial statement.

1.2.4.1 Chairman’s Welcome Address
The chairman address often acts as an interim measure toward full accounting. The address usually includes information about expenditure in human resource that is significant and relatively important, the information helps investors and financial analysts assess the extent to which management is paying attention to human resource development as a crucial factor in long-term profitability. The address will includes information about human resource like, training, development, and turnover rate.
1.2.4.2 Statement of Intangible Assets

Anderson Arthur and co. advocates that human asset should be included in the statement of intangible assets. They opined that human asset and other intangible asset should be classified separately in income statement. They advise that companies which are heavily engaged in expenditure for creation of intangible should present a statement of intangibles. The statement will indicates the expenditure made for various classes of intangibles for the current period and previous period.

1.2.4.3 Unaudited Pro-forma Financial Statement

Under this method, the company prepares a financial statement showing investment in Human asset using human resource accounting convention and includes the statement as supplementary information in the annual report. This will enable investor consider it separately from the financial statement prepare using conventional accounting practice. This was the approach used by R.G Barry Corporation (1973) and flying tiger live icon.

1.2.4.4 Conventional Financial Statement

The final method is that of presenting investment in human resource in financial statement. This method involves capitalization of the capital expenditure in human resource and amortization of such investment using the conventional intangible asset amortization rate (intangible asset are to be amortized for 20 years— IAS 38, 1998).

Sveiby’s (2004) opines that human capital, intellectual capital and structural capital concept are similar to other asset. He argued that organizations acquire human resource to generate future revenue and therefore human resource should be considered when valuing a company by capitalizing instead of expensing them in the current period. The crux of his argument is that human, intellectual and structural capital should be treated as other assets. Since assets are reported in the statement of financial position. Human resource also should be reported along other intangible assets. Though it is difficult to quantify the expertise, knowledge and competence of human resource as these matters are not physical assets of a company as a result companies all over Nigeria are showing the cost relating to human resource as expenses in the statement of comprehensive income, neglecting the assets aspect of the cost in the statement of financial position.

Brummet, Flamholtz, and Pyle (1968) believe that the development of human resource accounting is necessary to provide organization with accurate data needed for financial report and to guide its decision. In developed countries, it is a common phenomenon that companies have Formal Human Resource Accounting reporting aspect in their annual report.

According to Al Mamun (2009) in developing countries like Nigeria, Human Resource Accounting is a new concept and it is still in naïve stage, though some organizations are making some human resource accounting information disclosure voluntarily (Wallace, 1987). The disaggregated approach towards human resource cost will in no doubt increase firms profitability, net worth and market value.

1.2.5 Challenges of Human Resource Accounting In Nigeria

No doubt human resource accounting will provide valuable information both for management and outsiders, yet its development and application in different industries and organizations has not been very encouraging the accounting concept of Human Resource is not popular because it may not yield immediate and tangible benefits coupled with the lack of consensus among accountants about the basic of measurement (Cooke, 1989). This poses a service challenge to the introduction of the Human Resource Accounting.
1) No specific and clear cut guidelines for finding cost and value of human resources of an organization.

2) Human resources, unlike physical assets are not capable of being owned, retained and utilized at the pleasure of the organization. Therefore it cannot be considered at par with other assets.

3) There is no specific form and manner the value of human resource as an assets be included in financial statement.

4) If value is placed on Human resource as assets how should it be amortized? Should the rate be decreasing, constant or increasing? Should the rate be the same or different for different categories of personnel?

5) Tax laws do not recognize human resources as assets, this has reduce the concept to a theoretical concept. If the accounting standards board makes it mandatory to disclose the values of Human assets, only then tax authority will take into concern Human Resource Accounting.

6) There is yet an empirical evidence to support the idea that Human Resource Accounting is an effective tool to measure the economic value of people to their organization. There is very little date to support the hypothesis that Human Resource Accounting facilities better and effective management of human resource.

7) The life of human resources in uncertain and therefore valuing them under uncertainty seems unrealistic.

8) No law, standards or guidelines backing and enforcing the application of Human Resource accounting.

1.3 Statement of the Problem

In recent years, structure of the Nigeria economy has gradually shifted from the manufacturing to service based, where knowledge, skill, attitude count and the accounting for the human resource which runs the organizational show has also taken on increasing importance, partly because data have indicated that expenditure on human resource have risen faster than those for non-human capital. As organizational expenditure on asset shifted, so has interest. This has increase the demand for the inclusion of human resource cost and value in financial report. In Nigeria for instance in 2006, Unilever invested over #40 million in training its employees, besides in house programmes to develop staff and mutual expatiation of employee in sister companies abroad (Annual report 2008). As far back as 1988, Nigeria Breweries Plc invested more than #88million in local and overseas training of staff. Access bank Plc in 2007 commenced construction of access Bank Campus otherwise called Access University of Banking Excellence. Wema Bank Plc has a policy of sending each staff to relevant training for at least 80 hours each year. These heavy investments to train and retrain quality staff are not reflected in the balance sheet. They are charged to the profit and loss account to reduce the profit and by extension the value of the business. This paper seeks answers to the following:

1 Does the aggregation of human resource cost affect the organizational profitability?

2 What impact does the expensing of human resource investment has on organizational profitability?

1.4 Objectives of the Study

1. To examine the extent of relationship between the cost of human resource and organizational profitability.
To examine the effect the disaggregation of cost of human resource (into capital and revenue) on organizational profitability?

1.5 Hypotheses
Ho: There is no significant relationship between organizational profitability and the cost of human resource.
Ho: There is no significant relationship between the disaggregated cost on human resource and organizational profitability

2. Methodology
2.1 Research Design
The study is an analytical research design aimed to examine the effect of human resource capital on the performance of firms. Data on human resource cost was extracted from the internal accounting records of the firm. A structured “information card” was used for data collection. The data on profitability was obtained from the financial statements of the firm. The data are presented on Table 1 below.

<table>
<thead>
<tr>
<th>SN</th>
<th>YAER</th>
<th>Profit Before Tax</th>
<th>Cost of Human Resource Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Capital Expenses</td>
</tr>
<tr>
<td>1</td>
<td>2002</td>
<td>1010922</td>
<td>125432</td>
</tr>
<tr>
<td>2</td>
<td>2003</td>
<td>779369</td>
<td>143495</td>
</tr>
<tr>
<td>3</td>
<td>2004</td>
<td>224113</td>
<td>147918</td>
</tr>
<tr>
<td>4</td>
<td>2005</td>
<td>218654</td>
<td>143185</td>
</tr>
<tr>
<td>5</td>
<td>2006</td>
<td>493974</td>
<td>154962</td>
</tr>
<tr>
<td>6</td>
<td>2007</td>
<td>1056841</td>
<td>164454</td>
</tr>
<tr>
<td>7</td>
<td>2008</td>
<td>1453360</td>
<td>169668</td>
</tr>
<tr>
<td>8</td>
<td>2009</td>
<td>1813400</td>
<td>165021</td>
</tr>
<tr>
<td>9</td>
<td>2010</td>
<td>1832403</td>
<td>165359</td>
</tr>
<tr>
<td>10</td>
<td>2011</td>
<td>2056099</td>
<td>168856</td>
</tr>
</tbody>
</table>

Source: Extracted from the management and annual corporate financial report of selected firms

2.2 Model Specification
The model for this seminar paper is premised on the objectives of human resource accounting. The major objectives of human resource accounting has aimed to (1) determine the return on investment, (2) determine the human resource management (3) determine the worth of human resource, (4) provide a sound and effective basis for asset control, and (5) allows management personnel to monitor effectively the use of human resource. The Human Resource Costing has been aimed at enhancing (1) experience with attempts to measure and put information on intangibles into non-
financial frameworks; (2) experience with attempts to put information on intangibles into financial accounting frameworks; and (3) impacts of disclosure on management of intangibles and other measures of firm performance. Financial frameworks refer to financial statements, whereas nonfinancial frameworks refer to things not included in such statements. ‘Experience’ may include empirical findings as well as theoretical elaboration. This study attempted to establish empirical evidence that the cost of intangible training of staff can have effect on performance of firms. Hence the relationship can be represented in the functions below:

\[
PBT = f(THRC)
\]

\[
PBT = f(HRC_R + HRC_C)
\]

Where:

PBT = Profit before tax
THRC = Total human resource cost
HRC_R = Revenue cost of Human resource
HRC_C = Capital cost of Human resource

The function above can be written as a model thus:

\[
PBT = \alpha_0 + \alpha_1 \text{THRC} + \mu
\]

(1)

\[
PBT = \beta_0 + \beta_1 \text{HRC}_R + \beta_2 \text{HRC}_C + \mu
\]

(2)

Where \(\alpha_0\) and \(\beta_0\) are the constants, \(\alpha_1\) is the coefficient of the relationship between profit and total human resource cost. \(\beta_1\) and \(\beta_2\) are the coefficients of the explanatory variables for model two (2). \(\mu\) is the error term that captures the stochastic variables in the model.

2.3 Analytical Techniques

The regression technique was used for the analysis. The SPSS (Statistical Package for Social Sciences) is a computer based statistical tool used to run the analysis. The researcher used the SPSS because it provides more accurate results than manual computations. The Ordinary Least Square regression was run to produce statistics for the coefficient of determination, F-test, t-test, that are used for the interpretation of the study. The coefficient of determination (R^2) measures the explanatory power of the independent variables on the variables in the dependent variable. T-Test = measures the individual significance of the estimated independent variables, while F-Test measures the overall significance.

3. Presentation and Interpretation of Results

3.1 Relationship between Profitability and Total Human Resource Cost

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.737^a</td>
<td>.543</td>
<td>.485</td>
<td>4.84671E5</td>
<td>.867</td>
</tr>
</tbody>
</table>

a. Predictors: (constant), THRC
b. Dependent variable: PBT
The results of the analysis of the relationship between total human resource cost and firm profitability is shown on above Table 2a, 2b, & 2c. From the model summary, the coefficient of determination (R²) is 0.543 and the adjusted coefficient of determination (Adj R²) is 0.485. Since the time frame for the study is short (10 years) the researcher used the Adj R² in the interpretation in order to avoid overestimation of the explanatory powers of the independent variable (see Pallant, 2004). Thus, the Adj R² showed that about 49% of changes in profitability can be explained by total human resource cost. The result suggests that when human resource cost is lumped together, it does not effectively explain changes in profitability of firms. This implies that total human resource cost lack 51% predictive power. This means that it does not effectively account for changes in profitability and cannot be used as a sound decision making tool in a firm.

The ANOVA table produces the F-statistics used to testing the overall significance of the model results. The F-statistics is 9.487 with probability value (p.value) of 0.015. Since the p.value of the F-test is below 5% (p. < 0.05), the study reject the null hypothesis and conclude that total human resource cost has significant effect on profitability.

From the results of the coefficients, we the researcher establishes that nature of the relationship between total human resource cost and firm profitability. Thus, the relationship from model 1 of the study is: PBT = -1081034.826 + 1.719THRC. The coefficient of the model is 1.719THRC. The equation shows that there is a positive relationship between profitability and total human resource cost of firms.

### 3.2 Relationship between Profitability and Disaggregated Human Resource Cost

The results of the analysis of the relationship between total human resource cost and firm profitability is shown on above Table 2a, 2b, & 2c. From the model summary, the coefficient of determination (R²) is 0.543 and the adjusted coefficient of determination (Adj R²) is 0.485. Since the time frame for the study is short (10 years) the researcher used the Adj R² in the interpretation in order to avoid overestimation of the explanatory powers of the independent variable (see Pallant, 2004). Thus, the Adj R² showed that about 49% of changes in profitability can be explained by total human resource cost. The result suggests that when human resource cost is lumped together, it does not effectively explain changes in profitability of firms. This implies that total human resource cost lack 51% predictive power. This means that it does not effectively account for changes in profitability and cannot be used as a sound decision making tool in a firm.

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Table 3b. ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.653E12</td>
<td>2</td>
<td>1.326E12</td>
<td>6.382</td>
<td>.026*</td>
</tr>
<tr>
<td>1 Residual</td>
<td>1.455E12</td>
<td>7</td>
<td>2.078E11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.108E12</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), HRCc, HRCr
b. Dependent Variable: PBT

Table 3c. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-3197307.173</td>
<td>1629498.180</td>
<td>-1.962</td>
<td>.091</td>
</tr>
<tr>
<td>HRCr</td>
<td>1.318</td>
<td>.595</td>
<td>.552</td>
<td>.042</td>
</tr>
<tr>
<td>HRCc</td>
<td>18.261</td>
<td>11.588</td>
<td>.393</td>
<td>.159</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PBT

The Results of the model summary (see table 3a, 3b, & 3c) show that R² is 0.646 while the AdjR² is 0.545. Using the AdjR² the study indicates that about 55% of the changes in profitability are explained by the independent variables (the two components of human resources cost). This shows that greater percentage of changes in profitability can be explained when the cost of human resource training is broken down into is components of capital and revenue expenses. The result of the F-statistic from the ANOVA table is 6.382 with probability value of 0.026 (p. < 0.05). The result indicates that the component of human resource cost has cumulative significance on profitability of firms.

The nature of the relationship that results from model 2 of the study can be drawn from the coefficient. The coefficient thus shows the relationship as below:

\[ PBT = -3197307.173 + 1.318HRC_R + 18.261HRC_C \]

The equation indicates that both human resource cost treated as revenue expenses (1.318HRC_R) and human resource cost treated as capital expenses (18.261HRC_C) have positive relationship with profitability.

The values of the results of the beta indicate the level of contributions of each of the independent variables. From the result, the beta value of HRC_R is .552 while that of HRC_C is .393. This result indicate that revenue expenses of the human resource cost contributed more to the profitability of firms than the capital expenses of the human resource costs.

The results of the t-test showed that the significance of the results of the contributions are HRC_R .042 (p. < 0.05) while HRC_C .159 (p. > 0.05). From the results, it is concluded that HRC_R has significant contributions to profitability while HRC_C does not.

4. Conclusion and Recommendations

Conventional accounting system charge the expenditure and investment on human resource as expense in the year they are incurred while the nature and characteristics of the investment require
them to be capitalized. This study has examined the effect the expensing of investment on human resource has on profitability. The funding revealed that there is a positive relationship between human resource cost (HRC) and profitability. It reveals that profitability increase when HRC is disaggregated (revenue expenditure and capital expenditure. Based on the findings, the following recommendations are proffered.

1) Beta Nigeria Plc should imbibe to the culture of capitalizing and reporting investment on human resource that can improve the quality and productivity. This will impact positively on their profitability consequently on the share price value.

2) Beta Nigeria plc should device a means of demarcating between human resource expenditure that are capital in nature and human resource expenditure that are revenue in nature. This will assist in collection and collation of those expenditure that are capital in nature and be reported as assets in their balance sheet and in determination of return on investment in some programmes that increase efficiency and effectiveness (this information can be used as a benchmark for measurement for inter company comparison.

3) The chief accountant should educate and convince the stakeholders on the benefits accruing from capitalizing and reporting of human resource expenditure that are capital in nature as intangible asset in the statement of financial position.

References


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