

**HUMAN RESOURCE ACCOUNTING AND FINANCIAL PERFORMANCE OF FIRMS IN NIGERIA: EVIDENCE FROM SELECTED LISTED FIRMS ON THE NIGERIAN STOCK EXCHANGE**

**Omodero Cordelia Onyinyechi<sup>1</sup> and Prof. J.U. Ihendinihu<sup>2</sup>**

Department of Accounting, Michael Okpara University of Agriculture, Umudike, Umuahia, Abia State, Nigeria

---

**ABSTRACT:** *The study investigated human resource accounting and financial performance of firms in Nigerian. The specific objective of the study is to determine the extent to which human resource influence the firms' profit after tax, total revenue and net asset. The hypotheses formulated were tested at 5% level of significance using SPSS software and multiple regression analysis as the statistical tool. The result revealed that PBC has significant and positive impact on the PAT, while there is a negative impact on the Net Asset. The research therefore concludes that human resources contribution to the financial growth of firms cannot be overemphasized. Firms should have the culture of training, developing and motivating the personnel to put in their best for the financial growth of their organizations. Providing them with infrastructures and a conducive working environment could reduce the rate of job turnover being experienced among firms.*

**KEYWORDS:** Human Resource Accounting, Profit after tax, Total revenue, Firms and Net asset.

---

## **INTRODUCTION**

All companies need strong and competitive human resource to succeed, the success of firms whether large, small/medium depends on the quality of human resource they have. According to **Robbins (2001)**, the characteristic that differentiate successful organizations from their contemporaries in almost all the sectors is the quality of the people they are able to get and retain. Therefore, money spent on employees' training and development is one of the best investments that companies could make (**Owen, 1825**). In accounting, expenses on human resource are not capitalized but are expensed as they occur. They are identified as recruitment cost, training cost, staff welfare, pension, and so on. Many authors have argued that human resource should be treated as a capital expenditure, but just like every tangible asset, human beings cannot be kept at a place without the tendency to move from organization to organization. Also, since the life span cannot be determined, the depreciation rate is difficult to ascertain. The study does not wish to encourage the capitalization of human resource in an organization considering the obvious limitations that are natural, rather the study seeks to ascertain the usefulness of human resource and the contribution to the growth of organizations.

## **Objective Of The Study**

The major objective of this study is to examine human resource accounting and the financial performance of firms in Nigeria. The study also aims at achieving the following specific objectives:

- To assess the extent to which PBC affects the PAT;
- To investigate the effect of PBC on the TR;
- To ascertain the influence PBC has on the NA.

### **Research Questions**

To achieve the above research objectives, the following research questions have been raised:

- To what extent does personnel benefit cost affect the profit after tax?
- What effect does personnel benefit cost have on the firms' total revenue?
- To what extent does personnel benefit cost influence the net asset of the firms?

### **Research Hypotheses**

To answer the above research questions, the following null hypotheses have been formulated:

Ho1: there is no significant relationship between PBC and PAT;

Ho2: significant relationship between PBC and TR does not exist;

Ho3: PBC and NA do not have significant relationship.

## **CONCEPTUAL REVIEW**

According to **Micah et al (2012)** "Human Resources (HR) are the energies, skills, talents and knowledge of people which are, or which potentially can be applied to the production of goods or rendering useful services. HRA is the process of identifying and measuring data about human resources and communicating this information to interested parties". **America Accounting Association (1973)** defines Human Resource Accounting (HRA) as the process of identifying and measuring data concerning human resource and communicating this information to users of accounting information. The history of human resource accounting was first introduced in the 1960's in an attempt to include employees on the balance sheet and it became a research topic in the 1970s. **Flamholz (1999)** opines that HRA main roles is to encourage decision makers to accept HRA and to provide firms with information concerning the cost of maintaining employees.

## **THEORETICAL REVIEW**

This study has been anchored on the following theories which stress the importance of human resource development and accounting:

### **Human Capital Theory**

A Dictionary of Sociology refers to Human-capital theory as "a modern extension of Adam Smith's explanation of wage differentials by the so-called net (dis)advantages between different employments. The costs of learning the job are a very important component of net advantage

and have led economists such as Gary S. Becker and Jacob Mincer to claim that, other things being equal, personal incomes vary according to the amount of investment in human capital; that is, the education and training undertaken by individuals or groups of workers. A further expectation is that widespread investment in human capital creates in the labour-force the skill-base indispensable for economic growth. The survival of the human-capital reservoir was said, for example, to explain the rapid reconstruction achieved by the defeated powers of the Second World War. Human capital arises out of any activity able to raise individual worker productivity. In practice full-time education is, too readily, taken as the principal example. For workers, investment in human capital involves both direct costs, and costs in foregone earnings. Workers making the investment decisions compare the attractiveness of alternative future income and consumption streams, some of which offer enhanced future income, in exchange for higher present training costs and deferred consumption. Returns on societal investment in human capital may in principle be calculated in an analogous way". According to this theory, a workforce that is more educated and possessing the relevant skills makes it easier for a firm to adopt and implement new technologies which in other words means return on investment in employees education and training, (**Izushi and Haggins, 2004**). Human capital theorists believe that education is an investment since it enhances productivity. The theory holds that the competence, knowledge, abilities and skills of an organization's workforce contribute to its competitive advantage.

### **Resource Based View (RBV)**

According to Amber (2016) posts RBV "argues that firms possess resources, a subset of which enable them to achieve competitive advantage, and a subset of those that lead to superior long-term performance. Resources that are valuable and rare can lead to the creation of competitive advantage. That advantage can be sustained over longer time periods to the extent that the firm is able to protect against resource imitation, transfer, or substitution". The theory confirms that firms' competitive advantage is sustained by organizational valuable resources, and capabilities, which are not common and cannot be easily substituted. RBV was built into a coherent theory by **Wernerfelt (1984) as cited by Odhong et al (2014)**. **Odhong et al (2013)** also believes that firms' competitive advantage can be secured through development of knowledge and skills. The theory sees human capital as a resource that cannot be substituted or imitated which gives a firm a competitive advantage over others.

### **EMPIRICAL REVIEW**

**Micah et al (2012)** did a study on firms' financial performance and human resource accounting disclosure in Nigeria. Descriptive, correlation and regression statistical techniques were used in analyzing the data. The result revealed that the combined effect of Firm Financial Performance accounted for 75.9% of the variation in Human Resource Accounting Disclosure (HRAD) with an F-ratio 3.581 being significant at 5% confidence level. The positive correlation between Return on Equity (ROE) and Human Resource Accounting Disclosure (HRAD) supposes that an increase in return on equity encourage firm in reporting human capital information so as to establish trustworthiness with stakeholders; enhance external reputation, appear legitimate in the public eye and avoid cost for non-legitimacy. The study therefore concludes that human resource accounting information of an organization is very relevant for decision management decision making.

**Prince et al (2013)** examined the human resource accounting and its impact on organizational performance. The study made use of cross-sectional data drawn from the Nigerian Stock Exchange fact book (2009). The regression result revealed that human capital and intangible asset had a positive and insignificant impact on organizational performance.

**Abubakar (2011) in his Ph.D dissertation** investigated human resource accounting and the quality of financial reporting of quoted service companies in Nigeria. The data collected were analyzed using Kendall's Coefficient of Concordance (KCC), Pearson's Chi-square technique, and the use of tables and percentages. KCC was used to find the concordance of selected experts regarding the nature and characteristics of human resource expenditure and necessity for their capitalization. Pearson's Chi-square was used to know the perceptions of questionnaire respondents on the significant effect that reporting human resource value would have on the ability of financial statements' users to make informed decisions. The value relevance of the model developed was tested using Edwards-Bell-Ohlson Model. The study revealed that the nature and characteristics of investments on the human resource require them to be capitalized rather than expensed. The study established that the value relevance of financial reporting of quoted service companies in Nigeria will be improved by the application of the developed model; thereby boosting the informed decision making abilities of the multiple users of accounting information.

**Ekwe (2012)** studied the relationship between intellectual capital and financial performance in the Nigeria banking sector. The research adopted multiple regression analysis method for the test of all the hypotheses. The SPSS statistical software (version 17.0) was used for the data analysis. There was a positive significant relationship between components of VAIC and the Return on Assets of the banks in Nigeria (VIAC coefficient = 9.02,  $R^2_c = 0.97$ ,  $R^2_t = 0.49$ ,  $P < 0.05$ ). There was also a positive significant relationship between components of VAIC and the Return on Equity of the banks in Nigeria (VIAC coefficient = 8.15,  $R^2_c = 0.69$ ,  $R^2_t = 0.49$ ,  $P < 0.05$ ). The study further revealed that there was a positive significant relationship between components of VAIC and employee productivity of the banks in Nigeria (VIAC coefficient = 1.34,  $R^2_c = 0.98$ ,  $R^2_t = 0.49$ ,  $P < 0.05$ ). The results also showed that there was no positive significant relationship between components of VAIC and the growth in revenue of the banks in Nigeria (VIAC coefficient = -2.37,  $R^2_c = 0.45$ ,  $R^2_t = 0.49$ ,  $P > 0.05$ ). There was a positive relationship between the components of VAIC and market to book value ratio of the banks in Nigeria (VIAC coefficient = 3.29,  $R^2_c = 0.68$ ,  $R^2_t = 0.49$ ,  $P < 0.05$ ).

## RESEARCH METHOD

### Research Design

The research design adopted in this study is a cross sectional survey which involves a survey of existing data (secondary data).

### Methods of Data Collection and Technique of Analysis

Time Series Annual data was employed ranging from 2011 - 2015 with a sample size of 10 Firms. The research instruments used in collection of data for this study were mainly secondary data from the NSE Website and Annual reports published by the selected Firms.

Descriptive and inferential statistics were used to analyze the data for this study. Also multiple regression and t-test statistical tools were used to test the hypothesis formulated in this study.

### Model Specification

This study used the econometric technique of Ordinary Least Square (OLS) in form of Multiple Linear Regressions to the relative regression coefficients. The regression model was estimated through the use of Statistical Package for Social Sciences (SPSS).

**The mathematical model for the study is as follows:**

$$PBC = f(PAT, TR, NA)$$

Where;

PBC = Personnel Benefit Cost

PAT = Profit after Tax

TR = Total Revenue

NA = Net Assets

### Mathematical Specification

$$Y_i = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Where;

$Y_i$  = Personnel Benefit Cost

$X_1$  = Profit after Tax

$X_2$  = Total Revenue

$X_3$  = Net Asset

$b_0$  = the parameter which represents the intercept

$b_1, b_2, b_3$  = The regression parameters used in determining the significance of the impact of each of the independent or explanatory variables  $X_1, X_2, X_3$  on dependent variable,  $Y_i$ .

$e$  = Random disturbance term.

## RESULTS AND DISCUSSIONS

The result from SPSS below has been summarized as follows:

Summary of the Results

R = 0.984

R2	=	0.968
Adj.R	=	0.953
Std Error of estimate	=	2192.36
Durbin – Watson	=	1.553
F Value	=	61.262
DF 5%)	=	9-3 = 6 i.e. F-tab = 4.76 (Under 5%)
PV (Significant)	=	0.000

**Table 1** shows the R2 of 98.4% which is the rate of variability on the dependent variable (PBC) by all the independent variable (PAT, TR, & NA) combined. That means PBC of Firms affects the behaviour of the explanatory variables which are accounted for by the model.

**Table 2** is the F-Test to determine whether the model is a good fit for the data. From the p-value, the model is a good fit since the  $P < 0.05$ . That is, the F-value of 61.26 with the P-value of 0.000 shows that the model is statistically significant.

**Table 3** means that  $Y = 3612.009 + 0.379PAT + 0.008TR - 0.087NA$

### Test of Hypothesis

The study earlier hypothesized that: significant relationship does not exist between Firms' PBC and their PAT, TR & NA. Therefore the study has tested sets of variables using the t-test, to see if they are significant. The results revealed the following: PAT = 11.865 > 4.76 (strong positive impact), significance level ( $p = 0.000 < 0.05$  i.e., highly significant); TR = 2.745 < 4.76 (no effect), significance level ( $p = 0.03 < 0.05$  i.e., significant); NA = -6.120 < 4.76 (strong negative impact), significance level ( $p = 0.001 < 0.05$  i.e., negatively significant). Based on the result from SPSS, the study has rejected the null hypotheses and accepted the alternatives which state otherwise.

### CONCLUSION AND RECOMMENDATION

It is worthy to note from the result that human resource in organizations contribute positively to their financial growth as evidenced by the positive impact on PAT. Since the accounting treatment of human resource expenses is not capital in nature that could be the reason for the adverse effect on the Net asset. The conclusion is that human resource in companies contribute so much to enhance financial performance of organization. Therefore, it is recommended that training and good working conditions be made available to them to enhance their productivity.

**VARIABLES FROM COMPANIES FINANCIAL STATEMENTS FROM 2011 - 2015**

NAME OF ORGANIZATION	PBC	PAT	TR	NA
	N'M	N'M	N'M	N'M
JULIUS BERGER NIG. PLC	11,897	30,516	914,331	96,312
UNILEVER NIG. PLC	8,526	19,524	285,253	44,299
DANGOTE CEMENT PLC	4,881	799	1,809	2,474
DANGOTE SUGAR REFINERY NIG. PLC	3,841	53,342	512,207	264,396
NASCON ALLIED INDUSTRIES PLC	2,116	11,642	60,573	32,607
NESTLE NIG PLC	35,218	105,864	642,353	171,938
CADBURY NIG. PLC	5,094	17,022	161,764	86,240
FORTE OIL NIG. PLC	4,248	-3,273	630,756	53,425
NIGERIAN AVIATION HANDLING CO. PLC	3,065	3,414	39,262	28,575
MRS OIL NIG. PLC	1,116	3,137	418,428	98,866
<b>TOTAL</b>	<b>80,002</b>	<b>241,987</b>	<b>3,666,736</b>	<b>879,132</b>
<b>SOURCE: ANNUAL REPORTS OF COMPANIES PUBLISHED ON NSE WEBSITE 2011-2015.</b>				

TABLE 1

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.984 <sup>a</sup>	.968	.953	2192.361	1.553

a. Predictors: (Constant), NA, TR, PAT

b. Dependent Variable: PBC

TABLE 2

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	883357048.496	3	294452349.499	61.262	.000 <sup>b</sup>
Residual	28838679.104	6	4806446.517		
Total	912195727.600	9			

a. Dependent Variable: PBC

b. Predictors: (Constant), NA, TR, PAT

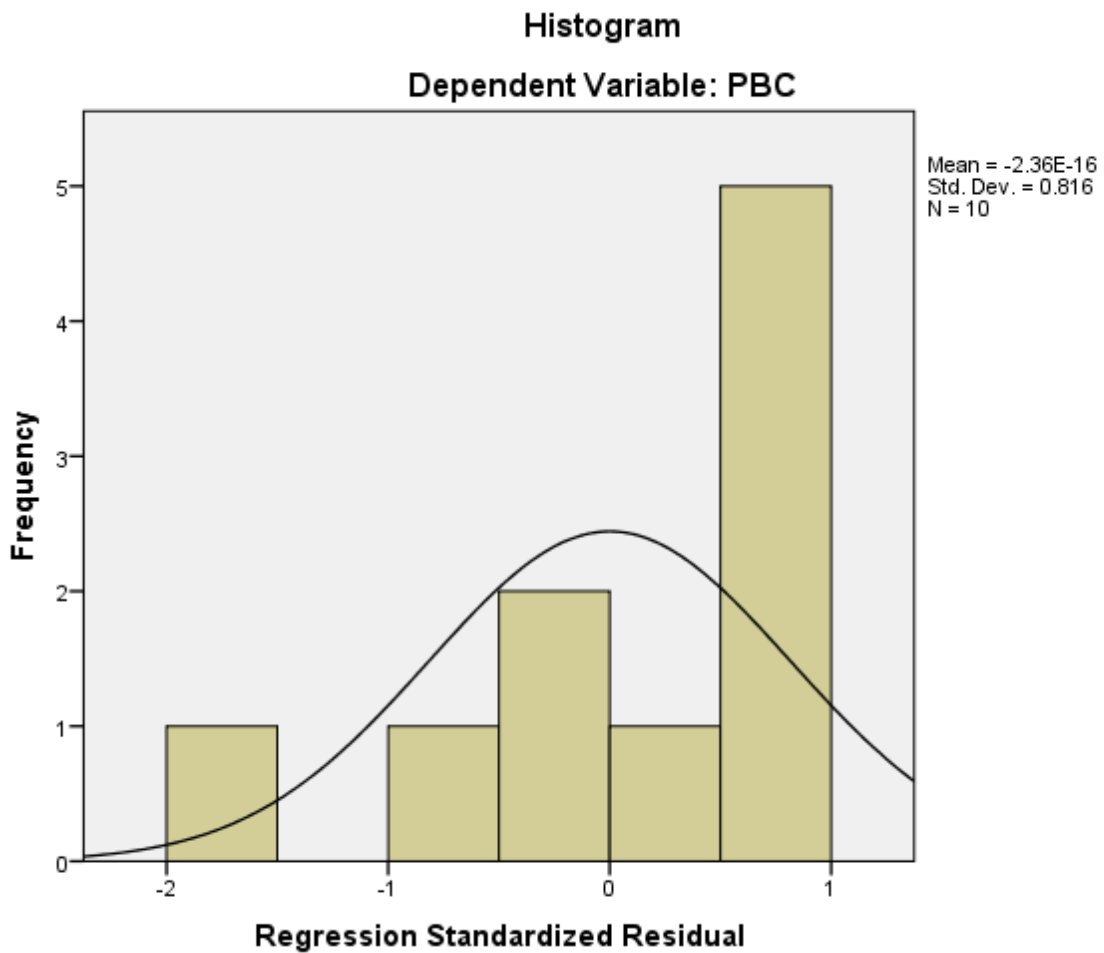


TABLE 3

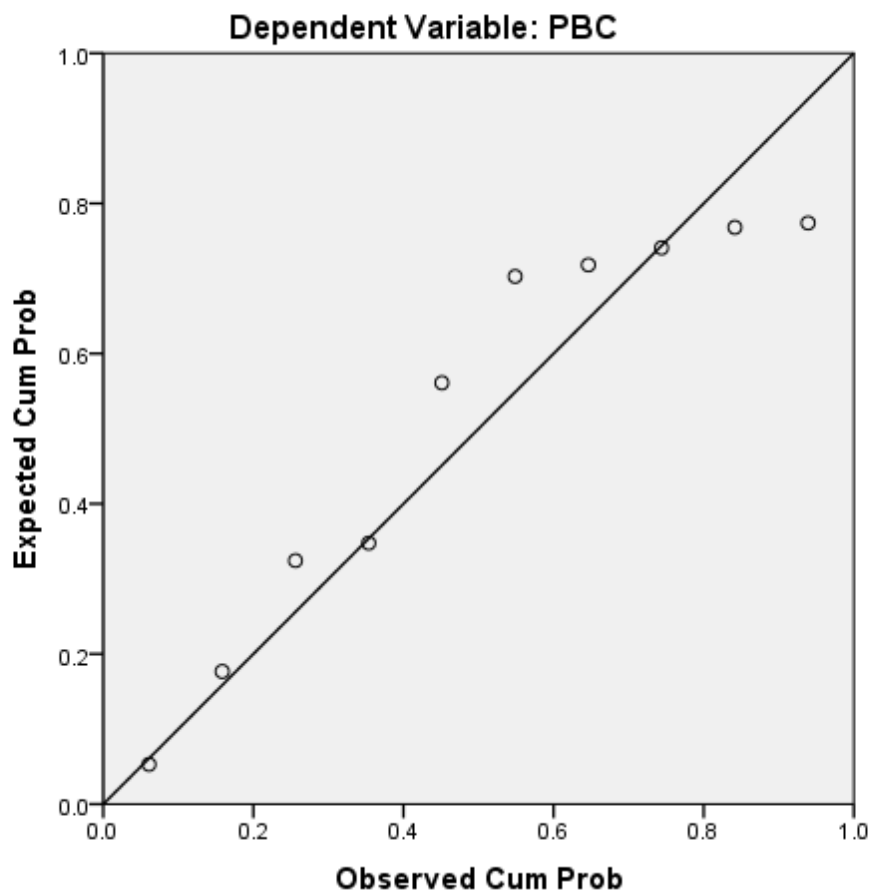
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	3612.009	1198.996		3.013	.024
PAT	.379	.032	1.253	11.865	.000
TR	.008	.003	.238	2.745	.034
NA	-.087	.014	-.677	-6.120	.001

a. Dependent Variable: PBC





**Normal P-P Plot of Regression Standardized Residual****REFERENCES**

- Abubakar, Salusu (2011). Human resource accounting and the quality of financial reporting of quoted service companies in Nigeria. Ph.D. Dissertation submitted to PG School of Ahmadu Bello University, Zaria.
- Amber Dejmaj (2016). Business 306: Strategic Human Resources Management Study. Com/academy/lesson/human-capital-theory-characteristics-investment.html.
- American Accounting Association (1973). Report of the Committee on Accounting for Human Resources. *The Accounting Review*, 48, pp. 6-11.
- Ekwe M. C. (2012). Relationship between intellectual capital and financial performance in the Nigerian banking sector. Ph.D. Dissertation submitted to the Department of Accountancy, Faculty of Business Administration University of Nigeria.
- Flamholtz, E. G. (1999). Current issues, recent advancements, and future directions in human resource accounting. *Journal of Human Resource Costing & Accounting*, 4(1), a 11–20. <http://dx.doi.org/10.1108/eb029050>.
- Izushi, H. and Huggins, R. (2004). “Empirical analysis of human capital development and economic growth in European regions”. In Descy, P. and Tessaring, M. (eds) *Impact of Education and Training Third report on vocational training research in Europe:*

background report. Luxembourg: Office for Official Publications of the European Communities.

- Micah L.C., Ofurum C.O. and J.U. Ihendinihu (2012). Firms' financial performance and human resource accounting disclosure in Nigeria. *International journal of business and management*. Vol. 7, No. 14.
- Odhong E. A. and Were S. (2013). "Human Capital Management as a tool for value creation", in proceedings of First SHRD Annual Research Conference, 12th and 13th September, Nairobi, Jomo Kenyatta University of Agriculture and Technology main campus.
- Odhong', A. E., Were A. & Omolo, J. (2014). Effect of human capital management drivers on organizational performance in Kenya. A case of investment and mortgages bank ltd. *European Journal of Business Management*, 2 (1), 341-356.
- Owen, R. (1825). "Organisation of Human Element", In Robbins, S.P. (2001) *Organisational Behaviour* (9th Edition). India: Pearson Education (Singapore) Ltd.
- Prince F.I., Lucky G.O. and Kingsley K. (2013). Human resource accounting and its impact on organizational performance. *Journal of economics and sustainable development*.
- Robbins, S. P. (2001), *Organisational Behaviour* (9th Edition). Singapore: Pearson Education (Singapore) Ltd.