# UNIVERSITY OF PORT HARCOURT JOURNAL OF ACCOUNTING AND BUSINESS DEPARTMENT OF ACCOUNTING UNIVERSITY OF PORT HARCOURT, CHOBA PORT HARCOURT, RIVERS STATE NIGERIA VOL. 3 NO. 2 JUNE 2016

# HUMAN ASSETS-RELATED COSTS AND FIRM PERFORMANCE IN MANUFACTURING FIRMS IN NIGERIA

PETER OKOEGUALE IBADIN Department of Accounting Faculty of Management Sciences University of Benin, Edo State Email:okoeguale.ibadin@uniben.edu

And

KILLIAN OSIKHENA OGIEDU Department of Accounting Faculty of Management Sciences University of Benin, Edo State Email:koogiedu@yahoo.com

#### ABSTRACT

Human assets have been seen as critical elements in achieving corporate goals and objectives. To this end, these assets are known to play very strategic roles in achieving corporate performance, though their values are unreported directly in the financial statements. It is only thought that a flat and anecdotal submission of the criticality of human assets be corroborated by appealing to empiricism . This study was an attempt to simulate human assets variables and how these pseudo variables impact on corporate performance in Nigeria. This study, therefore examined the impact of human assets-related costs on firm performance in selected manufacturing companies in Nigeria. To achieve this, a sample of 40 quoted companies in Nigeria was used. The choice of the manufacturing industry was based on the role of human assets-related costs in the manufacturing industry classification. In analyzing the data, a pooled multiple regression technique. The results show that the human assets-related costs have a significant and positive influence on quoted companies' return on capital employed (ROCE) in Nigeria. Given the interaction of human assets-related costs with firm size and the ratio of labour cost to fixed assets, the results show that human assets-related costs impact positively and significantly on corporate performance. It was also observed that higher compensation had a positive and significant impact on ROCE in Nigeria. In the case of IFRS dummy, which was introduced to capture the effect of different accounting reporting standards for companies in the period of 2011 to 2013, the results show that it was significant. On the basis of these findings, it is recommended that stakeholders interested in ROCE-based performances should emphasize on companies that focus on investments in human assets-related costs to create corporate value.

Keywords: Human assets-related costs, ROCE, Manufacturing companies.

# PETER OKOEGUALE IBADIN AND KILLIAN OSIKHENA OGIEDU HUMAN ASSETS-RELATED COSTS AND FIRM PERFORMANCE IN MANUFACTURING FIRMS.......

#### INTRODUCTION

Human assets- related costs represent the costs that are related to the human efforts which result in corporate growth indices. These indices are financial or non-financial, qualitative or quantitative. As indicated in the literature of human capital assets, Tsafrir, 2005; Moradi, Saeedi, Hajisadeh and Mohammadi (2013) averred that disclosure of human assets in the financial reports; provide a major source of competitive advantage. Every business requires physical assets as well as human capital assets. Without the human efforts, the human knowledge and skills, physical or non-current assets, like land, plants, property and equipment as well as machinery will become unproductive (Ibadin & Oladipupo, 2015; Bassey & Arzizeh, 2012). Even in the face of technology and internet revolution, the role of human assets as value drivers cannot be overemphasized. Of critical importance and mostly neglected in the financial statement is the role of human asset in defining firm's performance.

Human assets or human capital -used interchangeably- represents the human efforts, both innate and external, in creating value; these human assets include the human knowledge, skills, experiences and abilities of people. Edvinsson and Malone (1997) describe the human knowledge as the sum of the workers' skills, experiences, capabilities and innate knowledge which drive production and ultimately profitability. Some of this knowledge is unique to the individual while some may be generic (Bontis, 2003). Meritum Project (2002) enumerates some of this knowledge to include: innovation capacity, creativity, know-how and previous experience, teamwork capacity, employee flexibility, tolerance for ambiguity, motivation, satisfaction, learning capacity, loyalty, formal training and education. In addition, human assets represent the individual stock of human knowledge stock in an organization as represented by its employees (Bontis, Keow & Richardson, 2000). It comprises the competence, skills and intellectual agility of the individual employees (Roos, Bainbridge & Jacobsen, 2001); and it cannot be owned by the company (Bontis, 2001). It is considered to be the most important intellectual asset as it is the source of innovation and renewal (Stewart, 1999). In similar reasoning, Bontis (1998) describes human assets or human capital as the company's collective capabilities to extract the best solution from the knowledge of its individuals.

Unfortunately, these human assets lack a framework for the assessment, valuation, measurement and financial reporting in the financial statements ((International Accounting Standard No 38; Ibadin &Oladipupo, 2015). Presently, it is classified as a part of intellectual capital and described as the most important form of intangible assets (Brennan &Connell, 2000).But with the transition to International Financial Reporting Standards-IFRS, the Nigerian Generally Accepted Accounting Principles (NGAAP) are now subsumed in the international standards, suggesting that all accounting transactions and events will be guided by the international standards.

In the light of this, this study employed simulated human assets-related costs germane to improvements in human asset stock and motivation, satisfaction, learning capacity, loyalty, formal training and education required to deliver on performance. To this end, this paper

#### UNIPORTJAB

Examined human asset-related costs, including their interaction with the corporate attribute of firm size, on firm performance, using the manufacturing firms in Nigeria.

#### **REVIEW OF LITERATURE**

#### CLARIFYING HUMAN ASSET, HUMAN CAPITAL AND HUMAN ASSET-RELATED COSTS

The concept of human capital was fully developed in the 1960s with the emergence of human capital theory formalized by Schultz (1961) and Becker (1962, 1964). The former analyzed educational expenditure as a form of investment whereas the latter developed a theory of human capital formation and analyzed the rate of return to investment in education and training.

Human capital or human asset are concepts that have the same thread of connotation; and both have been used interchangeably or synonymously in very many studies. From the perspective of the accountant, human resources, a similar phrase, approximate human capital or human asset. These contexts accommodate the education and training, the knowledge and skills as well as the incentives defined in terms of remuneration intended to impact on productivity (Marimuthu, Arokiasamy & Ismail , 2009),. These contexts apply in this study.

Human asset, in broad sense, refers to the knowledge that employees possess as well as the employees' ability to generate it, which is useful to enhance firm performance; this includes individual values, attitudes and know-how (Ibadin and Omokhudu, 2015). Although the human brain can be considered as the main source of knowledge creation, an organization can accumulate and store this individual knowledge in databases, proceedings, and organizational structures. These accumulated data are also referred to as the human capital; therefore human capital involves both the employee and the stored knowledge (firm-specific human capital).

Izedonme, Odeyile and Kuegbe (2013) identified two kinds of human capital that can be discerned in any organization – generic and firm-specific human capital. The former refers to an explicit form of knowledge, developed outside the firm and paid for by individuals, and is highly transferable (mobile). Firm-specific human capital refers to the knowledge and skills unique to a firm that cannot be easily transferred to other companies.

Many studies have identified human asset (capital) as a pre-condition for and often a determinant of economic performance and international competitiveness In addition, some authors argue that the process of industrial deepening and upgrading requires higher levels of skill, know-how and organization in almost every function

#### HUMAN ASSETS-RELATED COSTS AND FIRM PERFORMANCE

According to Marimuthu, Arokiasamy and Ismail (2009), human assets or capital assets refer to processes that relate to human skills, training and development, education and other professional initiatives which increase the levels of knowledge, skills, abilities, values, and social assets of an employee that lead to the employee's satisfaction and performance, and eventually impact on firm performance. The human capital (generic and firm-specific) nurturing is imperative to enhancing firm performance.

However, organizations' competitive advantage and core value creation reflect the nurturing of the generic human assets (capital) and the firm-specific human assets (capital). As

# PETER OKOEGUALE IBADIN AND KILLIAN OSIKHENA OGIEDU HUMAN ASSETS-RELATED COSTS AND FIRM PERFORMANCE IN MANUFACTURING FIRMS.......

Posited, human assets (capital) information is an important ingredient in decision makers' evaluation of the future potential of companies, hence argue (International Accounting Standard Board, 2000), that it is in the interest of companies to supply more of such information to increase their market value.

To this end, human assets-related costs are the associated costs which are incurred to uplift the human skills and knowledge for higher productivity. These include the staff training and labour cost, among others.

#### STAFF COSTS AND FIRM PERFORMANCE

It is argued that emoluments in form of remuneration to employees may lead to motivation for higher productivity. Performance-based compensation, however, is the dominant human resource practice that firms use to evaluate and reward employees' efforts (Abeysekera, 2012). Compensation for employees and managers is strongly related to the education and experience they possess (Becker, 1964; Fisher & Govindarajan, 1992; Harris & Helfat, 1997), however, there is scarce evidence on the effects of compensation policy on firm growth. Empirical studies on the relationship between performance-related pay and company performance have generally found a positive relationship, but a growing body of empirical evidence suggests that it is not just pay level that matters, but pay structure as well. Pay is a device by which owners can potentially seek to create financial incentives for employees to satisfy their opportunistic behaviour (Amess & Drake, 2003). Performance-based compensation is said to have a positive effect upon employee and organizational performance. Managers believe that high employee performance followed by an incentive reward system will make future high performance more likely (Tsafrir, 2005).

#### LABOUR COSTS AND FIRM PERFORMANCE

Training and development of the workforce now occupies a pride of place in the agenda of serious organizations. Researchers and practitioners have long understood that human capital or assets ,expressed in one's education and training, can play an important role in firms or organizations (Becker, 1983; Mincer, 1974); and investments in training which are designed to build human capital influence performance (Combs, Liu, Hall, & Ketchen, 2006).

The grown and growing firms employ training programmes to achieve their objectives, including employee (Izushi & Huggins, 2004). Human assets, as reflections of skills, creativity and enhanced productivity of the employees, are believed to be a fall out of investment in training programmes (UI Rehman, Abdul Rehman, Rehman & Sahid, 2011). Employee training programmes are designed to provide the knowledge, attitude, or job skills that help employees perform their present jobs.

Training has immediate practical application on the job. On the other hand, development programmes are designed to assist employees in preparing themselves for future responsibilities of different nature, or higher degree of proficiency in their present jobs. Whereas training has an early and often visible payoff while development is future-oriented.

#### UNIPORTJAB

VOL. 3 NO. 2

**JUNE 2016** 

Therefore, facing competition both within and across the industry, top level policymakers must view human capital development as a key to strengthening the positions of their companies in the local and global market. To this end, investment in education and vocational training is paramount in providing every business units with comparative advantages.

# CONTROL VARIABLE (s) FIRM SIZE AND FIRM PERFORMANCE

Growth is sacrosanct as far as business is concerned. Everything in nature seeks to grow mainly because it is an indicator of survival. For a firm to survive it has to grow; hence firm size as a control variable and or its interaction with labour intensity, labour cost and staff value and training encompasses the economies of scale, indicating the capacity to grow the wealth of the firm or organization. The growth of any economy takes place through the growth in the size of existing organizations According to Symeou (2012), firm size is a strong indicator of firm performance This is because, as firms face high growth potentials and pursue growth strategies, additional benefits and exploits will be derived from larger size. A larger economy size entails higher firm growth potentials, hence the need for firms to pursue growth.

#### EMPIRICAL EVIDENCE ON HUMAN ASSETS-RELATED COST AND FIRM PERFORMANCE

Academic research over the last decade has demonstrated that intangible assets in the aggregate are increasingly important sources of firm value, and that human assets are an important part of that asset value.

Izushi and Huggins (2004) found that training and employee development practices, as labour costs, are more common in rapid-growth firms than slow growing ones. Madumere and Jaja (2011) concluded that the training cost should not be dispensed in the income statement but should be capitalized. That training programmes should be included in the organization's annual budget plan since increased human capital increases organizational growth in terms of market shares.

On performance based package and remuneration, Amess and Drake (2003) submitted that the remuneration of top executives is directly related to the measure of knowledge input, which directly reflects firm performance. The argument here in general, is that labour cost expressed in performance-related package tends to attract higher productivity for the obvious reason that it elicits hard work.

# THEORETICAL FRAMEWORK CONTINGENCY OR 'FIT' APPROACH

The emphasis here is on alignment, or fit, between the external environment, the organization, and human resources or human assets. The notion of the fit approach indicates the intercourse of these elements, the benefits of efficiency and effectiveness in achieving organizational goals. A central tenet in human resource and its management is that there should be vertical linkage between human resource practices and processes and the organizational strategy of the firm.

# HUMAN CAPITAL THEORY

In the human capital literature, human capital reflects human and productive capabilities (Bassey & Arzizeh, 2012), skills, experience, and knowledge which have (potential) economic value to organizations because they enable it to be productive and adaptable. This

# PETER OKOEGUALE IBADIN AND KILLIAN OSIKHENA OGIEDU HUMAN ASSETS-RELATED COSTS AND FIRM PERFORMANCE IN MANUFACTURING FIRMS........

Theory constitutes the human capital architecture of the organization which has value or potential value that can be fully realized only with the co-operation of the person.

In human capital theory, contextual factors indicated in market conditions, unions, business strategies, and technology are important elements that can affect such value of the organization's human capital and the value of the anticipated returns, such as productivity gains.

# **METHODOLOGY AND DATA**

For the purpose of this study, we employed basically the content analysis and longitudinal research design for data extraction. The content analysis was required partly for the extraction of staff training and development cost while the longitudinal research design suggested the use of data in which remuneration was conveniently extracted in the financial statements. We utilized 40 manufacturing firms listed on the Nigerian Stock Exchange for a three year period (2011-2013). This period was also to feel the rhythm of the transition to International Financial Reporting standard in Nigeria in 2012 by firms.

The sources of data used were secondary. These data were collected from the annual reports and accounts of these firms listed on the Nigerian Stock Exchange.

# MODEL SPECIFICATION AND DATA ANALYSIS PLAN

In analyzing the data, a pooled multiple regression was selected and some preliminary analysis was conducted, such as descriptive statistics and correlation matrix. The general model is thus specified:

General model:  $Y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_{4+a_5x_5+Ut}$ 

The testable model:

 $\label{eq:ROCE} ROCE = a_0 + a_1(Staff-value) + a_2(Staff-cost + a_3(Labcost) + a_4(Fsize) + a_5IFRSD + a_6(Staff-cost * Fsize) + a_7(Staff-value*L/k) + Ut -------2$ 

Where: ROCE = Return on capital employed

- 1. Staff-value= Per staff revenue less Per staff cost
- 2. Staff-cost= Wages and salaries and training cost)
- 3. Labcost = Labour Cost to Fixed Asset ratio
- 4. Fsize = Firm size
- 5. IFRSD = Firms' compliance or noncompliance to IFRS
- 6. Staff-cost \*Fsize =Staff cost and firm size interaction
- 7. Staff-value\*L/k =Human capital creation value and labour cost interaction
- 8. Ut = Error term;  $a_0$ =Constant:  $a_1$ ,  $a_2$  and  $a_3$ =Parameters to be estimated

#### TABLE 1. Definition and Operationalization of variables and expected signs

Variables	Apriori	Explanation/measurement	Source	
Return on capital employed	SIGI	the ratio of net profit after tax divided by total asset less current liabilities	Moradi, Saeedi, Hajisadeh & Mohammadi, (2013).	
Human capital asset value creation (Staff- value)	+/-	Per staff revenue less Per staff cost		
Staff cost	+/-	Remuneration or Wages and Salaries	Abeysekera, 2012	
Labour Cost to Fixed Asset ratio(L/K)	+	This ratio indicates the degree of utilization of tangible fixed assets	Moradi, Saeedi, Hajisadeh & Mohammadi, (2013).	
Firm size	+	The growth capacity of the firm expressed in total assets	Symeou (2012)	
IFRSD	+	Firm's compliance to IFRS:Firm's compliance,1 otherwise (NGAAP),0		

# DATA PRESENTATION AND ANALYSIS

In order to explore the pooled data collected from our sampled companies' audited annual financial reports, a descriptive statistical analysis was conducted and table 1 provides the summary of the descriptive statistics of the sampled 40 Nigerian quoted companies.

Variables	Mean	Max	Min	Std. Dev	JB (P-value)
ROCE (%)	0.023	0.670	-6.48	0.70	(0.0)*
Staff-value	84,427	990,880	-9,617	190,672	(0.0)*
Staff-cost	2,068	19,514	458	3,198	(0.0)*
L/k	0.326	4.070	0.019	0.54	(0.00)*
Fsize	16.5	20.55	13.17	1.68	(0.14)
IFRSD	0.81	1.00	0.00	0.38	(0.00)*
No. of Cross Sections	40				

#### **TABLE 2: Descriptive Statistics**

# Note: \*1% Level of Significance, \*\* 5% Level of Significance, \*\*\*10 % Level of Significance

Table 2 shows the mean (average) for each of the variables, their maximum values, minimum values, standard deviation and Jarque-Bera (JB) statistics (normality test). The results in table 1 provide some insights into the nature of the selected Nigerian quoted companies that were used in this study. Firstly, the large difference between the maximum and minimum values of log of total assets (Fsize) shows that the sampled quoted firms were not dominated by

# PETER OKOEGUALE IBADIN AND KILLIAN OSIKHENA OGIEDU HUMAN ASSETS-RELATED COSTS AND FIRM PERFORMANCE IN MANUFACTURING FIRMS......

Either large or small firms. Secondly, it was observed that on the average over the three year period (2013-2011), the sampled quoted firms in Nigeria were characterized by a positive average, ROCE (0.023). It also observed that the average human capital asset value creation (Staff-value) over the period was N84, 427 and the maximum amount from our sampled firms was N990, 880 while the minimum stood at N-9,617. This shows that some quoted firms in Nigerian workforce can best be described as liabilities rather than asset since they created negative value addition. The wide variations in the value creation by the workforce of our sampled firms justify the need for this study, as we expect firms with more human capital asset to perform significantly better. The table also shows that our sampled firms covered firms with small and large cost per staff. A look at the IFRS dummy variable, which was a dummy assumes "1" for companies that reported under IFRS and "0" otherwise, shows that 81% of our sampled quoted firms reported with IFRS while over 19% still reported under NGAAP. This confirms that our sample firms are heterogeneous and our selected estimation techniques most took into consideration heteroscedaticity problem and IFRS adoption effect on the estimated coefficients. This therefore justifies our use of both OLS (ordinary Least Square) and WLS (weighted least square) pooled multiple regression estimation techniques.

Lastly, in table 2, the Jarque-Bera (JB) which tests for normality or the existence of outliers or extreme values among the variables, shows that all the variables are normally distributed at 1% level of significance except for firm size (Fsize). This means that most of the variables are not likely to distort our conclusion and are therefore reliable for drawing generalization. This also implies that a least square estimation can be used to estimate the pooled regression models.

# **CORRELATION ANALYSIS**

In examining the association among the variables, the Pearson correlation coefficient (correlation matrix) was employed and the results are presented in table 2.

TABLE 5: Pearson correlation Matrix						
	ROCE	Staff-cost	L/k	Fsize	Staff-value	IFRSD
ROCE	1.00					
Staff-cost	-0.30	1.00				
L/k	0.03	-0.10	1.00			
Fsize	0.10	0.47	-	1.00		
			0.25			
Staff-value	-0.01	0.52	-	0.30	1.00	
			0.15			
IFRSD	0.17	0.15	-	0.15	0.16	1.00
			0.06			

# TABLE 2. Dearcon Correlation Matrix

The use of correlation matrix in most regression analysis is to check for multicolinearity and to explore the association between each explanatory variable and the dependent variable. The findings from the correlation matrix table, shows that there exists a weak and negative

#### UNIPORTJAB

Association between firm performance and human capital cost (ROCE; Staff-cost= -0.30).In the case of human capital asset value creation (ROCE; Staff-value=-0.01), we observed that firm performance was negatively and weakly associated with human capital asset value creation. This suggests that investigating the influence of human capital asset influence on firm performance without introducing interaction variables may lead to wrong conclusion. This therefore justify why we adopted firm size (Fsize) and Labour cost to fixed asset ratio (L/k) as interaction variables. A close look at the correlation matrix also revealed firm size (ROCE; Fsize=0.10) was positively and weakly associated with firm performance. While IFRSD variable was found to be positively and weakly correlated with firm performance (IFRSD; ROCE=0.17).

In checking for multicolinearity, we notice that no two explanatory variables were perfectly correlated. This means that there is the absence of multicolinearity problem in our model. Multicolinearity between explanatory variables may result to wrong signs or implausible magnitudes in the estimated model coefficients, and the bias of the standard errors of the coefficients.

## POOLED MULTIPLE REGRESSION RESULTS

However, to examine the impact relationships between the dependent variables (ROCE) and human capital asset variable (Staff-value) and to also test our formulated hypotheses, we used a pooled multiple regression analysis since the data had both time series (2013 to 2011) and cross-sectional properties (40 quoted firms). The pooled interaction based on multiple regression results obtained is decomposed into two: ROCE (OLS) and ROCE (WLS) estimation techniques with the results:

#### **ROCE Model**

The Return on Capital Employed (ROCE) pooled OLS and WLS regression results examine how human capital asset(Staff-value) and its interaction with firm size (Fsize) and Labour cost to fixed asset ratio (L/k) impact on companies' ROCE. The general hypothesis of this model is that human capital asset is not statistically significant in companies' ROCE in Nigeria. The results obtained are presented in table 3.

In testing for the cause-effect relationship between the dependent and independent variables in the ROCE model, we reported the OLS and WLS pooled regression results. In estimating the OLS results we follow the assumption of no heteroscedasticity while in the case of WLS, there is the assumption of the presence of heteroscedasticity and we adopted a weighted transformation process to obtain an a more robust result. In selecting from the two pooled regression results, we used the WLS, since the results would be more appealing statistically in the context of difference in our sampled companies.

# PETER OKOEGUALE IBADIN AND KILLIAN OSIKHENA OGIEDU HUMAN ASSETS-RELATED COSTS AND FIRM PERFORMANCE IN MANUFACTURING FIRMS.......

	Expected	ROCE	ROCE
	Sign	(OLS)	(WLS)
С		-2.00	-0.13
		(-3.07)	(-6.16)
		[0.00]*	[0.00]*
Staff-cost	+	-0.0001	0.027
		(-5.09)	(7.33)
		[0.00]*	[0.00]*
Staff-value	+	5.90e-07	
		(1.63)	-
		[0.10]	
Fsize	+	0.12	-
		(3.04)	
		[0.00]*	
L/k	+	0.10	-
		(0.98)	
IFRSD		[0.32]	
	+	0.32	0.07
Staff-cost*Fsize		(2.10)	(1.96)
		[0.03]**	[0.05]*
Staff-value*L/k	+	-	1.46e-08
			(1.97)
			[0.05]*
	+	-	9.57e-07
			(0.69)
			[0.48]
R-Squared		0.21	0.12
Adj-R-Squared		0.18	0.09
F-Statistic		6.34(0.0)*	4.15 (0.0)*
N(n) Observations		120(40)	120(40)

### Table 4: ROCE pooled multiple regression results

Note: (1) Parentheses () are t-statistic while bracket [] are p-values

(2) \* 1%, \*\* 5%, \*\*\*10% level of significance

Following the pooled WLS results in table 3, it is observed that R-squared and adjusted R-squared values were (0.12) and (0.09). This is unlike the OLS results which produced an R-adjusted that was about 18%. This indicates that all the independent variables jointly explain about 6% of the systematic variations in ROCE of our sampled companies over the three-year period (2013-2011). The low R-squared value is not surprising as we expect other variables outside our "model scope" to be responsible, for better understanding of the behaviour of ROCE. The low R-squared value also justifies previous studies in Nigeria that argued that financial performance of most Nigeria companies is difficult to predict by specific selected

#### JUNE 2016

#### UNIPORTJAB

Variables. The F-statistics (4.15) and its p-value (0.0) show that the ROCE WLS regression model is generally significant and well specified. The F-Statistic also shows that the overall ROCE WLS regression model is significant at 1% levels. A similar conclusion can also be made for the OLS results.

In addition to the above, the specific finding from the explanatory variable as shown in the WLS regression models is provided as followings:

On the human capital asset value creation (Staff value) based on the coefficient of 5.90e-07 and p-value of 0.10, appears to have a positive influence on our sampled quoted firm's ROCE performance and was statistically significant at 10% since its p-value was 0.10. This result, therefore, suggests that human capital asset value creation does not significantly impact on firm performance. This means the value created by most staff in our sampled companies in Nigeria had a significant positive impact on the returns on capital (ROCE) of debt fund providers and equity shareholders.

On human capital asset value creation interaction with firm size (Staff-value\*Fsize), results reveal a coefficient of 1.46e-08 and p-value of 0.05appears to have a positive influence on our sampled quoted firms' ROCE performance and was statistically significant at 5% since its p-value was equal to 0.05. This result, therefore, suggests that human capital asset of large firms does not significantly impact on firm performance. This means that the value created by staff of large firms have a positive impact on firms ROCE performance. This finding also subjected that the hiring of addition human capital asset (Staff) by large firms has a more significant positive impact on bottom-line and returns on capital employed.

On the human capital asset value creation interaction with Labour cost to fixed asset ratio (Staff-value\*L/k) based on the coefficient of 9.57e-07 and p-value of 0.48, appears to have a positive influence on our sampled quoted firms' ROCE performance and was statistically insignificant, since its p-value was more than 0.10. This result, therefore, suggests that human capital asset of labour intensive firms does not significantly impact on firm performance. This means that the value creation of human capital asset in labour dominated firms have an insignificant influence on firm performance. This therefore suggests that companies with higher staff cost to fixed asset ratio should seek to adopt optimal compensation for human capital asset that would spur significant improvement in ROCE performance.

Results on human capital cost (Staff -cost) based on the coefficient of 0.027 and p-value of 0.00, reveal an appearance of a positive influence on our sampled quoted firms' ROCE performance and was statistically significant at 1% since its p-value was less than 0.05. This result, therefore, suggests that the cost of human capital asset does not significantly impact on firm performance. This means that increasing the reward of human capital asset (staff) has a positive and significant positive impact on firm performance in our sampled firms in Nigeria. This in other words, support the view that higher compensation of human capital asset (people or staff) does not reduce shareholder wealth but rather produce a significant positive impact on performance.

IFRS dummy (IFRSD) based on the coefficient of 0.07 and p-value of 0.05, appears to have a positive influence on our sampled quoted firms' ROCE performance and was statistically

# PETER OKOEGUALE IBADIN AND KILLIAN OSIKHENA OGIEDU HUMAN ASSETS-RELATED COSTS AND FIRM PERFORMANCE IN MANUFACTURING FIRMS........

Significant at 5% since its p-value is equal to 0.05. This result, therefore, suggests that the adoption of IFRS by some firms does not significantly impact on firm performance. This finding therefore shows that the introduction of IFRS dummy is justified in our model. This in other words means modeling the relationship between human capital asset and firm performance without considering the implication of companies reporting under IFRS and NGAAP would have undermined the true values of our coefficients.

# CONCLUSION AND RECOMMENDATIONS

In the light of these, the understanding of organizational performance in relation to human capitals should not be regarded as a phenomenon that only adds 'more zeros' in a firm's profits; it is rather transforming the entire workforce as the most 'valuable assets' in order to pave the way for greater performance, ensure competitiveness and long term survivability.

In this light, the following recommendations are suggested: Companies that still report under NGAAP should begin to report under IFRS without delay. The reason being that, it guarantees higher value of return on equity. Stakeholders of companies and investors that are interested in benefiting from high return on equity should seek for companies with higher human capital asset value creation and that are also rewarding their staff very well Companies should adopt optimal compensation packages and high employee welfare, because it guarantees high firm performance. Management should formulate policies that are human resource centered, policies that favor and enhances the quality of human capital assets. For future research, it is suggested that focus should accommodate content analysis in which other items of human capital, not disclosed in the financial statements but in the other sections of the annual report, could be examined. This could lead to a holistic view of human capital or asset disclosure as it relates to firm performance.

#### REFERENCES

- **Abeysekera, I. (2012).** Role of remuneration committee in narrative human capital disclosure. Accounting and finance. 52.1-23.
- Aldcroft (1992). Education, training and economic performance, 1944 to 1990, Manchester: Manchester University Press.
- Amess K. & Drake L., (2003). Executive remuneration and firm performance: evidence from a panel of mutual organisations. JEL. 1. 1-34.
- Anyim F. C., Ikemefuna C. O. & Mbah S. E. (2011). Human resource management challenges in nigeria under a globalised economy. International Journal of Economics and Management Sciences. 1(4), 1-11.
- **Bassey B. A.**, & Tapang A. T. (2012). Capitalized human resources cost and its influence on corporate productivity: A study of selected companies in Nigeria. international journal of financial research. 3(2), 48-60.
- **Becker,G. (1962).** Investments in human capital: A theoretical analysis, Journal of Political Economy,(70), 9-44.

- **Becker,G. (1964).** Human capital. A theoretical and empirical analysis with special reference to education, 3rd Edition, 1993, Chicago and London: The University of Chicago Press.
- **Becker, G. S. (1983).** Human capital: A theoretical and empirical analysis with special reference to education. Chicago, IL: University of Chicago Press.
- **Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006).** How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. Personnel Psychology, 59, 501–528. doi:10.1111/j.1744-6570.2006.00045.x
- Harris, D., & Helfat, C. (1997). Specificity of CEO human capital and compensation. Strategic Management Journal, 18, 895–920. doi:10.1002/(SICI)10970266(199712)18:11\_895::AID-SMJ931\_3.0.CO;2-R
- **Ibadin, P.O., & Oladipupo, A. O. (2015).** Determinants of intangible assets disclosure in quoted companies in Nigeria, Journal of Accounting and Governance, 6.13-25.
- International Accounting Standards Board (IASB) (2000). Statements of the Board of the International Accounting Standards Committee. International Accounting Standards Board. Retrieved from http://www.iasc.org
- International Accounting Standard (IAS 38). Intangible assets. London: IASB. Retrieved from http://www.iasc.org
- **Izedonme P. F., Odeyile L. G. & Kuegbe K. (2013).** Human resource accounting and its impact on organizational performance. Journal of Economics and Sustainable Development. 4(15). 50-57.
- **Izushi H. ,& Huggins R. (2004).** Empirical analysis of human capital development and economic growth in European regions. Cedefop Reference Series. 58. 72-128.
- Madumere I., & Jaja S. A., (2011). Human capital development and organizational dynamics: The role of the accountant. Working paper Retrieved from www.iiste.org/Journals/index.php/EJBM/article/download/4692/4771
- Marimuthu M., Arokiasamy L., & Ismail M. (2009). Human capital development and its impact on firm performance: evidence from developmental economics. The Journal of International Social Research. 2(8). 266-277.
- Mincer, J. (1974). Schooling, experience, and earnings. New York, NY: Columbia University Press. Fisher & Govindarajan, 1992
- Moradi M., Saeedi H., Hajisadeh M., & Mohammadi M. (2013). The influence of intellectual capital on the improvement of companies' financial performance. International Journal of Economics, Business and Finance. 1(5). 120-129.
- Schultz, T. (1961). Investment in human capital, American Economic Review, 51 (1), 1-17.

# PETER OKOEGUALE IBADIN AND KILLIAN OSIKHENA OGIEDU HUMAN ASSETS-RELATED COSTS AND FIRM PERFORMANCE IN MANUFACTURING FIRMS.........

- **Symeou, P.C. (2012).** The firm size performance relationship: An empirical examination of the role of the firm's growth potential, Institute for Communication Economics, Department of Management, University of Munich (LMU); Judge Business School, University of Cambridge,
- Teixeira, A. (2012). On the link between human capital and firm performance: A theoretical and empirical survey, working papers DA FEP No 121 Retrieved 19<sup>th</sup> June,2016 from http:/ www.fep.up.pt
- **Tsafrir S.S. (2005).**The relationship between trust, HRM practices and firm performance. international journal of human resource management. 16(9). 1600-1622.
- Ul Rehman W., Abdul Rehman C., Rehman H., & Sahid A. (2011). Intellectual capital performance and its impact on corporate performance: An empirical evidence from Modaraba sector of Pakistan. Australian Journal of Business and Management Research. 1(5). 8-16.