HUMAN RESOURCE COSTS AND FINANCIAL PERFORMANCE: EVIDENCE FROM SELECTED LISTED FIRMS IN NIGERIA.

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ABSTRACT: There is general lack of quantification and disclosure of human assets in domestic and international financial reports, and this appears to depress public assessment of the financial performance and value of firms. This study investigated the effect of human resource costs on the financial performance of firms in Nigerian. The specific objective is to determine the extent to which investments in human resources influence profit after tax and turnover of firms in Nigeria. Secondary data on relevant financial variables were extracted from published financial statements of ten selected listed firms in Nigeria. The OLS technique was employed in analyzing the data and the results indicate that personnel benefit costs have positive and significant effect on Profitability, explaining about 73.9% of the variations in Profit After Tax of firms in Nigeria. The results however reveal no significant effect of Personnel Benefit Costs on firm turnover. The paper therefore concludes that investments in human resources have positive trade-off effects on profitability and growth of firms and recommends greater commitment to manpower development and training, while providing proper infrastructures and conducive working environment to enhance the capacity of employees to drive positive improvements in corporate financial performance.


INTRODUCTION

There is no doubt that companies need strong and competitive human resource to succeed; the success of firms whether large, medium or small, depends on the quality and value of human resource they have. According to Robbins (2001), a major feature that differentiates successful organizations from their contemporaries in almost all economic sectors is the quality of the people they are able to get and retain. Knowledge has, indeed, become power and organizations in our ever changing world consider knowledge and intellect of their employees as a competitive edge to compete effectively in the market place (Kharal, Zai-ur-Rehman, Abrar & Khan 2014). Therefore, money spent on
employees’ training and development is generally viewed as one of the critical investments that companies could make, and that such investments should be treated as a capital expenditure. Stressing on the importance of disclosing information on intellectual capital in financial statements, Ghasempour & Yusof (2014) in their study of 65 Malaysian companies listed on Tehran Stock Exchange from 2005 to 2012, reported that assets, intellectual capital and human resources have created great competitive advantage and that the disclosure of such information had significant and positive impact on firm value with a one year lapse.

Following these developments, many organizations in all economies of the world have transited from industrial to knowledge-based. The fundamental difference between the two lies in the very nature of their assets. The old economy was characterized by heavy dependence on tangible assets as determinants of value, while the present-day economy is knowledge and information driven. Physical capital was of utmost importance in the economy of the past, while the distinctive feature of the emerging economy is an increasing emphasis on human and intellectual capital – knowledge, skill, competence, attitude and experience of people. Expectedly, expenditures on human capital have generally risen faster than those for non-human capital in today’s knowledge-driven economies. This shift appears to have induced more investments in humans and thus triggered off enquiries for the development of accounting tools for measuring and reporting human resource costs as assets. A number of scholars have however, investigated the utility of Human Resource Accounting (HRA) as a relevant tool for measuring human resource costs as assets, and evaluated the effect which such accounting treatment could have on firm performance and value (Ekwe, 2014; Izedonme, Odeyile & Kuegbe, 2013; Ekwe 2013; Yusuf, 2013; Ihendinhu & Nwokocha, 2010; Khadija & Abike, 2009; Okafor, 2009; Ottar, 2007; Theeke, 2005; Lev & Schwartz, 1971).

Under the present accounting practice, non-human expenditures on items like equipment and plants are treated as Assets while the huge investments made in acquiring and developing human resources are treated as an expense and charged against the current period’s resources. The present accounting treatment for human resource costs is not without its shortcomings. Unlike every tangible asset, human beings cannot be kept at a place without the tendency to move from one organization to another. Also, since the life span cannot be determined with reasonable margin of precision, the depreciation rate for human assets is difficult to ascertain. These obvious limitations of capitalizing human resource costs and reporting the value as an asset in a statement of financial position need to be properly investigated. The present accounting treatment for Human Resource Costs tends to reduce the profit available for distribution to shareholders and thus having implications on both the profitability and liquidity of an entity.

A major research problem to be settled prior to the issue of capitalization and the reporting approach to be adopted for HRC is to establish if there is any causal link between personnel related benefit costs and the performance of firms. This paper therefore, tried to determine the relationship between human resource costs and financial performance of firms in Nigeria.

**Objectives of the Study**
The major objective of this study is to determine the effect of human resource costs on the financial performance of listed firms in Nigeria. The following specific objectives were addressed:
1. To determine the extent to which Personnel Benefit Costs affect the profitability of listed firms in Nigeria.
2. To evaluate the effect of Personnel Benefit Costs on the liquidity of listed firms in Nigeria.

Research Questions
To achieve the above research objectives, two research questions were raised:
1. To what extent does personnel benefit costs affect the profitability of listed firms in Nigeria?
2. What is the effect of personnel benefit cost on the liquidity of listed firms in Nigeria?

Research Hypotheses
To answer the above research questions, two null hypotheses were also formulated:
H0¹: Personnel Benefit Costs (PBC) have no significant effect on the profitability (PAT) of listed firms in Nigeria.
H0²: The Liquidity of a firm is not significantly influenced by Personnel Benefit Costs (PBC)

REVIEW OF RELATED LITERATURE

Conceptual Framework

The Concept of Human Resource and Human Resource Accounting
Human Resources have been defined by Micah, Ofurum and Ihendinhu (2012) as the energies, skills, talents and knowledge of people which are, or which potentially can be applied to the production of goods or rendering of useful services. Human Resource Accounting (HRA) is the measurement and reporting of the cost and value of people in organizational resources (Flamholtz, 1971). It is the process of identifying and measuring data about human resources and communicating this information to interested parties. The America Accounting Association (1973) defined HRA as the process of identifying and measuring data concerning human resource and communicating this information to users of accounting information.

Inherent in these definitions is not only the need to assign monetary value to human capital as a factor of production, but for such values to be reported. Again, the definitions heighted three main components viz: identification, measurement, and communication. Thus HRA is a process of identifying all the costs and investments that are related to humans in an organization, covering all personnel benefit costs such as recruitment, placement, training and other employee development costs. The process also involves the quantification of economic values of the people in an organization. Perhaps, the greatest challenge to HRA is experienced within the value measurement component; for if the value of people in an organization could be appropriately established, the last component (reporting) would have been simplified. Communicating human resource value has to do with presenting or reporting it as an asset in the Statement of Financial Position of a firm.

There is yet no requirement that exists in statutes or in accounting standards demanding the furnishing of HRA related information in the financial statements of organizations in the manner conveyed in the above definitions. The debate is still ongoing on “why” and “how” this critical and key organizational performance-driver could be validly measured and reported in financial statements.
Human Resource Accounting: A historical Sketch.

Accounting for human resource value in a Statement of Financial Position has intrigued practicing human resource professionals for over 50 years. Rudimentary traces of HRA are found in the medieval European practice of measuring the cost-benefit of keeping prisoners and slaves. A formal academic enquiry into HRA is reported by Flamholtz (1999) to have started in the 1960s. He divided the development into five stages.

First stage (1960 – 1966) marks the commencement of academic interest in HRA with the new focus on deriving HRA concepts based on other studies like economic theory of capital, psychological theories of leadership effectiveness, and measurement of corporate goodwill. One of the earliest studies in determining human resource value can be traced to a scholarly work of Hermansson (1964). His original work ignited the interest of a number of research projects to develop the concepts and methods of accounting for human resources.

The second stage (1966-1971) marks efforts on developing and validating different models for HRA, covering both costs and monetary and non-monetary value of human resource. The third stage (1971-1976) is characterized by widespread interest in the area of HRA resulting to rapid growth of research in the area. The central focus was on issues of application of HRA in business organizations. During this period methods to operationalize and implement a system of accounting for human resource at the RG Barry Corporation was developed (Flamholtz, 1999). This was the first company to adopt assets and customer loyalty assets among the five result variables for performance evaluation, and effectively used Outlay Cost, Replacement Cost and Economic Value Methods to develop information on investments in human resources. These gradual multi-dimensional measurement and reporting approaches, which were based on seven identified costs for capitalization and amortization over time, proved helpful in meeting the company’s information needs on human resources (Khadija and Abike, 2009).

The fourth stage (1976-1980) witnessed decline in research efforts in this area. Emerging complex issues in HRA needed to be explored using deeper empirical research than was adopted in earlier stages. Although sponsors of such research efforts found the idea of HRA interesting, they were reluctant in pumping in large sums of money or investing lots of time and energy in supporting research efforts during the period. However, the fifth stage (1980 onwards) saw with it a sudden renewal of interest in the field of HRA. This was occasioned by shift from manufacturing/ industrial to service economies in most developed countries, which made the need for human asset critically obvious. The survival, growth and profits of organizations were perceived to be dependent more on their intellectual assets than on their physical assets; hence a felt need to have more accurate measures for human resource costs, investments and value (Flamholtz, 1999). A remarkable outcome of this renewed interest, particularly from the mid 90s was focused on greater application of HRA to business management, with the development of different types of models to meet specific requirements of organizations, and the adoption of HRA as management and financial accounting practices of a larger number of organizations.

It seemed that if a valuation method acceptable to accountants could be developed, the path to Balance Sheet inclusion of human resource assets would be clear. Contributors to the valuation field at this stage include Cascio,(1996 and 2000); Boudreau & Ramstad (1997); and Schmidt, Hunter, Mckensie, & Muldrow (1979) with their utility approach for valuing human resource. These works contain...
examples of studies undertaken by researchers using financial decision making approaches to evaluate and justify human resource options and choices. The authors attempted to solve some of the application and conceptual problems that kept, and still keep, human assets off the Statement of Financial Position.

**Measurement and Capitalization of Human Resource Value**

The biggest challenge in Human Resource Accounting is that of assigning monetary values to, and capitalizing, different dimensions of human resource costs, investments and the worth of employees. A number of methods and models for making this determination have been canvassed by different scholars and these were evaluated by Ihendinihu & Nwokocha (2010). These methods and the scholars that initiated them include the Discounted Wages Method (Lev & Schwartz, 1971), Historical Acquisition Cost Method (Flamholtz, 1972), Replacement Cost Method. Adjusted (Present) Value Method (Hermansson, 1964), and the Goodwill Method (Brummet, Flamholtz and Pyle, 1969). These methods of capitalizing human resource costs fall into two main measurement approaches – The cost approach which involves methods based on the costs incurred by the organization on employees, and the economic value approach which includes methods based on the economic value of the human resources and their contributions (stream of benefits flowing from the assets) to the company’s gains.

**Challenges of Human Resource Measurement and Reporting**

As earlier noted, human resource measurement and reporting is not without its challenges, and these have been reported in previous research works. For instance, Sveiby (1997) reported that, although some companies measured their human resources, they did not include the value in the annual report as assets, arguing that such practice is pointless given the current accounting concept, which has no model, rules and regulations for this kind of reporting. Furthermore, companies are also afraid to give away too much information. Edward & Garyl (2001) equally noted slow development of the concept of recording human resource value. This, according to them, is largely due to the absence of its demonstrated usefulness in the accounting field. Reinforcing this position Sveiby (1997) showed that attempts to convert people or competencies into financial terms, although theoretically interesting, had not yet proved useful to managers. Flamholtz (1999) clearly points out the primary obstacles in the area of human resource accounting as relating to valuation difficulties, inherent uncertainties of the value to be included in the financial statement and the potential for fraudulent manipulations.

Ifurueze, Odesa & Ifurueze (2014) outlined the challenges of HRA in Nigeria to include:

- Absence of specific and clear cut guidelines for finding the value of human resources of an organization.
- Human resources, unlike physical assets, are not susceptible to being owned, retained and utilized at the pleasure of the organization.
- Difficulties in determining acceptable amortization rates.
- Insufficient empirical data / evidence to support the hypothesis that HRA facilitates better and effective management of human resources.
- The life of human resources is uncertain and therefore valuing them under uncertainty seems to be very unrealistic.
There is no law, standard or guideline backing and enforcing the application of HRA. It should however be noted that despite some of the problems faced in measuring and recording human resource value, there was a revived interest in the concept in the 90’s. In a consultation paper by the U.K. government, Accounting for People, the government noted that human resource and human capital management could be usefully disclosed in the annual report and account package. The paper expressed belief that disclosure of human resource value is likely to be demanded in future accounting reports following increasing shift from production based to service-based economic activities (Shraddha & Philip, 2004).

THEORETICAL FRAMEWORK

This study is anchored on two theories – the human capital theory and the Resource-based theory.

**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 very important components of net advantage and have led 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. 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 & 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**

According to Amber (2016) Resource Based View 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. Resource Based View was built into a coherent theory by Wernerfelt (1984) as cited by Odhong, Were & Omolo (2014). Odhong & Were (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

There are growing interests by researchers on the importance of intellectual capital in today’s knowledge-based economy and on its effects on innovation, productivity growth as well as the
performance and competitiveness of organizations with evidences of such studies existing in literature. For instance, a study by Eliasson & Braunerhjelm (1998) on 137 Swedish engineering organizations shows that the financial outcomes of human resource investments have a significant positive correlation with an increase in an organization’s competence, shares and added value. Research among top U.K. organizations, as well as similar investigations carried out in the U.S. and other European countries, further, confirm that human resource measurement and reporting can lead to improved profitability and competitiveness of an organization (Brummet, et al 1969; Pyle, 1970; Stam, 2007; and Okafor, 2009).

Zehri, Abdelbaki & Bouabdellah (2012) examined the relationship between intellectual capital and business performance from the stand point of financial performance, the marketplace and economics. The study was based on data collected from 25 companies in different sectors and listed on the stock market in Tunisia from 2009 to 2011. The empirical analysis was based on the Value Added Intellectual Coefficient (VAIC) model. Panel data were collected on the components of the model and the performance measures represented by the ratios of Operating Income/Sales (ROS), Operating Income to Total Assets (ROA), and Market Capitalization to Equity (MB) among other variables. Descriptive statistics and OLS techniques were used in analyzing the data and the results indicate a positive and significant association between the components of intellectual capital and economic performance.

In a study of 62 non-financial companies listed on Bucharest Stock Exchange in Romania, Sumedrea (2013) analyzed the structure of intellectual capital and evaluated its influence on economic performance based on the VAIC model for 2010 and 2011. The performances of the companies were analyzed in terms of growth and profitability under the expression of Return on Assets (ROA), Returns on Equity (ROE), and dynamic of net Sales (GROW). Financial data relating to assets and liabilities for the companies were also collated as well as information on turnover, operating profit, depreciation, staff costs and net profits. Multiple regression models were used in testing the formulated hypotheses. The results obtained suggest that, in crisis time, the development of companies is influenced by the human and structural capital, while profitability is additionally linked to the capital through the Value Added Intellectual Capital coefficient. The paper concluded that a strong link exists between profitability and intellectual capital because even in time of crisis, the performance must rely on human ability to adapt to changes and learn.

Kharal, Zai-ur-Rehman, Abrar & Khan (2014) conducted a study on the effects of intellectual capital on the performance of companies in the oil and gas sector of Pakistan. The study adopted a correlational research design and Value Added Intellectual Capital Coefficient (VAIC) model in measuring the efficiency of intellectual capital to financial performance of listed oil and gas companies in the Karachi Stock Exchange. Data on the three components of VAIC (Human Capital, Structural Capital and Capital Employed Efficiencies) and three measures of financial performance (ROA, ROE and EPS) were extracted from the twelve (12) listed oil and gas companies from 2005 to 2013 with average of six (6) years data for each company. The pooled OLS technique and correlation analysis were used in estimating the parameters of the study. The study documented a positive impact of intellectual capital on the organizational performance and value of the companies.
in Pakistan, concluding that development and establishment costs of human resources could be considered an intangible asset and reported as intellectual capital with long term value,

In Nigeria, Ihendinihu & Nwokocha (2010) assessed the utility of human resource accounting as a relevant tool for the measurement of human capital and evaluated the effect of capitalizing it as an asset on firm performance and value. Survey data were obtained from 169 respondents to a researcher-designed and validated instrument. Panel data on Profit Before Tax (PBT) and Net worth of five Nigerian companies were also extracted for the period 2002 to 2006 and their Human Resource Costs (HRC) for the same period capitalized following the methodology adopted by Otter (2007). Data were analyzed using regression and paired sample t-test techniques. Results from the study reveal that about 41.4% of improvements in reported PBT and 69.6% in Net worth could be attributed to capitalized human resource cost in financial statements. With t-values of 8.946 and 24.773 being significant at 1% level, the work evidences that the application of the two accounting treatments to HRC has significant effect on both PBT and Net worth of Nigerian companies.

Abubakar (2011) investigated human resource accounting and the quality of financial reporting of quoted service companies. The data collected were analyzed using Kendall’s Coefficient of Concordance (KCC), and Pearson’s Chi-square technique. KCC was used to evaluate 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 ascertain the perceptions of questionnaire respondents on the effect which reporting human resource value as assets could 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 methodology and the results revealed that the nature and characteristics of investments on the human resources require them to be capitalized rather than expensed. The study established that the value relevance of financial reporting of companies could be improved by the application of the developed model; thereby boosting the informed decision making abilities of the multiple users of accounting information.

Micah, Ofurum & Ihendinihu (2012) equally investigate the relationship between firms’ financial performance and human resource accounting disclosure using financial data of 52 companies listed across all sectors on the Nigerian Stock Exchange from 2005 to 2009. Descriptive, correlation and regression statistical techniques were used in analyzing the data. The result revealed that the effect of Human Resource Accounting Disclosure (HRAD) accounted for 75.9% of the variation in the Firm Financial Performance, with an F– ratio of 3.581 being significant at 5% confidence level. The identified significant positive correlation between Return on Equity (ROE) and Human Resource Accounting Disclosure (HRAD) suggests that an increase in return on equity encouraged firms in reporting human capital information and thus established trustworthiness with stakeholders; enhanced external reputation, and legitimacy in the public eye. The study therefore concluded that human resource accounting information of an organization is very relevant for management decision making, and recommended regulatory interventions in accounting standard setting process to streamline capitalization and reporting of expenditures on humans to enhance reliable comparison of human capital values in Nigeria.
Bassey, & Tapang (2012) investigated the influence of human resources cost on corporate productivity of selected ten listed firms in the Nigerian Stock Exchange. Primary data on Acquisition Costs, Development Costs and Corporate Productivity were sourced with the aid of structured questionnaire validated with correlation coefficients ranging from 0.58 to 0.71. Using multiple regression technique, the paper provided statistical support for the existence of a positive and significant relationship between human resource costs and the performance of Nigerian companies, and concluded that capitalized human resource costs are important determinants of company performance.

In a similar investigation, Ekwe (2014) studied the relationship between intellectual capital and growth in Revenue of Deposit Money Banks in Nigeria. The research followed the VAIC construct with growth in revenue as proxy for performance and adopted multiple regression analysis in testing all the hypotheses with the SPSS software (version 17.0). The results indicate positive and significant relationship between components of VAIC and growth in revenue of banks in Nigeria. In an earlier study, Ekwe (2013) used the value Added Intellectual Coefficient (VAIC) model to compare both the intellectual capital indices and financial performance variables of six highly rated banks in Nigeria. The study was targeted at determining if the deviations in their financial performance indices could be explained by deviations in the banks’ intellectual capital variables. The ex-post facto research design was adopted and officially available longitudinal time series data on the variables spanning from 2000 to 2012 were collected and analyzed. The results indicate that banks with high intellectual capital recorded high financial performance.

Ifurueze, Odesa, & Ifurueze (2014) examined the causal link between the aggregated cost of human resource and organizational performance using data extracted with structured information card and annual financial reports of selected firms in Nigeria. Regression technique was employed in analyzing the data, and the results indicate the existence of a significant positive relationship between human resource costs and firm profitability and that changes in profitability can be explained when expenditures on human resource are segregated into revenue and capital expenditure components.

Adebawojo, Enyi and Adebawo (2015) investigated the likely effect of human asset accounting on the performance of business organizations in Nigeria. They adopted a survey research design with a six steps likert scale questionnaire validated with stability coefficient of 0.807 and 0.870 for Human Asset and Organizational Performance respectively. The instrument was administered on 18 publicly quoted banks in the Nigerian Capital Market and the data obtained were analyzed using simple regression technique. The results confirm that human asset accounting significantly affect bank performance, and recommended its disclosure as intangible asset in the balance sheet.

The foregoing reviews indicate that several studies have been conducted globally with commendable attempts at providing precise definition and measurement/valuation methods for intellectual capital, and the effect of reporting such values as assets in financial statements on organizational performance. The present study however, did not repeat the valuation process but tried to provide empirical evidence on the possible causal link between investments on humans (personnel benefit costs) on the profitability and liquidity of firms in Nigeria using time series data and inferential statistic.
RESEARCH METHOD

The research design adopted in this study is ex-post facto. Time Series Annual data on personnel benefit costs, profit after tax and turnover were extracted from the audited financial statements of ten listed firms in Nigeria for the period 2011 – 2015. The econometric technique of Ordinary Least Squares (OLS) was used with the aid of the Statistical Package for Social Sciences (SPSS) version 20 in analyzing the data.

The conventional econometric model was adopted and reformulated for the study as follows:

\[ PF = f(PBC) \]  \hspace{1cm} (1)

Where:
- \( PF \) = Financial Performance with Profit After Tax and Turnover as dependent variables.
- \( PBC \) = Personnel Benefit Costs

The above model is specified thus:

\[ PAT = \beta_0 + \beta_1 PBC + \mu \]  \hspace{1cm} (2)

Where:
- \( PAT \) = Profit after Tax
- \( PBC \) = Personnel Benefit Costs
- \( \beta_0 \) = the parameter which represents the intercept
- \( \beta_1 \) = The regression parameter used in determining the significance of the impact of the independent or explanatory variable (PBC) on the dependent variable (PAT).
- \( \mu \) = Random disturbance term.

And:

\[ TOV = \beta_0 + \beta_1 PBC + \varepsilon \]  \hspace{1cm} (3)

Where:
- \( TOV \) = Turnover
- \( PBC \) = Personnel Benefit Costs
- \( \beta_0 \) = the parameter which represents the intercept
- \( \beta_1 \) = The regression parameters used in determining the significance of the impact of the independent or explanatory variable (PBC) on dependent variable (TOV).
- \( \varepsilon \) = Random disturbance term.
RESULTS AND DISCUSSIONS

Table 1: Effect of Personnel Benefit Costs on the Profit After Tax of Firms in Nigeria

<table>
<thead>
<tr>
<th>Variable/Test Statistic</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1026.983 * (.146)</td>
</tr>
<tr>
<td>Personnel Benefit Costs</td>
<td>2.896*** (5.143)</td>
</tr>
<tr>
<td>R</td>
<td>.876</td>
</tr>
<tr>
<td>R²</td>
<td>.768</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>.739</td>
</tr>
<tr>
<td>F-ratio</td>
<td>26.447***</td>
</tr>
<tr>
<td>Std. Error of the Estimate</td>
<td>17010.435</td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>2.141</td>
</tr>
</tbody>
</table>

**Source:** Computed with figures extracted from published financial statements of selected firms.

Note: *** = significant at 1%; ** = significant at 5%; and * = significant at 10% and above. t-values are shown in parenthesis.

Results in Table 1 indicate the existence of a very strong positive relationship between personnel benefit costs and profit after tax of firms in Nigeria, with personnel benefit costs explaining about 76.8% of the variations in Profit After Tax while about 23.2% of the changes are attributable to other factors not captured in the model. The F-ratio of 26.447 is statistically significant at 1% level, indicating the appropriateness of the model specification. The unstandardized coefficient of the independent variable (PBC) of 2.896 has a t-value of 5.143 which is equally significant at 1% probability level. The Durbin-Watson of 2.141 falls within the region of no auto correlation. We accordingly reject the null hypothesis because the p-value of 0.001 < 0.05 and conclude that Personnel Benefit Costs have significant effect on profitability of firms in Nigeria. This result accords with findings by Khara, et al (2014), Adbawojo, et al (2015), Sumedrea (2013), and Micah et al (2012) who in their various studies found significant positive links between human resource cost components and the profitability of organizations. These results are justifiable on the premise that high quality and skill-driven manpower will cost more resources to acquire and retain, and such calibre of personnel has strong capacity to compel greater improvements in profit earning of a firm.

Table 1: Effect of Personnel Benefit Costs on the Turnover of Firms in Nigeria

<table>
<thead>
<tr>
<th>Variable/Test Statistic</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>254476.076* (2.127)</td>
</tr>
<tr>
<td>Personnel Benefit Costs</td>
<td>14.024* (1.461)</td>
</tr>
<tr>
<td>R</td>
<td>.459</td>
</tr>
<tr>
<td>R²</td>
<td>.211</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>.112</td>
</tr>
<tr>
<td>F-ratio</td>
<td>2.133*</td>
</tr>
<tr>
<td>Std. Error of the Estimate</td>
<td>289991.346</td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>2.371</td>
</tr>
</tbody>
</table>

**Source:** Computed with figures extracted from published financial statements of selected firms.
Again, results shown in Table 2 reveal very weak relationship between personnel benefit costs and turnover of firms in Nigeria. The adjusted $R^2$ indicate that only 11.2% of the changes in the turnover of a firm could be explained by variations in personnel benefit costs with over 88% of the changes attributable to other factors. The F-ratio of 2.133 is not significant hence the model is improperly fitted. The coefficient of the independent variable (14.024) has a t-value of 1.461 with a p-value of 0.182 $> 0.05$. The computed Durbin-Watson of 2.371 however indicates absence of autocorrelation. We therefore accept the null hypothesis and conclude that personnel benefit costs do not have any significant effect on the turnover of firms in Nigeria.

CONCLUDING REMARKS

The link between organizational performance and investments in humans is increasingly becoming important and interesting area of enquiry following fundamental shifts from industrial to knowledge-based economy. The positive effect of Personnel Benefit Costs on Profitability affirms that progressive growth in human resource development could have strong positive trade-off effects on the financial performance of firms. Consistent with this conclusion, we recommend that organizations should consider establishment and development costs of human resources as strategic investment options necessary for providing competitive edge in today’s world of business. Accounting standard setting bodies should accordingly review present accounting practices relating to human resource costs and provide standards for valuation and reporting such expenditures in financial statements to enhance information contents of such statement and firm value.

REFERENCES


