

# Impact of Human Capital Expenditure on Financial Performance of Listed Insurance Companies in Nigeria

Taibat, Adebukola Atoyebi<sup>1</sup>, \*Emmanuel, Okpe Onuh<sup>2</sup>, Abdulwaheed, Bamidele Oyebisi<sup>3</sup>

<sup>1,2,3</sup>University of Abuja, Nigeria

Corresponding Author\*

DOI : <https://dx.doi.org/10.47772/IJRISS.2024.808002>

Received: 02 July 2024; Revised: 10 July; Accepted: 17 July 2024; Published: 26 August 2024

## ABSTRACT

This study assessed the impact of human capital expenditure on the financial performance of listed insurance companies in Nigeria. The population of the study consisted of twenty - three (23) insurance companies listed on Nigerian Exchange Group among which nine (9) companies were sampled for a period of ten (10) years from 2012 to 2021. Employee's Salaries and wages, Employee's Retirement Benefits, Employee's Training Costs and Other Employee Benefits were adopted as proxies for human capital expenditure, while Profit Before Tax was adopted as proxy for financial performance. Secondary data were collected from the sampled insurance companies' annual reports and accounts over the period of study. Panel Least Square analysis method was used to analyze the collected data. The findings of the study revealed that employees' salaries and wages and employee's retirement benefits have significant positive impact, and employee's training costs and other employee's benefits have no significant impact on the financial performance of Insurance companies in Nigeria. The study therefore, recommended that; insurance companies in Nigeria should carefully consider and invest in competitive and fair compensation packages for their employees, prioritize and enhance their employee retirement benefit packages and evaluate the cost-effectiveness of additional benefits and focus on other factors that more directly influence their financial performance.

**Keywords:** Human capital Expenditure, Financial Performance, Premium, Salaries and wages, Contributory Pension Scheme (CPS), Employee Training Costs and Employee Benefits

## INTRODUCTION

The fact that humans are valuable resources in any business enterprise is not new. People from different industries, companies and backgrounds agree that human resources have the greatest importance in gaining sustainable competitive advantage and efficiency. In the economic perspective, the human capital refers to the factor of production used to create goods and services that are not themselves significantly consumed in the production process. The factor is referred as the knowledge and skills that people obtain through education and experience. Mathis and Jackson (2006) defined human capital as the collective value of the capabilities, knowledge, skills, life experiences, and motivation of the workforce in an organization. This definition reinforces the idea that human capital is not only an individual attribute but a collective strength that contributes to organizational success. In company, where productivity and financial efficiency are very crucial to its very existence and survival, the company invests more in human capital with expectation of high return on its investment. Human capital expenditure consists of investments managers make on employees in order to improve their abilities which in return brings about efficient financial performance. Human capital expenditure according to Bosman, Praag, Thurik and De Wit (2004), is commonly believed that expenditure in human and social capital improve the performance of employees in an organization. The more expenditure a company makes on its employees, the chances of its productivity and success become higher. The simple fact is that the most successful organizations today and in the foreseeable future will be those that are able to measure the business impact of their investment in people whether that expenditure is employee recruiting, performance management, skills development or benefits administration. To buttress this, Flamholtz and

Lacey (1981) view all costs related to eliciting productive behaviour from employees, including incentives for motivating, monitoring, and retaining them, as human capital investments. This view emphasizes the proactive nature of investing in human capital to anticipate future output, aligning with the forward-looking perspective of human capital theory.

Meanwhile, financial performance is a general measure of the overall monetary and financial health of a business organization over a specific range of time. It involves enhancing shareholders' wealth and profit making which are among the major objectives of a firm. It can be internally computed using accounting data as the indices or externally determined using capital market indices. Various indicators have been used to measure the financial performance of the firms by various scholars. The various ways of measuring company's financial performance are reflected in the company's ratios of return on investment (ROI), return on assets (ROA), return on equity (ROE), value added, profit before tax (PBT), among others which measure whether the owners' objectives are being met; the objectives of increasing shareholders' wealth through investing in business. Given the assumption that some investors and management regard the financial health of a firm as the ultimate objective, achieving such objective through efficiency in the application of different assets (especially human knowledge and skill) seem paramount (Okafor, Hachosim & Oji,2022). Therefore, investors and management may need to understand the implication of expenditure in human capital for enhancing organizational efficiency of human capital on the long-term financial performance.

Insurance as security is a need of all human beings. No animal, no plant nor mountains and oceans want any security, like man does. Especially in times of economic uncertainty person and legal entities man needs protection against losses. Insurance can be well defined as a social device which combines the risks of individuals into a group, using funds contributed by members of the group to pay for losses. Insurance primarily serves the purpose of granting security against losses and damages to people. It is an agreement entered into by two parties in which one promises to protect other from losses in return for premium paid by other party. One party is insurance company and other one is insured. Insurance companies guarantee the insured of compensation in case of any unfavorable contingency. Insured need to pay premium to insurance companies in return for guarantee of compensation.

Insurance services have been acknowledged by both individuals and corporate bodies to be active and productive tools for remitting of risks which are very important for economic development. Despite its importance for economic development, the Nigerian Stock Exchange (NSE) in 2019 stated that the annual gross premium collected by insurance companies in Nigeria is below 1.9 Billion United States Dollars compared to the 3.8 Billion United States Dollars collected in South Africa. In the United Kingdom, the insurance industry contributes about 20% of the total GDP of the country. In South Africa, the insurance industry contributes 17% of the total GDP and in Kenya, the insurance companies contribute 3.4% of its nation's GDP. However, in spite of its astronomical growth, the Nigerian Insurance industry contributes a meagre 0.7% of the total GDP of Nigeria (NAICOM 2022).

The industry is underdeveloped and penetration of insurance is very low 0.5%. According to CIIN (2018), 86.6 million Nigerians have no form of insurance. There are challenges causing the sub-optimal performance among insurance companies in Nigeria. Among these challenges is a huge shortfall of skilled professionals (underwriters, brokers, actuaries, etc.) which has affected the financial performance of the entire insurance industry. The companies invested a low percentage of their budgets in human capital development and this has affected the sales of insurance policies in the last few decades (Osinuga,2016). Majority of the insurance companies attract low-skilled personnel due to inadequate remuneration package, inadequate retirement package, low training costs and other staff benefits. To this end, a lot of comments have been passed and a number of questions raised on the state of human capital development in the insurance industry in Nigeria. Most of the remarks in this regard tend to clothe human capital expenditure in the industry whether positively or negatively compared to other players in the larger financial services sector (Onaolapo, 2005). The aim of this study is to examine the existing ideas and knowledge on human capital expenditure in insurance companies and their impact on financial performance in Nigeria.

From the forgoing, capitalizing human asset expenditures, money spent on employees' training and other

employee benefits is generally viewed as one of the critical investments that may have impact on monetary and financial health of insurance companies over a specific range of time. In the light of above problem, the study assessed the impact of employee's salaries and wages, employees' retirement benefits, training costs and other employees benefits on financial performance of selected listed insurance companies in Nigeria, namely; AXA Mansard Insurance, Leadway Assurance plc, Consolidated Hallmark Insurance Plc, Mutual Benefit Assurance Plc, Sovereign Trust Insurance Plc, Lasaco Assurance Plc, Cornerstone Insurance Company Plc and NEM Insurance Co (Nig) Plc. The research questions raised for this study are as follow;

1. What is the impact of employees' salaries and wages on financial performance of listed insurance companies in Nigeria?
2. What is the impact of employee's retirement benefits on financial performance of listed insurance companies in Nigeria?
3. What is the impact of employee's training costs on financial performance of listed insurance companies in Nigeria?
4. What is the impact of other employee benefits on financial performance of listed insurance companies in Nigeria?

In order to answer the above questions, the following hypotheses were formulated to guide this study

**H<sub>01</sub>:** There is no significant impact of employees' salaries and wages on financial performance of listed insurance companies in Nigeria

**H<sub>02</sub>:** There is no significant impact of employee's retirement benefits on financial performance of listed insurance companies in Nigeria.

**H<sub>03</sub>:** There is no significant impact of employee's training costs on financial performance of listed insurance companies in Nigeria.

**H<sub>04</sub>:** There is no significant impact of other employee's benefits on financial performance of listed insurance companies in Nigeria.

## LITERATURE REVIEW

### The Concept of Human Capital Expenditure

Human capital is a major factor in generating future growth and prosperity of organizations. In an attempt to breakdown the concept of human capital semantically, Becker (1962) defined human capital as skills and knowledge that individuals acquire through investments in schooling, on-the-job training, and other types of experience. He believed the concept of human capital is rooted in the economic literature which it is neither physical capital nor financial capital. Schultz (1961) in his own notion of human capital theory, conceives that human capital is the result of investment, and so it is valued at the expenditure that is invested to enhance ability. Suffice to say, the level of skills, knowledge and competences held at any one time by individuals can be taken to represent the "stock" of human capital. Skills, experience, and knowledge have economic value to organizations because they enable it to be productive and adaptable; thus, people constitute the organization's human capital (Obiazonwa & Adesina 2018). Their significance to the productivity and performance of organizations emphasizes the strategic reasons these organizations incur different types of expenditure in order to ensure that they perform at their maximum level.

Williams Pretty in 1691 was the first scholar to develop the notion of human capital. After acceptance of the concept as theory, human capital started evolving as a discipline that provides some researchers with illustration on how the expenses of human capital affects the revenue of organization (Obiazonwa and Adesina 2018). The gesture prompted the researchers to expansively categorize how the expenditure on human capital

could affect profitability of companies into the following components;

### **Salaries and Wages**

Salaries and wages are the payment for agreed between an employee and his or her employer under the contract of employment in the private sector and for contractual agents in the public service or employment for civil servants. Salaries is the agreed amount of money between the employer and the employee that is extended at regular intervals in the basis of an individual's performance. Wages is termed as a compensation that is given on the basic of the amount of work done and the hours spent in doing the work. Salaries and wages are typically paid directly to an employee in the form of cash or in a cash equivalent, such as by cheque or by direct deposit into the employee's bank account or an account directed by the employee. Alternatively, all or a part may be paid in various other ways, such as payment in kind in the form of goods or services provided to the employee.

### **Contributory Pension Scheme (CPS)**

The Contributory Pension Scheme (CPS) is an arrangement where both the employer and the employee contribute towards the payment of the employee's pension at retirement. It is fully funded through the monthly pension contributions that are remitted into an employee's Retirement Savings Account (RSA) managed by the Pension Fund Administrator (PFA). The main objective of the CPS is to ensure that every person that worked in either the Public or Private Sectors in Nigeria including the self-employed persons receives his/her retirement benefits as and when due.

### **Employee Training Costs**

The cost of training is the amount of money an employer spends to equip their employees with the necessary skills and knowledge, which they can use to perform their tasks well. Typically, employees allocate different budgets to training new and existing employees. Offering on-the-job training to new hires helps companies make sure staff knows how to do their job and set clear performance expectations. Through training current staff, organisations can increase employee retention and support their members by investing in their professional development. The training aspect can be acquired through employer-sponsored training, self-sponsored training or training acquired through individual experience (Alan, Altman & Roussel, 2008). Employers fully or partially fund the training of workers in the hope of gaining a return on this investment in terms of being a more productive, more competitive and consequently more profitable firm in the future.

### **Employee Benefits**

Employee benefits are forms of payment that employers give to their staff in addition to their normal pay or income. These benefits may include group insurance (health, dental, life, etc.), retirement benefits, education loans, other loans (house loans, vehicle loans, etc.), sick leaves, vacations, and flexible alternative arrangements. In an organization, the workforce is the most valuable asset, and it is important for an organization to understand their needs and help them be engaged and satisfied. Employee benefits, when offered to the employees, act as an attribute for better performance and support for your employees. Rapid globalization and organizations looking at massive expansion not only in the countries they are set up but also across the globe are key indicators for giving employees the flexibility to work at the most convenient hours.

Employers can provide a wide range of employee benefits depending on the size of the organization, the industry, and the budget. Some of the most common types of employee benefits include health insurance, plans for retirement, Paid time off (PTO), flexible work arrangements, disability insurance, life insurance, wellness programs, childcare benefits, education assistance and employee assistance programs.

### **Financial Performance**

A firm's financial performance refers to a firm's ability to generate new resources from day to day operations over a given period. It involves enhancing shareholders' wealth and profit making which are among the major



objectives of a firm. Accounting ratios derived from the balance sheet and income statement and also from data on stock market prices, are used to measure how better off a shareholder has become over time (Berger & Patti, 2002). The growth in firms' sales, the improvement in their profit margin, their capital investment decisions and capital structure decisions mainly influence the shareholders' wealth (Arnott & Asness, 2003). Various indicators have been used to measure the financial performance of the firms by various scholars. The various ways of measuring company's financial performance are reflected in the company's ratios of return on investment (ROI), return on assets (ROA), return on equity (ROE), value added, profit before tax (PBT), among others which measure whether the owners' objectives are being met; the objectives of increasing shareholders' wealth through investing in business. Therefore, financial performance is a general measure of a firm's overall financial health over a given period, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. A study by Okwo, Okelue, & Nweze (2012), used operating profit margin to measure financial performance of firms within the brewery sector. Olatunji & Tajudeen (2014) used Net profit of the commercial banks as the measure of their financial performance. The current study used profit before tax (PBT) to measure financial performance of the companies under study.

### **Profit Before Tax (PBT)**

Also known as Earnings Before Income Tax (EBIT), Profit Before Tax (PBT) is the measure of the company's profit before the payment of corporate income tax. It is listed on the income statement of the company. The primary purpose was for the company owners to estimate how much profit the company is really making without factoring in varying tax rates and structures. PBT is calculated by collecting financial data about the different sources of revenue for the company. These include rental income, discounts received, service income, interest earned on bank accounts, bonuses and total sales. The deductible expenses incurred by the company such as rent, debt, utilities, charitable contributions, health expenses, accrued wages and the cost of goods sold are evaluated. The deductible expenses are being deducted from the earned income to get the earnings or profit before tax.

Earnings Before Interest and Taxes (EBIT) – interest expense = PBT

However, it is important to note that PBT is not the only measure of profitability that can be used. Other measures, such as net income and return on equity, may also be relevant depending on the specific purpose of the analysis.

### **Theoretical Review**

This study is anchored on the human capital theory which implies that there is positive relationship between human capital expenditure and financial performance. Although many researchers on relevant studies related to human capital expenditure and financial performance adopted theories such as, knowledge-based theory, agency theory, and human capital theory etc. Human capital theory (HCT) assumes that investment in education is necessary to acquire skills and training which, in turn, will increase individual capital. Human capital theory, initially formulated by Becker (1962), argued that individual workers have asset of skills or abilities which they can improve or accumulate through training and education. The discussion on HCT emphasizes the significance of personal attributes, skills, and knowledge in the production process. This theory in the context of assessing the impact of Human Capital Expenditure on financial performance, believed that employer's expenditure on human capital enhances value of employees, productive capabilities and collective value of workforce of the organisation. The theory underscores the importance of education, training, and other investments in developing human capital for both individual and organizational benefit. By integrating human capital theory into the theoretical framework, the study not only acknowledges the intrinsic value of human capital but also provides a structured lens for evaluating the impact of strategic investments in human capital on the financial performance of listed insurance companies in Nigeria

### **Empirical Review**

Eke, Nlerun, Odukwu and Alafuro (2023) investigated human capital expenditure and market value of listed insurance companies in Nigeria. A descriptive survey design was used in the study. Out of the 21 listed

insurance firms in Nigeria as at December 31, 2022 (per the Nigerian Exchange Bulletin), the study chose and evaluated two (2) of them. The study used secondary data obtained from the annual reports of the relevant insurance companies for the years 2015 through 2021, given a 14-year period of annual observation. The study employed judgmental sample technique to select two insurance companies. The researchers concluded that there is a substantial positive association between human capital expenditure and EPS of insurance companies in Nigeria. Additionally, the study concluded that there is a strong correlation between human capital expenditure and BVPS of insurance companies in Nigeria.

Major and Biragbara (2023) investigated the effect of human capital costs on financial performance of listed healthcare firms in Nigeria. The specific objectives were to determine the effect of training and development costs, employee costs and health and safety costs on return on assets of listed healthcare firms in Nigeria. The Researchers used ex-post facto research design. Targeted population of this study comprised of all the seven listed healthcare firms in Nigeria which were sampled to five (5) using purposive (Judgmental) sampling technique. Secondary data were used and it was sourced from annual reports and statement of accounts of the selected firms between 2012 and 2021. Descriptive Statistics, Unit Root Test and Ordinary Least Square Regression were employed with the aid of Microsoft Excel, SPSS 25 and E-View 12. The result of the study showed that training and development cost has negative and significant effect on return on assets. Furthermore, the result indicated that employee costs has positive and significant effect on return on assets. It was also revealed that health and safety costs have negative and insignificant effect on return on assets of listed healthcare firms in Nigeria. The study generally concluded that, there is a negative and significant effect of human capital costs on financial performance of listed healthcare firms in Nigeria under the period of the study between 2012 and 2021. It was recommended amongst others that companies should adopt other human capital costs related expenses as strategy for attracting and retaining high earnings because this study indicated that training and development and employees' costs has significant effect on financial performance in term of return on assets.

Israell, Ikem, and Nduka (2022) evaluated the influence of expenditure in human resource (EHR) on financial performance of quoted manufacturing companies in Nigeria. Salaries, wages, allowances (SWA), other staff related expenses (OSRE,) and human resource efficiency (HRE) are adopted as proxies for expenditure in human resource, accounting based profitability represented as return on equity (ROE) and capital market performance denominated into market value performance of firms (MVP) were proxies for financial performance. Causal comparative and descriptive research designs were adopted in the operational method for estimating the test results of the four hypotheses of the study. Result of the multivariate econometric regression demonstrated a mixed finding at varying magnitudes of significance. Besides statistically significant P-values for SWA and OSRE in hypothesis one, SWA demonstrated significant positive unstandardized beta coefficient contribution while HRE in hypothesis four indicated insignificant but positive unstandardized beta coefficient. Hence, the null hypotheses were rejected in the analysis. However, main predictors of focus were not adequately statistically significant in hypothesis two and three, thus, their null hypotheses were not rejected. Borrowing further interpretation of the empirical result from the explanatory credence of extant accounting literature, the researcher concluded that expenditure in human resource (EHR) among quoted manufacturing companies in Nigeria is positively associated with their financial performance. Such companies were therefore recommended to adopt reasonable salaries, wages, and allowances as well as reporting same as a competitive strategy for improving financial performance. They were also implored to engage in other staff related expenses as strategy for attracting and retaining high quality workforce. Last but not the least, the researcher suggested that regulatory authorities should make human resource efficiency as contained in the VAIC model to rank as a compulsory accounting ratio to be disclosed by quoted manufacturing companies in Nigeria.

Tadic and Barac (2022) analyzed the role of human capital investments in business excellence of Croatian companies. The research sample was selected from a list of issuers listed on the Zagreb Stock Exchange (ZSE). According to the data available on the 31st of December 2018, shares of a total of 132 issuers were listed. A final sample of 119 companies was formed, representing 90% of the population. The ordinary least square regression analysis was applied as the most appropriate methodology for testing the hypotheses. The results obtained showed that training and extra bonuses or salaries were positively correlated with company excellence, as well as showed a significant difference in the mean of salaries per employee between high and

moderate intensive intellectual capital companies. The differences in company excellence, when human capital expenditures are capitalized in a company's balance sheet rather than recognized as expenses in the company's profit and loss account, was confirmed. The study concluded that companies should pay attention to managing human resources and realizing their importance for business excellence, as well as the importance of appropriate recognition and measurement of human capital in financial state.

Utilizing ex-post facto research design, Jesuwunmi, Nzewi, Obelogu and Udodi, (2019) empirically examined the contribution of human resource valuation on financial performance of listed companies in Nigeria. Adopting human resource cost and human capital efficiency as determinants for human resource valuation, secondary data were obtained from the audited annual reports of 24 selected listed companies for 2011-2016. The researchers found that human resources cost (HRC) and human capital efficiency significantly predicted return on investment, gross profit margin, asset turnover, and return on asset, but insignificantly predicted net profit margin among listed companies in Nigeria. The result of this analysis suggests managers of companies to always ascertain the level of human resource cost/asset that can translate into human capital efficiency. The researchers however recommended Nigerian listed companies to manage their cost or investment on human resource to the minimum amount that can optimize their human capital efficiency, hence, their financial performance. They also highlighted the need to develop accounting standards for regulating human resource reporting to ensure uniformity in disclosures and comparison across firms and industries.

Ubesie, Amoge, and Nkemdilim (2019) ascertained the effect of human capital expenditures on corporate social responsibility of oil and gas firms in Nigeria. It spanned for the period of 10 years (2008-2017) and made use of secondary data extracted from the financial reports and accounts of the oil and gas firms selected for the period. The study adopted ex-post facto research design and employed the panel least squares multiple regression analysis.

Findings of the study provided empirical evidence that human capital expenditures proxy by expenditure on salaries and wages, on education and training and expenditure on health have significant positive effect on Corporate Social Responsibility (CSR) of oil and gas firms in Nigeria. This implies that increases in volume of corporate social functions of the firms are associated with increases in spending on the human capital indices. Based on these findings, it was recommended among others that oil and gas firms should keep up in the corporate supports to the community since it helps in the growth of their firms and ensure good salary pay structure for their workers to motivate them in community supports.

Makgata and Ngwakwe (2017) examined human capital expenditures and company sales turnover in South Africa. The research evaluated the relationship between human capital expenditures and company turnover. The study evaluated how employee's productivity can be improved in the existing companies through human capital investment, which will result in good performance towards the firm's profitability. The research inclined on two major objectives – to analyze the relationship between employees' health and safety investment and turnover, and to evaluate the relationship between employees' skill development investment and turnover.

Applying a quantitative approach, the correlation statistics was used to analyze the secondary data collected over a period of 5 years (2011–2015) from the archives of selected companies in the JSE SRI. Findings from statistical analysis revealed that for objectives 1, P-value was 0.05, which signifies a relationship between health and safety investment and turnover. This also implies that the lesser the lost time Injury frequency rate due to health and safety the higher the company turnover. For objective 2, the P-value was less than 0.05, which implies that the more companies invest on skills development of their workforce the higher the turnover.

Olayiwola (2016) examined the importance of human capital accounting information on the market value of 50 quoted manufacturing companies in the Nigerian economy. Utilizing secondary data obtained from the annual financial reports and database of the Nigerian Stock Exchanged for the period of 2007 to 2014, Pooled ordinary least square and Fixed Effect Models were adopted for data analyses. Findings revealed significant positive relevance of human capital cost ( $\beta=0.02$ ,  $t=2.42$ ,  $p<0.05$ ) with prices of shares. The result implies that investment on human resource has the capacity to increase the wealth of the shareholders, in addition to enhancing the public image of quoted manufacturing companies in Nigeria.

## METHODOLOGY

A combination of causal comparative and descriptive research designs were adopted in this study. The population of the study consisted of all the twenty - three (23) insurance companies listed on the Nigerian Exchange Group (NEG) as at October, 2023. The sample for this study comprised of nine (9) listed insurance companies out of population of the 23 insurance companies. These 9 insurance companies include; AXA Mansard Insurance, Leadway Assurance plc, Consolidated Hallmark Insurance Plc, Mutual Benefit Assurance Plc, Sovereign Trust Insurance Plc, Lasaco Assurance Plc, Cornerstone Insurance Company Plc and NEM Insurance Co. (Nig) Plc. Systematic sampling technique was adopted for selecting sampled firms for the study. It was aimed to sample only those listed insurance companies whose data were available for the period covered and significantly engaged in expenditure on human capital from 2012 to 2021. The basic criteria for sampling include:

1. Insurance companies which engaged in human capital expenditure such as salaries and wages, defined contribution pension costs, staff training costs and other staff benefits costs.
2. Insurance companies which were consistent with the afore- mentioned human capital expenditure for the period covered.

Therefore, only 9 insurance companies satisfied the two conditions for inclusion in this study. The data for this study were collected from the published annual reports and accounts of the 9 sample listed insurance companies for the year 2012 to 2021.

Employee's salaries and wages (ESW), employee's training cost (ETC), employee retirement benefits (ERB) and other employee benefits (OEB) are the predictor variables and proxies for expenditures in Human capital (EHC). However, the popular apriori belief across almost all disciplines and professions within management sciences is that EHC is fundamental for efficient and profitable management of all organizational resources. Meanwhile, its influence on insurance companies was measured in this study through financial performance (FP) as response variables denominated into profit before tax (PBT). This study adopted the model of Olowolaju & Oluwasesin (2016).

The functions below represent the relationship:

$$PBT = f (THCE) \text{-----} (1)$$

Where: PBT = Profit before tax

THCE = Total Human Capital Expenditure

The function model thus:

$$PBT = \beta_0 + \beta_1SW + \beta_2TR + \beta_3CP + \beta_4H + \mu \text{ - - - (Basic Model) .....} (2)$$

Where:

PBT = Profit before tax

SW = Salaries and Wages

TRC = Training costs

CPC = Contributory Pension cost

HC = Health cost

0 = Intercept



1, 2, 3 = coefficients of predictor and control variables;

$\mu$  = Error term

t = Time (Annual)

The model was adopted to suite the objectives of this study, the regression equation is as follows:

$$FP = f(\text{THCE}) \text{-----} \quad (3)$$

$$FP_{ti} = 0 + \beta_1 ESW_{ti} + \beta_2 ETC_{ti} + \beta_3 ERB_{ti} + \beta_4 OEB_{ti} + \mu \dots \dots \dots \text{Basic model} \quad (4)$$

Where: FP (financial performance) = PBT or EBIT (Profit before tax or earnings before income tax)

THCE = Total Human Capital Expenditure

0 = Intercept

$\beta_1, \beta_2, \beta_3, \beta_4$  = Regression of the coefficient of predictor and control variables

ESW = Employee’s Salaries and Wages

ETC = Employee’s training cost

ERB = Employee retirement benefits

OEB = Other employee’s benefits

$\mu$  = the error term

t = Time (Annual)

The analytical tools employed in this study were categorized into statistical and econometric techniques. The statistical tools are descriptive statistics while the econometric tool was panel least squares simple regression analysis. The descriptive statistics was used to describe the variables under investigation; The Hausman test is used to compare the fixed effects model and the random effects model, and it is based on the assumption that the error terms are correlated with the explanatory variables. While the panel least squares simple regression, analysis was used to estimate the effect of expenditure on employee’s salaries and wages (ESW), employee’s training (ETC), employee retirement benefits (ERB) and other employee benefits (OEB) of human capital on financial performance insurance companies in Nigeria and also it was used to test the hypotheses at the same time.

## RESULTS

### Data Analysis

Table 4.1 presents descriptive statistics, including the total number of observations mean, maximum, minimum, and standard deviation.

**Table 4.1:** Descriptive Statistics

| Variable | Observations | Mean      | Maximum    | Minimum | Std. Dev. |
|----------|--------------|-----------|------------|---------|-----------|
| FP       | 90           | 1,863,168 | 13,448,965 | 0       | 2,614,283 |

|     |    |            |            |           |            |
|-----|----|------------|------------|-----------|------------|
| ESW | 90 | 810,179.00 | 4,011,579  | 70,683.00 | 579,359.00 |
| ERB | 90 | 51,057.42  | 185,388.00 | 0         | 35,964.81  |
| ETC | 90 | 72,879.23  | 537,777.00 | 0         | 81,938.79  |
| OEB | 90 | 49,504.67  | 513,694.00 | 0         | 89,584.02  |

The table 4.1 shows that the mean of FP is 1,863,168, which means that the average FP of the insurance companies in the sample is 1,863,168. The median is 851,682, which means that half of the insurance companies in the sample have a financial performance of less than 851,682 and half have a financial performance of more than 851,682. The maximum value is 13,448,965, which means that the financial performance of the best-performing insurance firm in the sample is 13,448,965. The minimum value is 0, which means that there is at least one insurance firm in the sample that has a financial performance of 0.

The standard deviation of FP is 2,614,283. Which means that the dispersion or how far apart financial performance of the sampled insurance companies from mean is 2,614,283. The number of observations is 90, which means that there are 9 insurance companies with 10 years' financial information each in the sample. The independent variables are ESW, ERB, ETC, and OEB. The dependent variable is FP. The results of the descriptive statistics suggest that there is a positive relationship between human capital expenditure and financial performance of insurance companies in Nigeria.

**Table 4.2:** Hausman test for correlated random effects

| Test       | Statistic | d.f. | Probability |
|------------|-----------|------|-------------|
| Chi-square | 21.8      |      | 0           |

**Source:** E Views 2023

The table 4.2 displayed the results of the Hausman test for correlated random effects. The Hausman test is used to compare the fixed effects model and the random effects model, and it is based on the assumption that the error terms are correlated with the explanatory variables. The table showed that the chi-squared statistic for the cross-section random effects model is 0, as is the chi-squared statistic for the period random effects model. This means that the test variances are invalid, and the Hausman statistic is set to 0. The warning message indicates that the estimated period random effects variance is zero. In this case, the Hausman test cannot be used to determine which model is preferred. The null hypothesis of the Hausman test is that the random effects model is consistent, and the alternative hypothesis is that the fixed effects model is consistent. Since the test statistic is 0, we cannot reject the null hypothesis, so we cannot say for sure which model is better. However, the warning message indicates that the period random effects model may not be appropriate, since the estimated variance is zero. This suggests that either of the two models can be used in the case of this study.

**Table 4.3:** Model Summary

| Variable | Coefficient | Std. Error | t-Statistic | Probability |
|----------|-------------|------------|-------------|-------------|
| C        | 282,695.30  | 519,836    | 1           | 0.5881      |
| ESW      | 0.926671    | 0.45       | 2           | 0.04        |
| ERB      | 14.27601    | 6.67       | 2.14        | 0.0356      |

|                   |           |      |       |        |
|-------------------|-----------|------|-------|--------|
| ETC               | -0.616958 | 3.56 | -0.17 | 0.8627 |
| OEB               | 2.944586  | 3.21 | 0.92  | 0.3613 |
| Prob(F-statistic) | 0         | 0    | 0     | 0      |

**Source:** Eviews output, 2023

The table 4.3 shows the results of a panel least squares regression analysis of the financial performance (FP) of 9 insurance companies over 10 years. The independent variables are ESW, ETC, ERB, and OEB. The Variable section shows the estimated coefficients for the independent variables in the regression model. The value of C (Intercept) is 282695.3 is the estimated intercept term in the regression equation. It represents the expected value of the dependent variable (FP) when all independent variables are zero. The coefficient of ESW is 0.9267 represents the estimated effect of the variable ESW on the dependent variable FP. It indicates the change in FP a one-unit change in ESW, holding other variables constant. The coefficient of 14.27601 represents the estimated effect of the variable ERB on FP. It indicates the change in FP for a one-unit change in ERB, holding other variables constant. The coefficient of -0.616958 represents the estimated effect of the variable ETC on FP. It indicates the change in FP for a one-unit change in ETC, holding other variables constant. The coefficient of 2.944586 represents the estimated effect of the variable OEB on FP. It indicates the change in FP for a one-unit change in OEB, holding other variables constant. The standard error of the regression 1797709 measures the typical error in the predicted values of FP. Smaller values indicate a more precise model.

The model table provides a detailed overview of the regression results, including coefficient estimates, statistical significance, goodness of fit, and information about the effects used in the model, helping to assess the relationship between the dependent variable (FP) and the independent variables (ESW, ERB, ETC, OEB).

## Test of Hypotheses

### Hypothesis One

According to the results of this study, table 4.3 shows there is the strong positive correlation coefficient of 0.926671 between FP and ESW indicates that there is a notable positive linear relationship between these two variables. The associated p-value of 0.0411 associated with this correlation suggests that the observed correlation is highly statistically significant. The positive correlation coefficient indicates that, in the given dataset, higher ESW are associated with higher FP for insurance companies. This means that on average ESW increase, FP tends to increase as well. The very small p-value suggests that this observed correlation is highly unlikely to be due to random chance. This provides strong evidence against the null hypothesis that there is no impact of employees' salaries and wages on the financial performance of insurance companies. The p-value 0.0411 is less than the common significance level of 0.05 (assuming a typical alpha level of 0.05). This suggests that the variable related to employees' salaries and wages (ESW) has a statistically significant impact on the financial performance of insurance companies in Nigeria. Therefore, Ho1 will be rejected.

### Hypothesis Two

The table 4.3 shows that there is positive correlation coefficient which contradicts the null hypothesis that there is no impact of employee retirement benefits on the financial performance of insurance companies. It suggests that there is some relationship between these two variables. The p-value of 0.0356 is less than 0.05, indicating that the correlation is statistically significant at the 0.05 significance level. This means that there is evidence to reject the null hypothesis and consider the possibility that employee retirement benefits might indeed have an impact on the financial performance of insurance companies in Nigeria

### Hypothesis Three

The result in table 4.3 shows that the p-value 0.8627 is greater than the common significance level of 0.05. Suffice to say that the weak correlation coefficient -0.616958 suggests that the data does not strongly support

the idea of a significant impact of employee training costs on financial performance. The non-significant p-value (greater than 0.05) further suggests that there is no strong statistical evidence to reject the null hypothesis in favour of the idea that employee training costs have a significant impact on financial performance of insurance companies in Nigeria.

#### **Hypothesis Four**

Similar to Ho3, from the table 4.3 the p-value for OED is 0.3613 which is greater than the common significance level of 0.05. This suggests that the variable related to other employee's benefits (OEB) does not have a statistically significant impact on the financial performance of insurance companies in Nigeria. Based on the coefficient estimates and associated p-values from the panel table, hypotheses Ho1 and Ho2 are rejected, indicating that employees' salaries and wages as well as employee retirement benefits have a statistically significant impact on the financial performance of insurance companies in Nigeria. However, the study fails to reject hypotheses Ho3 and Ho4, suggesting that employee's training costs and other employee's benefits do not have a statistically significant impact on financial performance in this analysis.

## **DISCUSSION**

The findings of this study revealed that there is a statistically significant positive relationship between employees' salaries and wages, retirement benefits and the financial performance of insurance companies in Nigeria. The result is in line with the findings of Israel, Ikem & Nduka (2022) that salaries, wages, allowances and other staff related expenses have significantly influence market value of manufacturing companies in Nigeria.

The result is also in agreement with the findings of Olowolaju & Oluwasesin (2016) who documented that there is significant impact of human capital expenditure on profitability of Quoted Manufacturing Companies in Nigeria. However, the findings of the study also revealed that employee's training costs and other employee's benefits have no significant impact on the financial performance of Insurance companies in Nigeria. This result contradicts the findings of Eke, Nlerun, Odukwu & Alafuro (2023) that that there is a significant and positive relationship between human capital expenditure (employees' training/education cost, and employee health and safety cost) and market value of listed insurance companies in Nigeria. This finding also contradicts the study conducted by Obiazonwa & Adesina (2018) which found out that organization should see reasons for training and retraining employee for maximum profitability.

## **CONCLUSIONS AND RECOMMENDATIONS**

This study empirically examined the impact of human capital expenditure on financial performance of insurance companies in Nigeria. The study found out that employee-related factors have varying impacts on the financial performance of insurance companies in Nigeria. Therefore, the study specifically concludes that;

1. Employees' salaries and wages and retirement benefits have positive significant impact on the financial performance of Insurance companies in Nigeria.
2. Employee's training costs and other employee's benefits have no positive significant impact on the financial performance of insurance companies in Nigeria.

Based on the findings of this study, the following recommendations were made;

1. It is recommended that insurance companies in Nigeria should carefully consider and invest in competitive and fair compensation packages for their employees. This can contribute to efficient financial performance of the companies.
2. It is recommended that insurance companies in Nigeria should continue to prioritize and enhance their employee retirement benefit packages. The expenditure can serve as valuable tool for employee retention and motivation, which, in turn, can contribute to the financial performance of the companies.
3. Although the study did not find a statistically significant impact of employee training costs on financial performance of the sampled insurance companies, it is recommended that insurance companies in



Nigeria should recognize the importance of training in developing employee skills and organizational capabilities. While the direct financial impact of the expenditure may be limited and not obvious in a short while, the training remains essential for long-term success of the companies.

4. Lastly, the lack of statistically significant impact of other employee benefits on financial performance the sampled insurance companies in the study, suggests that beyond salaries, wages, and retirement benefits, additional benefits may not be a key driver of financial outcomes. It is therefore recommended that insurance companies in Nigeria should evaluate the cost-effectiveness of additional benefits and focus on other factors that have more direct influence on their financial performance.

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