

Human Resources Accounting and Financial Performance of Listed Deposit Money Banks in Nigeria

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Abstract

The dwindling performance of listed deposit money banks caused by poor employee morale, lack of motivation and inadequate management of human resource has resulted to loss of key talent personnel in the banking sector has become worrisome to shareholders, regulators, academia and analysts. In lieu of this, the study examined the effect of human resource accounting on financial performance of listed deposit money banks in Nigeria. This study adopted ex-post facto research design. The study population is 13 listed deposit money banks on Nigeria Exchange Group. Census sampling technique was used to select the entire 13 listed deposit money banks form the sample size of the study. Data were collected from secondary source using annual reports of the selected firms from Factbooks published by the Nigerian Exchange Group from 2013 to 2022. Data collected include; employee remuneration cost, employee health and safety cost, employee retirement benefits and return on capital employed. The data were analysed using descriptive statistics and ordinary least square regression analysis. The result showed that employee remuneration cost to revenue has a negative and significant effect on returns on capital employed of DMBs in Nigeria. Also, employee and safety cost has a positive and significant effect on returns on capital employed (ROCE) of listed deposit money banks in Nigeria. Employee retirement benefit has a negative and significant effect on returns on capital employed (ROCE) of deposit money banks in Nigeria. The study concluded that human resources have negative and significance effect on the financial performance of listed deposit money banks in Nigeria. The study therefore recommended that management of deposit money banks and labour unions should ensure there is appropriate accountable structure to improve the commitment of the companies to human resource management and the ways of boosting the financial performance of firms. Also, management of deposit money banks should substantially invest in building the capacities and abilities of their employee through training, seminar, education as this will have a positive impact of the financial performance of the firm and improve their performance. Management should ensure that the cost committed to employee emoluments and welfare is not above what the company revenue could absorb conveniently without negatively affecting the investors returns.

Keywords: employee remuneration cost, employee and safety cost, employee retirement benefit and returns on capital employed.

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1. Introduction

Human resources remain of the vital asset that an organization possess to create more value for the company and enhances its survival. Organization should leverage on the human resources as a tool to develop a competitive edge and improving productivity that would bring more value to the (Khowanas *et al.*, 2021). Hence, the human resources play a significant role in the organization which cannot be neglected (Ndum & Oranefo, 2021).

Nowadays, organization considered human resources as a key source for competitive advantage and therefore viewed their employees as a crucial resource to heavily invest in (Makkos, *et al.*, 2020). They are to any organization because they are the people who make up the workforce and are responsible for carrying out the organization's goals and objectives. Human resources are often view as a vehicle driving out innovation, skills, competencies and improvement among staff and management to achieving organizational goals (Herath & Naser 2016). It plays significant role in increasing efficiency and creating opportunities for evaluating personnel policies, assessing employee performance, identifying non-operational and productivity gains resulting from investment in human capital (Kumar & Priyanka, 2018). In other to make informed decisions and value human resources in an organization, a system that needs to be put in place to track and manage human resources cost. In these human resources accounting came into light.

According to Ndum and Oranefo (2021), human resources accounting is considered to be a new branch in accounting. In Nigeria, reporting of human resources cost has not gained high interest as disclosures has not been made in the financial statement of Nigerian firms (Kirfi & Adbullahi, 2012). Human resources accounting is seen as a reporting to the process of measuring the financial value of the human resources of an organization. Human resources accounting helps to assess the value of employee skills, knowledge, and experience, and using this information to make decisions about resource allocation and organizational strategy (Gao, *et al.* 2015). By

measuring the value of organization human resources, human resources accounting provides a system to which information can be generated to make informed decision and to allocate resources (Herath & Naser, 2016). It provides systems that evaluate the performance of employees or teams. By tracking the financial value of their contributions, organizations can identify areas of strength and weakness and adjust as needed.

Human resources accounting differs from conventional accounting as it focuses on cost solely necessary in valuing human resources which includes staff remuneration cost, staff health and safety cost, staff retirement benefits and so on. Staff remuneration plays a significant role in an organization's financial performance. employee remuneration is often one of the largest expenses for a company, and it can impact a range of factors that are critical to financial performance, such as employee turnover, absenteeism, and productivity. Therefore, companies need to carefully consider their compensation strategies and ensure that they are aligned with their financial goals and objectives. (Akinjare *et al.*, 2019). Remuneration, or compensation is seen as the total rewards an employee receives for their work, including wages, salaries, bonuses, and benefits. Investment in employee compensation led to increased motivation, job satisfaction, and productivity, which can in turn lead to higher profits and better financial performance.

In same vein, staff health and safety cost also account for significant amount of expenses incurred by organization. When employees are healthy and safe, they are less likely to miss work due to illness or injury. This can lead to reduced absenteeism and turnover, which in turn can increase productivity and reduce costs associated with hiring and training new employees (Akintoye, 2018). In same manner, significant investment in the staff health and safety cost is an indication of staff health prioritization. In this regard, when employees feel that their health and safety are being prioritized by their employer, they are more likely to be engaged and productive at work (Chen *et al.*, 2020). This can result in increased output, improved quality, and better customer service, all of which can positively impact financial performance. Organization that invests in staff health and safety may be less likely to face legal claims or incur insurance costs associated with workplace accidents or illnesses. This can help to reduce costs and improve financial performance and corporate reputation.

Staff retirement benefit is also significant to cost of organization. By offering retirement benefits, companies can attract and retain talented employees who value these benefits. This can help reduce turnover costs and increase employee productivity and engagement, which can have a positive impact on financial performance (Roslender & Stevenson, 2021). Companies that offer retirement benefits must allocate funds to support these benefits. These costs can have a negative impact on financial performance in the short-term, as they reduce available funds for other purposes. Retirement benefits can help companies plan for future workforce needs. By encouraging employees to retire at an appropriate age, companies can manage their workforce and staffing levels more effectively. Offering retirement benefits can improve employee morale and engagement, which can increase productivity and reduce turnover costs.

Human resources remain one of the significant resources to banks and managing it effectively has been a challenge in the banking sector. The performance of the banking sectors has drilled down as a result of inadequate management of human resource and this has resulted to loss of key talent personnel in the banking sector and poor employee morale and motivation.

Investments in employee compensation cost, health and safety cost and retirement benefit as components of human resource costs are not adequately recognized and disclosed despite their contribution to the economic value of organizations in Nigeria (Nwauzor & Longjohn, 2020).

In this regard, investors and other stakeholder group are yet to ascertain the value and importance of human resources. According to Adeyemi *et al.*, (2018) human resources costs are not accurately accounted for and this has affected the bank's ability to make informed decisions. Olaoye and Ajayi (2016) opined that ineffective human resources management make it difficult to manage compensation and benefits effectively in the banking sector and which have resulted to issues of over or underpaying employees, disengagement and low morale. The aftermath of this worsens the financial performance in the banking sector.

In a bid to augment performance, management interest has been focused on human resources accounting. Several empirical studies have shown that there-is a significant positive-relationship between human-resource costs and financial-performance, such as studies such as (Ifurueze *et al.*, 2014; Okpako *et al.*, 2014; Adebawojo *et al.*, 2015; Olowolaju & Oluwasesin, 2016; Adebawojo, 2017; Mbah *et al.*, 2018, Onyekwelu & Akani, 2021 and Onyekwelu & Ironkwe, 2021). However, extant studies have been able to proof human resources accounting on financial performance measures such as return on asset, return on equity and earnings per-share. A gap exist in this literature has very few studies have been recorded on how human resource accounting enhance financial performance measure in terms of return on capital employed. The study covers deposit money banks that are listed on the Nigerian Exchange Group as at December, 2020.

This study examined the effect of human resources accounting on the financial performance of listed deposit money banks in Nigeria. The study focused on three key components of human resource accounting these include employee remuneration cost, health and safety cost and employee retirement benefits. The paper is structured into five separate headings and other subheads; these cover the introductory aspect of the study, the

review of the literatures and hypotheses development to clarify concepts, and showing interactions between variables in line with previous studies. The third heading is the explanation of data and methods used in the study. The analysis and discussion of findings are explained in the fourth heading and finally, the conclusion and recommendations are outlined in the fifth heading.

2. Literature Review

Human Resources Accounting

The concept of human resource as vital asset is not a new phenomenon. Akintoye (2018) conceptual human resources as the people who work for an organization, and the management of those people. In other words, human resources (HR) are the function within an organization that is responsible for managing the workforce. The concept of human resources is based on the idea that people are the most valuable asset of an organization, and that their skills, knowledge, and abilities are critical to the success of the organization.

Sunil (2018) defined human resource accounting as the activity of knowing the cost invested for employees towards their recruitment, training them, payment of salaries and other benefits paid and in return knowing their contribution to organization towards its profitability. According to him, human resources encompass the process of assigning, budgeting, and reporting the cost of human resources incurred in an organization, including wages and salaries and training expenses.

Abdulateef, *et al.* (2018) opined that human resources accounting is an approach that seeks to measure and assign a monetary value to the human resources of an organization, including its employees, management, and intellectual capital. Accordingly, it is an approach that recognizes that people are a critical asset to an organization, and that their skills, knowledge, and experience contribute to the value and success of the organization.

Egbunike and Okoro (2018) viewed Human resources accounting as a management tool that seeks to measure, analyze, and report on the human capital of an organization. It involves assigning a financial value to the knowledge, skills, and experience of employees, as well as other intangible assets such as intellectual property and brand reputation. Human resources accounting is a technique used to measure the value of an organization's human resources, including the knowledge, skills, and abilities of its employees. This approach aims to provide a more comprehensive view of the value of an organization and its potential for future success (Yusuf *et al.*, 2018).

Chukwu (2017) stated HRA simply means accounting for people as an organizational resource. It involves identification and measurement of the cost incurred by an organization to recruit, select, hire, train and develop human assets. In the same vein, it measures the economic value of people in the organization. It ensures that expenditures relating to human resources are treated as assets as opposed to traditional accounting arrangement in which the cost is treated as operating expenses.

The field of human resources covers a range of activities, including recruitment and selection, training and development, performance management, compensation and benefits, and employee relations (Akintoye, 2018). Human resources professionals work to ensure that the organization has the right people in the right positions, with the right skills and competencies, and that they are motivated and engaged in their work. They also help to create a positive work environment that supports employee well-being and productivity

Employee Remuneration Cost

Employee remuneration cost refers to the total expenditure that a company incurs in compensating its employees for the work they perform. This includes salaries, wages, bonuses, benefits, and any other forms of compensation that are paid to employees in exchange for their services.

Akintoye (2018) describes it as costs associated with providing and maintaining employee benefits such as health insurance, retirement plans, and other perks. It is the total cost of all compensation, both direct and indirect, provided to employees. This includes wages, salaries, bonuses, commissions, benefits, and any other forms of compensation paid by the employer. Yusuf *et al.* (2018) opined that employee remuneration is the compensation or payment that an employee receives for their work or services rendered to an organization. It can take various forms, such as salaries, wages, bonuses, commissions, and benefits.

Surbhi (2015) described employee remuneration as a fixed sum paid to the employees at regular intervals due to their performance productivity while wages are payments made on an hourly basis to labor for the quantity of work completed daily. The study further submitted that salaried individuals are involved in white-collar jobs, which means they are well educated and skilled, are employed with good social standing, while persons on wages are doing blue-collar jobs, meaning that the person is engaged in a semi-skilled/unskilled job where he is getting daily wages

Employee remuneration provide financial and non-financial incentives for employees to perform their jobs well and to motivate them to stay with the organization. Employers use remuneration as a tool to attract and retain employees, and to maintain a productive and motivated workforce (Bankole, 2020).

Employee Health and Safety cost

Employee health and safety cost refers to the cost associated with maintaining a safe and healthy working environment for employees (Etim & Effiong, 2021). These costs include a wide range of expenses such as personal protective equipment, safety training, medical exams, workers compensation insurance, safety inspections, and other safety measures aimed at preventing injuries or illnesses on the job.

Employee health and safety cannot be overstated. Workplace injuries and illnesses not only cause significant suffering for employees, but they also result in lost productivity, increased healthcare costs, and potential legal liabilities for employers. Therefore, investing in employee health and safety is critical to the success of any organization. Seleim *et al.* (2007) found that attended training courses and teamwork practices lead to superstars, where more productivity could be translated into organizational services and the quality of developers and the volume of market share improved (Bankole, 2020).

Investing in employee health and safety not only benefits employees, but it can also save organizations money in the long run. By reducing the likelihood of workplace injuries and illnesses, employers can reduce workers' compensation costs, insurance premiums, and legal fees. In addition, creating a culture of safety can lead to increased productivity, improved employee morale, and a more engaged and motivated workforce.

Employee Retirement Benefits

Employee retirement benefits refer to financial incentives provided to employees upon retirement to help them maintain their standard of living after they leave the workforce. Retirement benefits can take many forms, including pensions, IRAs, and other investment vehicles that provide a stream of income to retired employees. Retirement benefits are often a critical part of an employee's overall compensation package and can play a significant role in attracting and retaining talent (Onyekwelu & Ironkwe, 2021). Many employers offer retirement benefits as a way to help employees save for retirement, which can be a challenging task for individuals to manage on their own.

Employee retirement benefits are a crucial aspect of an organization's compensation package and can significantly impact employee recruitment and retention. A well-designed retirement benefits program can provide employees with financial security and peace of mind, leading to a more engaged and motivated workforce (Nwauzor & Longjohn, 2020). Employers typically offer retirement benefits to their employees in form of defined benefit plans or defined contribution plans (Ahmed *et al.*, 2018). Retirement benefits can be costly for employers to provide, they can also offer significant tax benefits. Contributions to retirement plans are often tax-deductible for the employer, and investment earnings in the plan are typically tax-deferred.

Financial Performance

Financial performance is the measurement of the effectiveness of the operations and policy of the companies in monetary terms. Financial performance reveals a company's overall financial health over time. It enables simultaneous comparison of many businesses involved in the same industry (Wanjohi, *et al.*, 2017). Financial performance, according to Suka (2010), is a general indicator of an institution's ability to make profits while utilizing its money and other resources. Suka (2010) considered financial performance to be a subjective indicator of how well and effectively a company uses its resources to generate income. Financial performance is described by Eastburn and Sharland (2017) as "a straightforward indicator of management's prior risk decision capabilities."

Financial Performance is the measure of the organization success with the use of ratios such as profitability ratio, solvency ratio, efficiency ratio etc. (Ahmed *et al.*, 2018). According to him, financial performance is therefore an indicator that assess how firm is profitable, solvent and how efficient it is in utilizing the resources committed into the firm. In this study, financial performance is measured by Return on Capital Employed (ROCE)

Return on Capital Employed

Return on Capital Employed (ROCE) is a measuring tool that measures the efficiency and profitability of capital investments undertaken by a corporation. Return on Capital Employed ratio also indicates whether the company is earning sufficient revenues and profits in order to make the best use of its capital assets. High ROCE is a validation of a company's competitive advantage. It indicates that the-company has something special to offer-products or services that command a high return (Singh & Yadav P. 2013). Business entities should try to make a-profit that is large enough in relation-to the amount of money or capital invested in the business. The most-important profitability ratio is the return on capital employed (ICAN, 2014).

The concept of return of capital employed is a measure of percentage proportion of profit before interest and tax to capital employed, is the portion of capital and investment, plus long term debt capital such as bonds, loan stock and bank loans (Sheidu, A.D & Yusuf, H., 2015). Capital employed is the sum of preference share and capital ordinary plus debentures, loan stocks, reserves, all borrowings together with obligations under bank

overdraft, minority interests, finance leases, and provisions. Deductions include investments in associated companies (Singh, & Yadav 2013).

Theoretical Review

Human Capital Theory

The study assumes human-capital theory. Human capital theory was propounded by Schultz in 1961, and later formulated by Gay Becker in 1962, who argues that individual workers have a-set of skills or abilities which they can improve or accrue through training and education. This theory shows how education results raise in productivity and competence of workers by increasing the-level of their cognitive skills.

Theodore, Schultz, Gory Bucker and Jacob-Mincer introduced the concept that people invest-in education so-as to enlarge their reserve of human capabilities which-can be formed by bringing together inborn abilities with investment in human beings. (Babalola, 2000), examples of such investments include; on the job training; money spent on education and nutrition. This theory assumes that human-capital act as a resource, usually comes with experience are translated into knowledge and skills which further improves the chances of survival. This study can therefore be related to this theory as the knowledge-and skills acquired by employees as intellectual-capital and the corporate can enhance their performance based-on the knowledge by harnessing its Human-Capital Development (HCD), and the Employed Efficiency. In a deeper sense, however, human capital is more than simply the physical labour of people who work for an-organization. It-is the entire set of intangible qualities those people bring to the-organization that might help it succeed. The theory argues that a person's formal education determines his/her earning power. According to Human-capital theory, the key competences, skills, knowledge and-abilities of the personnel contributes to organizations competitive advantage (Nwauzor & Longjohn, 2020).

Empirical Review

Woan *et al.* (2023) examined the link between employee welfare and firm financial performance, the study utilized KLD database data from 2001 to 2015 to capture the firm-level employee welfare. Findings through clustered standard errors ordinary least squares (OLS) regression analysis along with robustness testing revealed positive association between employee health cost and firm performance. Regin *et al* (2023) examined effect of human resources management accounting on CSR, environmental responsibility and corporate social. To test the hypotheses in this research model, a self-completed questionnaire was collected from 220 managers of energy-intensive manufacturing for analysis. The ability ER-HRM practice has the highest influence on green technology innovation and organizational effectiveness. It is worth noting firm effectiveness relationship between ER-HRM practice and green technology innovation. The finding indicates a strong straight positive impact of the motivation, environmental ability, and opportunity ER-HRM practice on green technology innovation and organizational effectiveness. Research also proves that green technology innovation plays a partial mediation link (ER-HRM) with organizational effectiveness.

Marhil *et al* (2023) investigate the relationship between HRM strategies and employee performance in the Libyan oil and gas sector. Accordingly, 321 survey data were collected from Waha Oil Company employees in Tripoli, Libya. The structural Equation Modelling (SEM) technique was used to analyze the data as well as hypotheses testing. The findings demonstrated that human strategies significantly affect both job satisfaction and employee performance. Job satisfaction influences employee performance. Besides, training and development, recruitment and selection significantly affect job satisfaction, while performance appraisal significantly influences employee performance. The findings are beneficial to HRM department to enhance their emphasis on the crucial factors that boost employee performance through improving job satisfaction. Peter and Ogaluzor (2022) found that employees cost has a significant effect on the financial performance of listed deposit money banks in Nigeria. Onyekwelu and Ironkwe (2021) conducted a study that focus on listed insurance-firms in Nigeria. The study showed-that there is a-positive and significant-relationship between human-resource accounting-disclosure and employee remuneration cost on Return-on-Asset and Return-on Capital-Employed. Etim and Effiong (2021) supported the findings where they examine human and intellectual capitals effect on-performance of manufacturing-firms in Nigeria.

Akinjare *et al* (2021) examined employee remuneration costs on the corporate financial performance of insurance companies where it was discovered that employee remuneration has a big impact on return on assets. Adetoun *et al.*, (2020) finding shows that cost of remuneration and developing human resources has a major impact on a company's ability to earn revenue. Manukayi, *et al.*, (2019) examine the effect of human resource development on the performance of quoted companies in Nigeria using training as one of the proxies and found that remuneration cost has positive and significant effect on performance of sampled firms in Nigeria. Akinjare *et al.*, (2019) findings shows reveal that there is a positive and significant relationship between staff cost and the performance of the financial service firms in Nigeria. Abdulateef, *et al.* (2018) outcome showed that salaries & wages have negative and significant relationship with the profitability of banks in Nigeria.

Ndum and Oranefo (2021) assess the effect of human resource cost on the financial performance of quoted brewery firms in Nigeria. Findings through the use of regression technique revealed that staff health and safety cost have positive and insignificant effect on the ROA of quoted firms. Onyeukwu *et al.* (2021) assess the link between human resource accounting and the financial performance of microfinance banks in Nigeria. Findings from the study revealed that personnel health and safety costs have significant effect on both Net Profit Margin (NPM) and Return on Equity (ROE). However, it has insignificant effect on Return on Assets (ROA). The study of Akinjare *et al.*, (2019) assessed the impact of human resource accounting on the performance of Nigerian firms. It was found that there is no significant effect between health and safety cost and organization performance as measured by return on asset. Egbunike and Okoro (2018) investigate the impact of health safety costs and on the profitability of consumer goods firms listed on NSE during 2012-2016 and the result showed that there was no significant relationship between health safety cost and the profitability measure of the sampled banks.

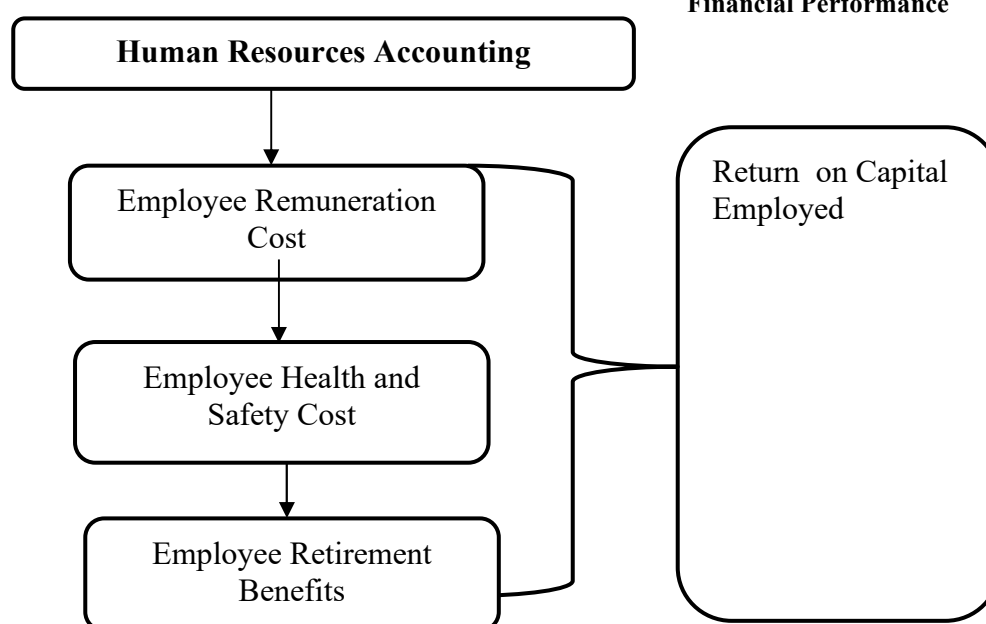
Onyekwelu and Akani (2021) examined the connection between human resource costs and financial performance of quoted Nigerian companies. The-study used regression-analysis to analyze-data with the aid of E-view package version 12. The findings of their study showed that human-resource retirement benefit cost has positive and significant connection with financial-performance of listed manufacturing-firms in Nigeria. Bankole (2020) Investigated the-effect of human-resource cost on financial-performance of listed consumer goods-firms in Nigeria. The result of the study showed that predictors pension cost, director’s emolument and gratuity cost exert positive and statistically significant impact on ROA. Olaoye and Afolalu (2020) examine the effect of human capital accounting on the performance of DMBs in Nigeria. The outcome revealed that retirement has significant and positive relationship with the performance of banks in Nigeria. Abdulateef, *et al.*, (2018) study assess the effect of HRA on profitability of listed DMBs in Nigeria covering time scope 2006 -2015. The results of the study showed that staff retirement benefit cost have positive and significant effect with the profitability of sampled banks in Nigeria. The study of Asika, *et al.*, (2017) examined the effect human resource accounting on the profitability of corporate organization in Nigeria. The study sought specifically to evaluate the extent at which retirement benefits (Pension) has effect on the profitability of banks between 2010 and 2014. Data were collected and analyzed with t-test statistical tools. It was depicted from the study that retirement benefits have positive and significant relationship with organizational profitability in the sampled banks. The findings of this study showed a mix results, it is therefore hypothesized that:

Conceptual Framework

The framework shows the interactions between the variables of this study. The major components are; human resources accounting, which is the predictive variable represented as employee remuneration cost, employee health and safety cost and employee retirement benefits, and financial performance proxy by return on capital employed being the dependent variable.

Independent variable

Dependent Variable



Source: Researcher’s Conceptualization (2023)

3. Data and Methods

An *ex post facto* research design was employed for this study. The choice of the design was because the data needed is readily available in the annual report and Nigeria Exchange Group Factbooks. The data used were collected from secondary source through the annual report and Nigeria Exchange Group Factbooks for a period of 2013 to 2022. Secondary data were chosen because the information needed on the variables can only be found in the financial statement of listed deposit money banks in Nigeria. This source of data also has the advantage of being more reliable since financial statement has been audited by independent auditor. The population of the study consists of 13 deposit money banks listed on the Nigerian Exchange Group as at 31st December, 2022. This study covers listed deposit money banks because of its peculiarity and vitality in the financial service sector of the Nigerian Exchange Group. A total number of all the thirteen (13) deposit money banks listed on the Nigerian Exchange Group were considered as the sample size. A census sampling technique was adopted in order to consider all the listed deposit money banks in the analysis. In order to achieve the stated research objectives, the sourced data were analyzed using the descriptive statistics, correlation analysis and regression analysis.

The model specified in this study is based on the theoretical foundations of the study which is adopted from Ekpulu and Iyoha (2021).

$$FP_{it} = f(HRA) \dots \dots \dots (i)$$

$$FP_{it} = f(ERC, EHSC, ERB) \dots \dots \dots (ii)$$

The econometric equation in respect of the broad objective is stated as:

$$ROCE_{it} = \beta_0 + \beta_1 ERC + \beta_2 EHSC_{it} + \beta_3 ERB_{it} + \varepsilon_{it} \dots \dots \dots (iii)$$

Where:

- FP= Financial performance
- ROCE = Return on Capital Employed
- ERC= Employee Remuneration Cost
- EHSC= Employee Health and Safety cost
- ERB = Employee Retirement Benefit
- B1 – B3 = coefficient of independent variables
- ε_{it} = error terms of firm i and time t.

Measurement of Variables

The independent variable for this study is human resources accounting which was proxied by employee remuneration cost (ERC), employee health and safety cost (EHSC), employee retirement benefit (ERB). The dependent variable is financial performance this was proxied by return on capital employed (ROCE).

S/N	Variables	Description	Measurement	Source
1	Return on Capital Employed	It depicts the extent to which organizations manages its capital efficiency.	Ratio of profit before interest and tax to capital employed	Singh & Yadav, 2013; Sheidu, A.D & Yusuf, H., 2015; Leyira <i>et al.</i> (2012); Wulandari & Meilani (2018)
2	Employee Remuneration	Money received by an employee from an employer as salary or wages.	Salary and wages and other allowances	Nwauzor & Lonhjohn (2020); Micah <i>et al</i> (2012)
3	Employee health and safety cost	Investment on the wellbeing and safety of staff with the organization	Staff health and safety cost.	Nwauzor & Lonhjohn (2020) and Sarkar <i>et al</i> (2016).
4	Employee Retirement benefit	Cost on retirement. This includes defined benefit plans for retirees.	Pension and other related retirement benefits paid.	Nwauzor & Lonhjohn (2020); Micah <i>et-al</i> (2012) and Sarkar <i>et al</i> (2016).

Source: Researcher’s Compilation, 2023

4. Data Analysis and Discussion of Findings

Descriptive Statistics

The presence of outliers in variable can distort its correctness and also induce lack of efficiency of the error term. The study explores the variable characteristics by obtaining their descriptive statistics as presented in Table 1.1. Financial performance, measured by returns on capital employed (ROCE) have a mean value of 5.2117 with a standard deviation of 6.49358 signifying that returns on capital employed across the sampled firms highly varies

from one another as the value is a bit far from the mean having the coefficient of variation of 1.245 and the ROCE ranges between a minimum of -10.493 to a maximum of 18.893. The total sum of ROCE for the listed deposit money banks is 677.5339 and the skewedness is negative and mesokurtic kurtosis value for returns on capital employed (ROCE) showing -.116108 and 3.44878 respectively indicating that the variable is the data is not normally distributed. For profit per employee (PPE) have a mean value of 7694.3 with a standard deviation of 8551.09 signifying that profit per employee across the sampled firms highly varies from one another as the value is a bit far from the mean having the coefficient of variation of 1.1113 and the PPE ranges between a minimum of -3783.69 to a maximum of 28657.27. The total sum of PPE for the listed deposit money banks is 1000267 and the skewedness is positive and mesokurtic kurtosis value for profit per employee (PPE) showing 1.12603 and 3.46264 respectively indicating that the variable is the data is not normally distributed.

Furthermore, on Table 1.1, employee cost to revenue (ECTR) have a mean value of 23.7609 with a standard deviation of 9.0637 signifying that employee cost to revenue across the sampled firms moderately varies from one another as the value is a bit close to the mean having the coefficient of variation of .38145 and the ECTR ranges between a minimum of 10.541 to a maximum of 28657.27. The total sum of ECTR for the listed deposit money banks is 3088.928 and the skewedness is positive and normal kurtosis value for employee cost to revenue (ECTR) showing .630546 and 2.671251 respectively indicating that the variable is the data is not normally distributed.

Lastly from Table 1.1., revenue per employee (RPE) have a mean value of 35834.06 with a standard deviation of 17270.79 signifying that profit per employee across the sampled firms moderately varies from one another as the value is a bit close to the mean having the coefficient of variation of .48196 and the RPE ranges between a minimum of 8033.89 to a maximum of 76441.9. The total sum of PPE for the listed deposit money banks is #4,658,427 and the skewedness is positive and normal kurtosis value for revenue per employee (RPE) showing .3004348 and 2.483767 respectively indicating that the variable is the data is not normally distributed.

Table 1.1 Descriptive Statistics

Variables	ROCE	PPE	ECTR	RPE
OBS	130	130	130	130
Mean	5.211799	7694.362	23.76098	35834.06
S.Dev.	6.493588	8551.099	9.063705	17270.79
Coeff.	1.24594	1.111346	.3814533	.4819658
Min	-10.4939	-3783.69	10.5415	8033.89
Max	18.8937	28657.27	45.6377	76441.94
Sum	677.5339	1000267	3088.928	4658427
Skewness	-.116108	1.126031	.6305469	.3004348
Kurtosis	3.448788	3.462646	2.671251	2.483767

Source: Researcher's Computation (2023)

Test of Variables

Correlation Matrix of Dependent and Independent Variables

The correlation co-efficient represents the linear association or relationship between the dependent and explanatory variables and also show symptoms of multi-collinearity. The result in Table 1.2 showing the relationship between human resource accounting and returns on capital employed. The relationship between returns on capital employed (ROCE) and profit per employee (PPE) shows that an increase in profit per employee will boost return on capital employed by 52.12 percent indicating coefficient value of 0.5212 as the relationship between the two variables move in the same direction and the relationship is significant at 5 percent showing probability vale of 0.0000. Likewise, from Table 4.2, the relationship between employee cost to revenue and returns on capital employed shows that an increase in cost spent on employee will cause a decrease in return on capital employed by 36.07 percent indicating coefficient value of -0.3607 as the relationship between the two variables move in the inverse direction and the relationship is significant at 5 percent showing probability vale of 0.0000.

From Table 1.2, t is shown that the relationship between revenue per employee and returns on capital employed shows that an increase in revenue spent on employee will cause a increase in return on capital employed by 25.09 percent indicating coefficient value of 0.2509 as the relationship between the two variables move in the same direction and the relationship is significant at 5 percent showing probability vale of 0.0000. Furthermore, the relationship between the independent variables is negative except for the relationship between revenue per employee and profit per employ that is positive and implying that one time increase in the revenue on an employee, profit per employee will increase by 63 percent.

It is observed that the relationship between the independent variables is not too strong to cause multicollinearity as none of them is above 0.70 that is an indication for strong relationship between the variables.

Table 1.2: Correlation Analysis of Study Variables

	ROCE	PPE	ECTR	RPE
ROCE	1.0000			
PPE	0.5212*	1.0000		
	0.0000			
ECTR	-0.3607*	-0.3743*	1.0000	
	0.0000	0.0000		
RPE	0.2509*	0.6367*	-0.6589*	1.0000
	0.0040	0.0000	0.0000	

Source: Researcher's Computation (2023)

Normality Test

The normality of data distribution is an assumption of running a linear model which assures that the p-values for the t-test and F-test will be valid. The assumption merely requires that the residuals be identically and independently distributed. However, from the descriptive statistics the data across some of the variables shows that virtually all the data obtained for this study are not normally distributed which is of no significance as the normality of the residual is of paramount significance. And as such, the normality of residuals will be conducted using Shapiro Wilks test of normality and the result is presented in Table 1.3.

Since the value is greater than 0.05 as indicated on the table at 5% level of significant therefore, the null hypothesis that the data is normally distributed across the models cannot be rejected. For this reason, it is concluded that the residuals of the models are normally distributed.

Table 1.3a: Shapiro-Wilk W Test for Data Normality

Variables	Obs	W	V	z	Prob>z
Human Resource Accounting residuals	130	0.93801	6.384	4.171	0.00002

Table 1.3b: Skewness/Kurtosis tests for Normality

Human Resource Accounting					
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	----- joint ----- Prob>chi2
residuals	130	0.0002	0.1145	13.87	0.0010

Multicollinearity Test

Multicollinearity test are part of post estimation test to confirm the validity of the assumption of the regression model. In a situation where two or more explanatory variable are highly correlated, meaning that one can linearly predict from the others with a certain degree of accuracy, then there is problem of multicollinearity. The Variance Inflation Factor (VIF) value is used to investigate the relationship between the variables themselves and the result is not found to be significant conclude that there is multicollinearity because the variance inflation factor and tolerance values are comparatively beyond the established rule of thumb.

Based on the evidence presented in Table 1.4, it can be concluded that there is no multi-collinearity problem. This is because the VIF values for all the variables are less than 10 and the tolerance values for all the variables are greater than 0.10 (rule of thumb). Therefore, the study can rely on regression co-efficient to predict the level of impact of independent variables on dependent variables and the outcome of the findings can be considered valid.

Table 1.4: Tolerance and VIF Value

Variable	VIF	1/VIF
RPE	2.57	0.388928
ECTR	1.78	0.562450
PPE	1.69	0.59098
Mean VIF	2.01	

Source: Researchers' Computation (2023)

basis for a Best Linear Un-Bias Estimate (BLUE) is shown in table 1.7. The Hausman specification test conducted produced p-value of 0.0010, which is significant at 5%. This implies that the variation across entities is assumed to be unsystematic with the independent variables included in the model hence the random effect model is the most suitable for interpretation. Furthermore, the Breusch and Pagan Lagrangian multiplier test for random effects was used to specify the best between the random effect model and the Ordinary Least Square (OLS) results and the results favoured the OLS indicating the P-value of 1.0000.

The regression estimates for the linear model as presented in table 1.8 indicate f-statistics of 24.77 and probability of the model to be 0.0000 which shows that the model is statistically significant at 5%. The R-Squared indicate 0.3709 and this implies that the independent variables in the model jointly explains 37.09 percent of the variation in the dependent variable with other variables captured by the error term. The implication is that the human resource is capable of influencing the financial performance of the listed deposit money banks in Nigeria and the effect is significant. However, it is indicated that there are other important human resource factors apart from the ones measured that could explain better variation in financial performance of consumer goods firms.

The overall result shows that the measures of human resources have negative effect and of significance value on the financial performance of listed deposit money banks in Nigeria exchange group. The individual results for the variables as shown in table 1.8 showed that employee cost to revenue (ECTR) has a coefficient of -.28376 with the Z-statistics of -4.20 and p-value of 0.000. This implies that employee cost to revenue has a negative and significant effect on returns on capital employed (ROCE) of DMBs in Nigeria. The implication is that the amount expended on employee when compares to the revenue of the companies is not justifiable as they did not bring commensurate returns with the expenses on the companies on their welfare, emoluments and benefits. Likewise, from table 1.8, profit per employee (PPE) have a coefficient of .00048 and z statistics of 6.94 and P-value indicating 0.000. It then means that PPE has a positive and significant effect on returns on capital employed (ROCE) of listed deposit money banks in Nigeria. The implication is that the proportion of profits apportioned to the employee is more than the returns on the effort in terms of assets committed in the business by the company.

Lastly from table 1.8, revenue per employee (RPE) have a coefficient of -.00015 and z statistics of -3.67 and P-value indicating 0.000. It then means that RPE has a negative and significant effect on returns on capital employed (ROCE) of deposit money banks in Nigeria. The implication is that the revenue per employee causes a decrease in the returns accrued to the company as a result in the use of their assets.

The study aligns with the Abdulateef, *et al.* (2018) assess the effect of human resource accounting on the profitability of 5 listed DMBs in Nigeria covering time scope 2006 -2015. The outcome of the study showed that cost on employee emoluments have negative and significant relationship with the profitability of banks in Nigeria. Yusuf *et al.* (2018) examined the effect of employee training on organizational profit. The study employed primary data to gather the necessary information. The results of the Partial Least Panel (PLS) analysis reveal that there is a negative effect between employee remuneration and organizational profit.

However, the findings of the study negate the results of Onyekwelu and Akani (2021) examined the connection between human resource costs and financial performance of quoted Nigerian companies. The study employed-secondary source to collect data via annual financial reports of selected manufacturing firms for the-period 2016 -2017. The findings of their study showed that human-resource health and safety cost has positive and significant connection with financial-performance of listed manufacturing-firms in Nigeria. The difference in results could be as a result if measurement of financial performance which in this case is measured by returns on capital employed.

Table 1.8 Regression Results

ROCE	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval]	
ECTR	-.2837638	.0674986	-4.20	0.000	-.4173416	-.1501861
RPE	-.0001565	.0000426	-3.67	0.000	-.0002408	-.0000722
PPE	.0004845	.0000698	6.94	0.000	.0003464	.0006226
_Cons	13.83454	2.688575	5.15	0.000	8.513933	19.15516
Number of obs	=	130				
F(3, 126)	=	24.77	Prob > chi2	=	0.0000	
R-squared	=	0.3709	Adj R-squared	=	0.3560	
Root MSE	=	5.2112				

Researcher's Computation (2023)

5. Conclusion and Recommendations

Human resources remain one of the significant resources to banks and managing it effectively has been a challenge in the banking sector. The performance of the banking sectors has drilled down as a result of inadequate management of human resource and this has resulted to loss of key talent personnel in the banking sector and poor employee morale and motivation. The study specifically focused on assessment of the effect of employee remuneration cost on the financial performance of listed deposit money banks in Nigeria; investigation of the effect of employee health and safety cost on financial performance of listed deposit money banks in Nigeria; examine the effect of employee retirement benefits on financial performance of listed deposit money banks in Nigeria. The study concluded that when explaining the effect of human resource accounting in terms of cost associated to it and its share of the company revenue on the overall financial performance of listed deposit money banks in Nigeria, employee cost to revenue, revenue per employee and profit per employee are the most significant to returns on capital employed of the listed deposit money bank. The findings of the study further uphold the transitional cost theory. The implication is that the DMBs investment on their human resources are yet to get balance structure to maintain returns sufficient in order to boost the financial performance of their companies. It is evident through the study that human resource accounting is useful for assessing a company's commitment to their human assets while still accruing economic benefit to the company. Management of DMBs need to ensure that the cost commitment to their employees is justifiable.

Based on the findings of this study, the following recommendations are arrived with.

1. Management of deposit money banks and labour unions to ensure there is appropriate accountable structure to improve the commitment of the companies to human resource management and the ways of boosting the financial performance of firms.
2. Management of deposit money banks should substantially invest in building the capacities and abilities of their employee through training, seminar, education as this will have a positive impact of the financial performance of the firm and improve their performance.
3. Management should ensure that the cost committed to employee emoluments and welfare is not above what the company revenue could absorb conveniently without negatively affecting the investors returns.

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