

HUMAN ASSETS ACCOUNTING AND FINANCIAL PERFORMANCE OF LISTED COMMERCIAL BANKS IN NIGERIA

Abolo, Aseinimieyefori Pereowei Ph.D
Department of Accounting, Ignatius Ajuru University of Education,
Rumuolumeni Port Harcourt, Nigeria

Email: perestic@yahoo.com

ABSTRACT

The study examined human assets accounting and financial performance of listed commercial banks in Nigeria. The objectives of the study were; to evaluate the relationship between recruitment and hiring costs and return on asset in listed commercial banks in Nigeria. And to investigate the relationship between compensation cost and return on asset in listed commercial banks in Nigeria. The study used the ex-post facto method of research design. The population and sample size of the study were a total of twelve (12) commercial banks listed as commercial banks on the NSE floor (NSE Fact book, 2020). Only secondary data collection was used in this study. The formulated research questions were analyzed with descriptive statistics. The hypotheses were tested using the lease square panel data regression analysis with the aid of E-view (10). The findings of the study were; that recruitment and hiring costs significantly influence return on assets of listed commercial banks in Nigeria. Also, that compensation cost significantly influence return on assets of listed commercial banks in Nigeria. And there is significant influence of firm size in the relationship between human asset accounting and financial performance of listed commercial banks in Nigeria. The study recommends that; Recruitment and hiring competent personnel are very essential in facilitating not only the level of productivity but also the development of personnel in any organization. The bank therefore, should take recruit and staff training seriously as it has positive impact on the banks performance. The ever increasing technological sophistication especially in this age of computer technology has really made it compulsory for organizations to meet changing situations. Training for capacity building is therefore recommended to sustaining economic growth and development because human capital is the greatest assets of any organization.

Keywords: Human assets accounting, Financial performance, Recruitment and hiring costs, Return on asset, Compensation cost and Firm size.

INTRODUCTION

Stakeholders are concerned about the performance of commercial banks in Nigeria today. According to Ekwe (2016), the performance of Nigerian banks has remained unimpressive over the last decade. A review of the banking index's quarterly performance in 2016 revealed that, aside from the first quarter, when it gained 1.484 percent, the sector declined by 0.93 percent and 8.05 percent in the second and third quarters, respectively, and shed 0.16 percent in the fourth quarter (Omodero & Ihendinihu, 2020). According to Odhong' (2018), one of the most important challenges facing the Nigerian banking sector is performance, which has existed from the sector's foundation. He noted that a lack of qualified people is one of the key difficulties that has made it impossible for banks to carry out their missions, which is why the sector has seen a lot of ups and downs, making the IMF's 2007 projection of the banking industry's contribution to Nigeria's GDP unattainable. The problem with Nigeria's banking sector, according to Sanusi (2012), is multifaceted, ranging from inconsistency in government policies to a bloated workforce with low labor per capita output. Again, the high rate of labor turnover in the Nigerian banking sector during the last two decades has been deemed the highest in the country's history of banking. In the

previous five years alone, over 300 banking employees have lost their jobs (NBS, 2020). This raises doubts about the impact of human asset on bank performance.

Employees like any other assets, can be affect the production and general performance of an organization, thus employee are the human asset accounting (HCA). According to Kashive (2013), entails accounting for human resource expenditures as assets, as opposed to standard accounting, which sees these costs as expenses that affect earnings. In simple terms, Enyi and Akindehinde (2014), described human asset accounting as accounting for the worth of people in an organization in order to improve information for decision-making by users of financial information. Their concept is inextricably linked to financial data and its application. "Human asset accounting," according to Frederikson and Westphalen (2018), is the act of identifying, measuring, and sharing information on human resources in order to allow effective management inside an organization.

The term "human assets" refers to the quality of individuals within businesses. It represents the economic potential of education and training (Teixeira, 2015). According to Becker (2017), "human assets" refer to people's productive abilities. It reflects a tendency in research and organizational productivity in which the general issue of capital is fully seen (and treated) as a value of economic means capitalized in physical and human resources (Dobija, 2018). Human capital is also a profit generator in the knowledge economy (Bontis & Fitz-Enz, 2012). It has also been characterized (on an individual level) as the sum of four factors: genetic inheritance, education, experience, and attitudes toward life and business (Hudson, 1993; Bontis & Fitz-Enz, 2013). According to Micah et al. (2012), human assets are people's energies, skills, talents, and knowledge that are, or potentially can be, used to the production of goods or the provision of useful services. Many firms in today's economy have identified human capital as one of the primary sources of competitive advantage (Bassegy et al., 2012). A human asset can be a source of long-term competitive advantage for businesses since it is valued, rare, unique, and non-substitutable (Wright et al., 2013). As a result, resource-based theorists say that human assets can be a source of long-term advantage because tacit knowledge and social complexity are difficult to replicate (Coff, 2014).

According to traditional accounting principles, any expenditure on human resources is treated as a cost, which reduces profit. Bullen and Egler (2018), on the other hand, stated that human asset accounting entails accounting for expenditures on human resources as assets. Woodruff (1973) human asset accounting as the identification, accumulation, and dissemination of information about human resources in dollar (Naira) terms. He continued by defining "human asset accounting" as the systematic accumulation of information about changes in human resource investments and the dissemination of that information to operating managers in order to assist them in making better decisions than they could without the additional information. Seth (2019), stated that human asset accounting (HAA) means accounting for people as original resources. According to him, it is the quantification of an organization's human capital costs and values. Additionally, it is a way of thinking about human resource management in formal organizations. He confirmed that worker knowledge is a critical resource for a typical modern business firm and that, as business organizations become more complex, the demand for competent people will continue to grow, while financial reporting ignores such resources. According to Parameswaran and Jothi (2011), "human asset accounting" is defined by the American Accounting Association (1973), as the process of measuring data about human resources and communicating that information to interested parties. According to the various definitions above, human asset accounting is simply accounting for the value of people in an organization in order to enhance the information available to users of financial information for decision-making.

Financial performance is a subjective indicator of a business's ability to generate revenue through the use of assets from its primary mode of operation. It is a broad indicator of a business's overall financial health over a specified time period and can be used to compare similar businesses within the same industry. Kaplan and Norton (2015), argue that performance can also be measured using a balanced scorecard based on four perspectives: financial, customer, employee's internal business output, and learning and growth. According to Richard (2009), financial performance refers to an

organization's actual output or results in comparison to its intended outputs (or goals and objectives). Organizational performance refers to three distinct aspects of firm outcomes: financial performance (profits, return on assets, return on investment, and so forth); product market performance (sales, market share, and so forth); and shareholder return (total shareholder return, economic value added, etc.).

Fajana (2014), observes that while the traditional accounting system tracks the use of money and materials, the value of human capital employed is rarely included in financial statements. Nevertheless, prior research has demonstrated a positive correlation between human asset accounting and financial performance. This study is based on this premise in order to determine the extent to which human assets accounting and financial performance of listed commercial banks in Nigeria are comparable. Human capital is a critical component of an organization's assets. However, there is no legal requirement for organizations to account for human capital in their annual reports. The primary objective of this review is to determine the benefits of human resource practices to the business. This review discusses the theoretical definitions of HRA and the implementation challenges associated with using HRA measurement models to forecast an organization's performance. Human asset accounting's proponents undoubtedly established a paradigm. Today, human resource (HR) practitioners agree and understand that employees are valuable assets that are valued higher than an organization's intangible and physical assets.

Statement of the Problem

Historically, conventional financial reporting practices have failed to classify the enormous investments made in staff recruitment and other related expenses as long-term assets to be amortized appropriately on the income statements and balance sheets. While employees are frequently referred to as assets, they are generally treated as costs due to the absence of a credible system for valuing them (Mayo, 2019). Human asset accounting scholars and proponents have argued for its inclusion in financial reporting. Sharma (2012), on the other hand, confirmed that an organization's performance is contingent on the quality of its human capital. She asserted that an organization's success is contingent upon the quality of its human resources, regardless of whether they work in manufacturing, service, or retail.

According to Onyekwelu et al. (2019), existing research has concentrated on developed countries, and policies and frameworks have been derived from these countries and may be applicable only to such developed countries. The developing and emerging economies may be unable to adopt due to the fact that their human asset management frameworks, ideologies, and practices vary in terms of hiring and recruiting, training and development, health benefits, and other employee benefit frameworks, ideologies, and practices. Additionally, Islam (2020) and Chukwu et al. (2019), argue that human asset (capital) accounting (HAA) is a relatively new branch of accounting, with global applicability and regional differences.

Thus, the few empirical studies conducted in Nigeria on the relationship between human asset accounting and financial performance differ from the current study in terms of variable operationalization, methodology used, and industry studied. For instance, Onyekwelu et al. (2015) examined the effect of human resource accounting on the financial performance of Nigerian banks, but only four banks were considered. Edom et al. (2015) limited their analysis to a single bank (access bank) and used profitability as a proxy for financial performance. Micah, (2012) used return on investment (ROI) as a proxy for financial performance in their study, which was not specifically focused on the banking industry. Although Ekwe (2019) examined the banking industry, he used return on assets (ROA) and return on equity (ROE) to measure financial performance. Abubakar (2020) based his study on a sample of selected service companies, and the dependent variable was financial reporting quality rather than financial performance.

Thus, this study provides empirical support for the aforementioned claim, closes gaps in prior research, and advances the frontier of knowledge in this field of study. This is, of course, why this research endeavors to examine the relationship effect of human asset accounting and financial

performance in the scope and content gaps. The study addressed the content gap by incorporating recruitment and hiring costs and compensation cost as dimensions and measures of earnings per share return on assets. Additionally, the study is unique in that its analytical scope spans a ten-year period (2011–2020) in order to address the issue of empirical information data obsolescence. Thus, it is on the basis of the foregoing premises that the researcher decided to write about human asset accounting and the financial performance of Nigeria's listed commercial banks.

Conceptual Framework Model

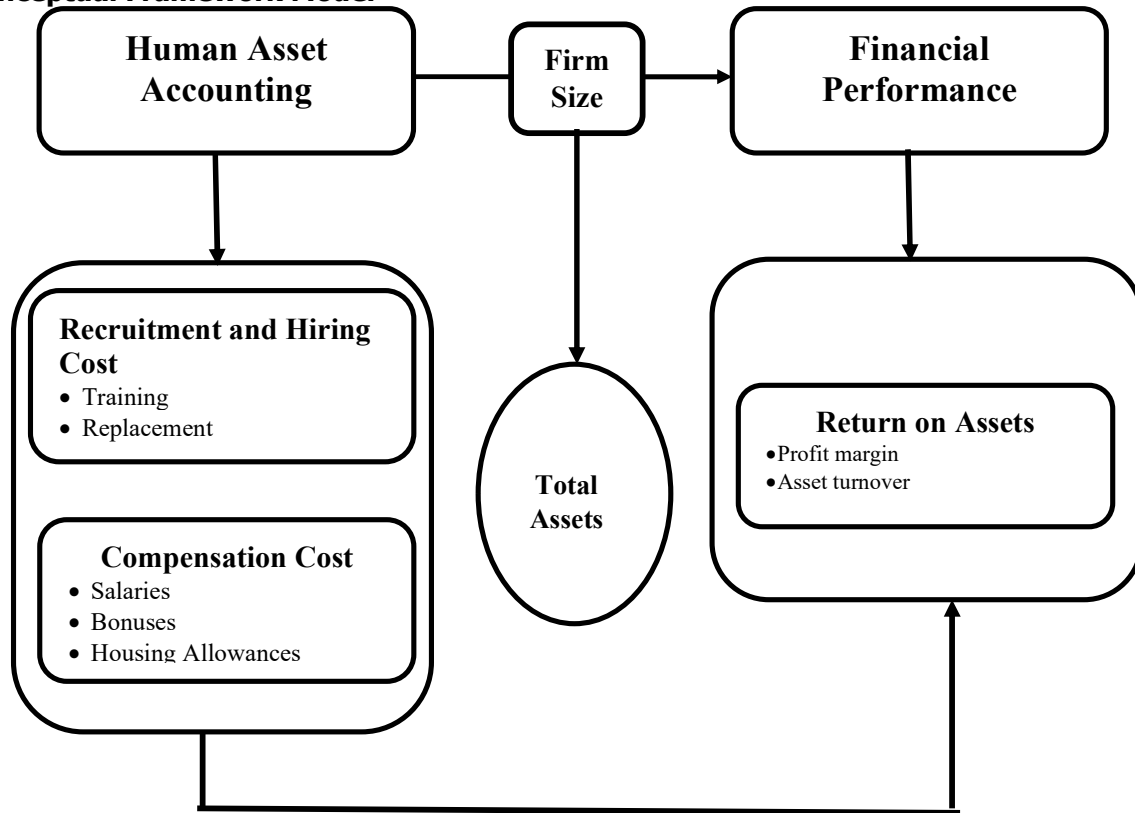


Fig: 1.1 Conceptual Framework Model

Source: Islam (2020); Chukwu et al. (2019); Onyekwelu, et al. (2019), Edom, et al. (2015) and Abubakar (2020) and researcher’s conceptual desk, 2022.

Aim and Objectives

The aim of this study is to investigate human assets accounting and financial performance of listed commercial banks in Nigeria. The specific objectives of the study are to:

1. Evaluate the relationship between recruitment and hiring costs and return on asset in listed commercial banks in Nigeria.
2. Investigate the relationship between compensation cost and return on asset in listed commercial banks in Nigeria.
3. To examine the extent to which firm size moderates the relationship between human asset accounting and financial performance of listed commercial banks in Nigeria.

Research Hypotheses

Ho₁: There is no significant relationship between recruitment and hiring costs and return on asset in listed commercial banks in Nigeria.

Ho₂: There is no significant relationship between compensation cost and return on asset in listed commercial banks in Nigeria.

Ho₃: Firm size does not moderate the relationship between human asset accounting and financial performance of listed commercial banks in Nigeria.

Conceptual Framework

Human Asset Accounting

Human assets accounting is a management tool that can be used to gather this critical information by calculating the cost of recruiting, hiring, compensating, and training employees. It can be used to assess employee training programs, boost productivity, and help managers make more informed decisions about promotions, transfers, layoffs, replacements, and turnover. (Prabhakar, 2013). Human capital or asset accounting, as defined by Flamholtz (2012), is the process of accounting for people as an organizational resource. It entails calculating the costs associated with recruiting, selecting, hiring, training, and developing human capital. Additionally, it entails determining the economic value of individuals to the organization (Okpala & Chidi, 2010). Essentially, it is an information system that informs management about changes in the business's human resources over time. Human resources accounting can be defined as the accounting process that identifies, quantifies, and measures human resources for the purpose of assisting management in adapting to changes in their quantity and quality in order to achieve equilibrium between required and provided human resources (Johanson et al., 2017).

Human asset accounting, according to Jeroh (2013), is the process of recognizing and reporting investments made in an organization's human resources that are currently not accounted for in standard accounting practice. It entails calculating the costs incurred by businesses and other organizations in recruiting, selecting, hiring, training, and developing human capital. Human asset accounting is the act of identifying, measuring, and sharing information on human resources to enable effective management within an organization. It is an extension of the accounting concepts of matching expenditures and revenues and structuring data in order to present meaningful financial information. The American Accounting Association's Committee on Human Resource Accounting (1973) describes human resource accounting as the act of discovering and measuring data on human resources and distributing this information to interested parties.

Dimensions of Human Asset Accounting

Recruitment and Hiring Cost:

The price of finding the right person to hire can be hefty. There are various potentially high costs just in the process of recruiting. According to Kashive (2013), These include advertising the opening, the time cost of an internal recruiter, the time cost of a recruiter's assistant in reviewing resumes and performing other recruitment-related tasks, the time cost of the person conducting the interviews, drug screens and background checks, and various pre-employment assessment tests (Odhong et al., 2014).Schwarz and Murphy (2018), the first step in developing an organization's human capital is recruitment. At a high level, the objectives are to find and hire the best candidates in a timely and cost-effective manner. Larger companies may have entire teams of recruiters, while smaller companies may only have one.

Methods of recruitment

Job fairs and campus visits: Job fairs are events that bring together a diverse group of employers in one location to network and meet with potential employees. The cost of holding a job fair is split among the various participants, and it can attract a wide range of candidates. Campus visits can help find candidates who are looking for a chance to prove themselves and have the minimum qualifications that a firm seeks, such as a college education, depending on their proximity to a college or university.

Headhunters and recruitment services: These outside services are designed to help a company build a talent pool, but they can be quite costly. Although these services can be extremely effective in supplying qualified applicants for specialized or highly sought-after job positions,

headhunters' fees can range from 20% to 35% of the new recruit's annual salary if the individual is hired.

Using networking: This technique can be applied in a variety of ways. To begin, this recruitment strategy entails simply asking existing employees if they know of any qualified candidates who could fill a specific position. This method is known as "employee referrals," and it frequently involves giving bonuses to current employees if the recommended applicant is hired. Another method involves using industry contacts and membership in professional organizations to help build a talent pool by spreading word-of-mouth information about the organization's needs (Kashive, 2013).

Online recruitment: Due to its ability to reach a large number of applicants quickly and cheaply, using the Internet to find a talent pool is quickly becoming the preferred method of recruiting. For starters, a company web site can help a company compile a list of potential applicants who are very interested in the company while also exposing them to the company's values and mission (Wiley et al., 2012).

Traditional advertising: This can include a variety of different types of advertising, from newspaper classifieds to radio commercials. Companies are estimated to spend USD 2.18 billion on these types of advertisements each year. This was the most popular form of recruitment for organizations before the Internet, but the decline in newspaper readership has made it significantly less effective.

Compensation Cost

Hibbs and Locking (2000) found more positive than negative effects of wage dispersion on a firm's real value added. Bingley and Eriksen (2001), who focused on the skewness of intra-firm wage distribution in Denmark, found evidence that characterized a u-shaped relationship with firm productivity. Research in this area has moved from a focus on separate human resource practices and employee performance to a more macro-focus on the overall set of human resource practices and firm performance (Arthur, 1992; Huselied, 1995; Huselid & Becker, 1996; Huselid, Jackson & Schuler, 1997). A firm's human resource practices must develop employees' skills, knowledge, and motivation such that employees behave in ways that are instrumental to the implementation of a particular strategy. Investment in human capital has a positive effect on firm financial performance. As a result, investment in human capital should include all expenses incurred in improving employees' knowledge, education, expertise, and skills. This may involve salaries and wages, training and development, payments for conventions and conferences, dues and subscriptions, and so on. No further explanation has been found for other expenses like training and development, subscriptions, etc., through financial statements. This is not to say that companies do not spend money on improving the skills, expertise, knowledge, and education of their employees. It also agrees with the findings of Abdul et al. (2014). They found that salaries had a positive relationship with the performance of the firms in Pakistan, although it was not statistically significant. The employee's competence generates value through knowledge, skills, abilities, talent, and know-how.

Financial Performance

Although several research works had been carried out on performance related issues as it affects the organization but its definition has been challenging to researchers. According to Roger and Wright (1998), performance is probably the most widely used dependent variable in organizational research today, yet it remains one of the vaguest and loosely defined constructs. They further confirmed that the struggle to establish a meaning for performance has been ongoing for many years. Gavrea, et al. (2011), confirmed the fact that defining performance has been very challenging to researchers because of its many meanings. However, Lebars and Zuske (2006), defined performance as a set of financial and non-financial indicators which offer information on degree of achievement of objectives and results. Performance generally could be regarded as one

of the key determinant factors that are widely used in measuring the success or failure of an organization. Financial performance therefore is the degree of success recorded by a firm or the extent to which a firm achieves its objective in terms of revenue, profitability, capital adequacy, liquidity, stock prices, and efficiency.

Return on Assets

Return on assets (ROA) measures how efficiently a company uses the bank's assets to generate operating profits. In general, a high return-on-assets ratio means that a Banks employees are productive and well managed. Intangible assets are non-monetary assets that cannot be seen, touched, or physically measured, such as trademarks, brand names, and patents. However, accounting rules don't recognize these assets on the balance sheet.

According Prastowo (2002), Return on Assets (ROA) is used to measure the effectiveness of the company in generating profits by exploiting its assets. This ratio may give an indication of good or bad neighbor management in implementing cost control or management of his property. Return on Assets (ROA) is often used as a tool to measure the rate of return on total assets after interest expense and taxes, (Brigham, 2001). The high Return on Assets (ROA) will be good for the company. Value Return on Assets (ROA) high would indicate that the company is able to generate profits relatively high value assets. Investors would like the company to the value of Return on Assets (ROA) is high, as companies with Return on Assets (ROA) which is capable of producing high levels of corporate profits is greater than the Return on Assets (ROA) is low (Ang, 2001).

Firm size

In today's world, the size of a firm is crucial to its success due to the phenomenon of economies of scale. Modern corporate firms look to increase their size so as to get a competitive edge over their competitors by reducing production costs and increasing their earnings per share. Bigger firms can manufacture items at much lower costs than smaller firms can (Olawale et al., 2016). Shaheen and Malik (2012), described firm size as the quantity and array of production capability and potential a firm possesses or the quantity and diversity of services a firm can concurrently make available to its clients. Firm size plays a significant and crucial role in explaining the kind of relationships the firm has within and outside its operating environment. Babalola (2013), argues that the larger a firm is, the more the influence it has on its stakeholders, and so large firms tend to outperform small firms. Larger firms' performance is expected to be better than for smaller entities. This is due to their ability to harness market power and existence of economies of scale and scope. Larger firms would have a higher ability to charge more than the average prices than smaller firms. Holding costs constant, these higher prices would translate into higher profitability for the larger firms as compared to the smaller ones. The scale concept argues that the bigger the firms become the more they enjoy reduction in average costs of production. This is because marginal costs tend to decrease as output increases. As the average unit cost decreases, essentially representing higher production efficiency, this result increases profitability of the firms. The two factors, market power and economies of scale, would translate into increase in size of firms leading to increase in their profitability (Abiodun, 2013)

Theoretical Framework

Human Capital Theory

In the economics literature, human capital refers to the productive capabilities of people (Becker, 1964). Human capital theory holds that it is the key competences, skills, knowledge and abilities of the workforce that contributes to organizations competitive advantage. It focuses attention on resourcing, human resource development, and reward strategies and practices. According to Human Capital Theory, education is an investment because it is believed that it could potentially bestow private and social benefits. According to Armstrong (2012) cited in Odhong & Were (2013),

Human capital theory helps to determine the impact of people on the business and their contribution to shareholder value. It demonstrates the HR practices that produce value for money in terms, for example, of return on investment.

According to Dae-bong (2009) Human capital theorists believe that education and earning power are correlated, which means, theoretically, that the more education one has, the more one can earn, and that the skills, knowledge and abilities that education provides can be transferred into the work in terms of productivity. Human capital refers to the knowledge, expertise, and skill one accumulates through education and training (Severine & Lila, 2009; Dae-bong, 2009; Malose & Boris, 2012; Armstrong, 2014). Human capital theorists have typically argued that organizations can increase their human capital by internally developing the knowledge and skills of their current employees, and by attracting individuals with high knowledge and skill levels from the external labour market. That is, organizations can try to make and buy human capital. Human capital grows in two ways; when the organization uses more of what people know and when more people know more of what is useful to the organization (Choudhury & Mishra, 2010). Human capital theory as the main underpinning theory in studies related to human capital, in this study the theory supports variables such as knowledge management, education, training, and skills development as well will bring about increased productivity of the employee that could lead to increase in performance of the firms as a result of management efficiency.

Empirical Review

A number of empirical studies have been conducted on the issue of human capital accounting in corporate organizations. Adebawojo, et al. (2015), investigated human asset accounting and performance of business organizations in Nigeria. The empirical study adopted an Ex-post facto research design, conducted on all 18 publicly quoted banks in Nigeria capital market. The instrument of data collection was questionnaire designed on a six steps Likert Scale and validated through peer review with Cronbach Alpha Coefficient of 0.807 and 0.870 for Human Asset and Organization Performance respectively. The hypothesis was tested using simple regression model. The result of the analyses confirmed that human asset accounting significantly affects the banks' performance at F-ratio = 56.280, $P \leq 0.05$, $R^2 = 0.193$. It concluded that capitalizing human assets would positively impact on performance of organizations and recommended its disclosure as intangible asset in the statement of financial position.

Okpako, et al. (2014) examined the relationship between human resource accounting and firm performance. It conducted a survey on seven (7) companies quoted on the Nigeria Stock Exchange. The study used primary data and secondary data. 260 questionnaires were distributed and 246 questionnaires were retrieved on the companies targeted at the staffs of human resources accounting, and audit/internal control departments which were considered to be the relevant departments for this study. Following the collection of completed questionnaires, the study adopted the principle component analysis to quantify the responses obtained so as to obtain a series which captured the composite value of the human resource accounting variable. It also adopted firm performance indicator (ROE) over the period 2006-2010. The study reveals that human resource accounting variables impacted positively to the level of firm performance.

Micah, et al. (2012) studied firm's financial performance and human resource accounting disclosure of companies in Nigeria. Five years financial data from 2005-2009 of fifty-two companies across all sectors as listed on the Nigeria stock exchange fact book of 2005-2009 were extracted using simple random sampling techniques. Descriptive, correlation and regression statistical techniques were used in analyzing the data. Their findings show that the combined effect of Firm Financial Performance accounted for 75.9% of the variation in Human Resource Accounting Disclosure (HRAD) with an F-ratio 3.581 being significant at 5% confidence level. The positive correlation between Return on Equity (ROE) and Human Resource Accounting Disclosure (HRAD) supposes that an increase in return on equity encourage firm in reporting human capital information so as

to establish trustworthiness with stakeholders; enhance external reputation, appear legitimate in the public eye and avoid cost for non-legitimacy. The study concludes that human resource accounting information of an organization is very important factor for decision makers in an era of knowledge-based economy. There is growing evidence of the interest and demand among stakeholders for information from firm in relation to human capital. Based on this, the study recommended among others, regulatory intervention in the accounting standard setting process for human capital reporting in Nigeria. Standard should be created for human resource identification and measurement. This will enhance valuation of human capital, ensure a higher degree of utility to stakeholder, uniformity in disclosures and will allow reliable comparison of human capital values.

Rehma (2011), confirmed that human capital accounting has a significant relationship with financial performance measures of returns on capital employed (ROE) and earnings per share (EPS). Their study specifically revealed that, one of the important components to strengthen the intellectual capital performance is human capital accounting. This means that, investing more to boost the employees' productivity would increase the human capital efficiency of employees. This could imply that performance of an organization depends on its human capital accounting.

Tessema (2014) conducted a study aimed at investigating the relationship between human capital accounting and firm performance. A survey research design was adopted to test this proposition using a sample of 143 small scale footwear companies in Addis Ababa, Ethiopia. Estimation results using a regression model indicates that human capital accounting in company leads to improved company's performance. The findings of this study have important implications for theory, policy and practice. Findings of Jelil (2014) however suggest that the majority opinion among scholars in the field of accounting is that human capital should be included in the statement of financial position. There are also some empirical researches on the issues of human capital accounting in Nigeria. Okafor (2009) in her study on disclosure of human capital in the annual reports of firms in Nigeria, solicited for views of accountants both academic and in practice. She found that most accountants are in favour of human resource accounting (HRA) theories and practice in the country, but they are of the view that, HRA information should be presented as a separate report and as asset in the balance sheet so that financial statements without HRA Information shall be presented as a healthier manner. She advocated the use of staff costs methods method of HRA valuation for inclusion in financial statements. The study also found that their number of difficulties in HRA which include; difficulty in quantifying human resource without bias, difficulty in establishing acceptable parameters for valuation, establishing basis for depreciating of human assets, high mobility from one job to other and agitation for salary increase can makes valuation.

METHODOLOGY

In light of the foregoing, this study used the ex-post facto method of research design. This research examines commercial banks in Nigeria that are active and listed on the Nigerian Stock Exchange as of December 2020, and that have consistently prepared annual reports from 2011 to 2020 in accordance with all Nigerian laws and standards. In the years studied, there were a total of twelve (12) commercial banks listed as deposit money banks on the NSE floor (NSE Fact book, 2020). The sample size of this study is twelve (12) listed commercial banks in the Nigerian Stock Exchange. This number is derived by the application or use of Taro Yamane formula for sample size determination. Only secondary data collection was used in this study. The formulated research questions were analyzed with descriptive statistics. The hypotheses were tested using the lease square panel data regression analysis with the aid of E-view (10).

Table 1: Population of the Study

S/N	Bank
1.	Zenith Bank Plc
2.	Guaranty Trust Bank Plc
3.	Access Bank Plc
4.	United Bank For Africa Plc
5.	First Bank of Nigeria Limited
6.	Fidelity Bank Plc
7.	First City Monument Bank Plc
8.	Stanbic IBTC Bank Plc
9.	Sterling Bank Plc
10.	Union Bank of Nigeria Plc
11.	Unity Bank Plc
12.	Wema Bank Plc

Source: *Nigeria Stock Exchange (NSE), 2022*

Operationalization and Measurement of Variables

Recruitment and Hiring Cost: It refers to the expenses incurred by the bank for include advertising the opening, the time cost of an internal recruiter, the time cost of a recruiter's assistant in reviewing resumes and performing other recruitment-related tasks, the time cost of the person conducting the interviews, drug screens and background checks, and various pre-employment assessment tests.

Compensation Cost: This is the reward made to employees for the mental and or physical effort expended in achieving the objectives of the bank. It is measured in this study by annual wages and salaries of employees in the bank.

Return on Asset: Return on Assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings.

Model Specification and Estimation

According to Nmesirionye et al. (2019), regression analysis is concerned with the study of how one or more variables affect changes in another variable. Thus, on the basis of the theoretical framework, the study adopted the regression formula adopted in the work of with some modifications. The model is specified as:

$$Y = f(a_0 + bX_1) + E_t$$

Where:

- y = Criterion variable
- f = Function
- x = Independent (explanatory) variables
- a = Intercept
- b = Slopes

In functional form, our hypotheses model are:

Where:

- ROA = Return on Asset
- REH = Recruitment and Hiring Cost
- COC = Compensation Cost
- FS = Firm Size
- ∞ = Regression Constant
- β = Regression Coefficient
- μ = Stochastic term

The model for this study was adapted from the models of Abdul, Muhammad, Hafiz, Ghazanfar, and Arslan (2014) with little modification to suit the purpose of this present study.

In functional form, our model is:

The First Model: The First hypothesis test model; shows the relationship between return on assets and recruitment and hiring costs: $H0_1: ROA = f(REH)$(i)

The Second Model: The Second hypothesis test model; shows the relationship between return on assets and compensation cost: $H0_2: ROA = f(COC)$ (ii)

Partial Correlation of the moderator variable: The Third hypothesis test model; Firm size does not moderate the relationship between human asset accounting and financial performance of listed commercial banks in Nigeria. $H0_3: FZ = f(HAA + FP)$ (ii)

Results

Table 4.2: Descriptive Statistics on all the Variables of the Study

	REH	COC	ROA	FS
Valid N	150	150	150	150
Mean	713317.2133	1025111.57	2.0430	514875578.2267
Std. Deviation	1280832.17872	1854998.74605	2.55424	908265533.25103
	2.997	2.838	5.158	2.370

Source: Result of SPSS Computation, 2022.

Table 1 shows the descriptive Statistics of all variables of the study. It was shown that: recruitment and hiring cost had a mean value of 713317.2133 and a standard deviation of 1280832.17872; compensation cost had a mean value of 1025111.57 and a standard deviation of 1854998.74605; firm size had a mean value of 514875578.2267 and a standard deviation of 908265533.25103; return on asset had a mean value of 2.0430 and a standard deviation of 2.55424; The skewnesses of 2.997, 2.838, 2.621, .953, 5.158 and 2.370 which shows the normality of the variables and is within the threshold of +/- 1.96. It signifies the absence of outliers in the data set.

Data Diagnostic and Robustness Tests

Stationary (Unit Root) Test

In order for data collected for the study are fit for analysis, the stationarity or unit root test was conducted on the study variables data. Using the popular Augmented Dickey Fuller (ADF) unit root test due to the fact that the data involves 10 years' time. According to Gujarat & Porter 2009, the unit root test is performed to ascertain that the time series data are stationary for co-integrated.

Table 4.3 Summary Stationary Test Result

Variables	Order of Diff. & Intercept	ADF Statistics	Test critical values at		probability
ROA	First difference and individual intercept	-6.653210	1%	-3.737853	0.0002
			5%	-2.991878	
			10%	-2.626542	
REH	First difference and individual intercept	-4.865441	1%	-3.737853	0.0003
			5%	-2.991878	
			10%	-2.626542	
COC	First difference and individual intercept	-6.434862	1%	-3.679322	0.0001
			5%	-2.987767	
			10%	-2.622989	
FS		-8.646898	1%	-3.653730	0.0000
			5%	-2.957110	

	First difference and individual intercept and trend		10%	-2.617434	
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Source: Statistical Computation result from Researcher's E-view (v.12), 2021

From the above table, all the variables are stationary since the ADF values are greater than the corresponding critical values and the probability is less than 0.05 for all variables. Therefore, the data becomes stationary at first difference integrated of order 1 that is 1(1), for {Recruitment and Hiring Cost (REH), Compensation Cost (COC) and return on asset (ROA) and Firm Size (FS)}, apart from the log of) at second difference and individual intercept and trend 1(2). The first Model: The first hypothesis test model; shows the relationship between return on assets and recruitment and hiring costs: $H_0_4: ROA = f(REH)$ (iv)

Table 4.3: Regression Analysis Summary on the Effect of Recruitment and Hiring Cost on Return on Asset

Variables	Coef	T-Stat	Sig.	R	R ²	Durbin Watson
Constants	2.074	8.150	0.092	0.647	.418	2.026
REH	2.043	2.726	0.046			

Dependent Variable: Return on Asset

Source: Result of SPSS Computation, 2022.

Table 4.3 showed the Correlation Coefficient of R 0.647, the value is strongly indicating that a strong relationship exists between the regressors and return on assets. The Coefficient of determination $R^2 = 0.418$, implying that the 42% variation in return on assets is explained by changes in the regressors, while 68% variation in return on assets is explained by other variables not included in the model. Also the Durbin Watson Statistics showed the observed value of 2.401; which indicates the absence of auto correlation, thus the conclusion of the usefulness of the model by the researcher. Recruitment and hiring costs had a t-value of 2.726 and a significant probability value of $0.046 < 0.05$ level of significance. Therefore, the researcher concludes that recruitment and hiring costs significantly influence return on assets of listed commercial banks in Nigeria.

The second Model: The second hypothesis test model; shows the relationship between return on assets and compensation cost: $H_0_5: ROA = f(COC)$ (iii)

Table 4.4: Regression Analysis Summary on the Effect of Recruitment and Hiring Cost on Return on Asset

Variables	Coef	T-Stat	Sig.	R	R ²	Durbin Watson
Constants	2.074	8.150	0.092	0.728	.529	1.814
COC	1.193	2.850	0.037			

Dependent Variable: Return on Asset

Source: Result of SPSS Computation, 2022.

Table 4.4 showed the Correlation Coefficient of R 0.728, the value is strongly indicating that a strong relationship exists between the regressors and return on assets. The Coefficient of determination $R^2 = 0.529$, implying that the 53% variation in return on assets is explained by changes in the regressors, while 47% variation in return on assets is explained by other variables not included in the model. Also the Durbin Watson Statistics showed the observed value of 1.814;

which indicates the absence of auto correlation, thus the conclusion of the usefulness of the model by the researcher.

Compensation cost had a t-value of 2.850 and a significant probability value of 0.046 < 0.05 level of significance. Therefore, the researcher concludes that compensation cost significantly influence return on assets of listed commercial banks in Nigeria.

Ho₃: Firm size does not moderate the relationship between human asset accounting and financial performance of listed commercial banks in Nigeria.

Table 4.5: Partial Correlation Analysis showing the Impact of Firm Size on the Relationship between Human Capital Cost and Financial Performance

Control Variables			Human Capital Cost	Financial Performance
Firm Size	Human Capital Cost	Correlation	1.000	.853
		Significance (2-tailed)	.	.015
		Df	0	147
	Financial Performance	Correlation	.853	1.000
		Significance (2-tailed)	.015	.
		Df	147	0

Source: Result of SPSS Computation, 2022.

From the output of the partial correlation explains that, firm size bears significant influence on the relationship between human asset accounting and financial performance of listed commercial banks in Nigeria. The correlation coefficient of 0.853 means that, firm size has positive interplay of human asset accounting and financial performance as depicted by the probability level of 0.015 which is lower than the chosen alpha level of 0.05, thus leading to the rejection of the null hypothesis and accepting the alternative hypothesis. Hence, there is significant influence of firm size in the relationship between human asset accounting and financial performance of listed commercial banks in Nigeria.

Summary Results Findings

Table 4.6 Summary Computation of Hypotheses Results

Hypotheses	Coefficient	T-Stat	P-Value 0.05	Statistical Decision	Result
H0 ₁	2.043	2.726	0.046	Significant	Rejected H0 ₄
H0 ₂	1.193	2.850	0.037	Significant	Rejected H0 ₆
H0 ₇			.015	Significant	Rejected H0 ₆

CONCLUSION

Every organization needs human capital be it medium or small. This is because the success of any organization depends on the ability of human capital to effectively and efficiently optimize other resources such as money, materials, machines, time, and information. The significance of the human capital theory therefore is that it regards people as assets and stresses that investment by organization in people will generate worthwhile returns. Without human capital, other resources cannot be operationally effective. The real health of the organization is indicated by the human behavior variables, like group loyalty, skill, motivation and capacity for effective interaction, communication and decision making. As earlier stated, the success or otherwise of an organization depends on how best the scarce physical resources are utilized by the human resource. Human capital being the traditional name for human skills used in the organization over the years have

remained less valued and recognized in the literature of the accounting professions. To bring value to human resources is to re-describe it as human capital.

Human capital gives rise to human capital assets whose value is significant to the organizations. Human capital asset (HCA) brings out the investment in human capital. The identification and recognition of human value in organizational productivity is what human capital accounting all entails. In other words, human capital accounting involves measuring the costs incurred by organizations to recruit, select, hire, train and develop human assets. Information generated by the analysis of investment in human resources has many applications for managerial purposes. Investments on human capital can be on the following expense heads: salaries and wages, contribution to pension funds, employees' welfare funds, expenditure on advertisement for recruitment, payment for redundancy, cost of selecting and hiring, training cost, subsistence allowance, educational and tour expenses, medical allowance and ex-gratis payments. It aims at ensuring that investments in human resources are treated as assets, capitalized and written-off within the expected period that the staff will serve the organization. In accounting, expenses on human capital are identified as recruitment cost, training cost, staff welfare, pension, and so on. It was also gathered in this study that recruitment and hiring costs, compensation cost and health and safety costs as dimensions of human capital cost have a significant impact on return on asset as measures of financial performance. This implies that when investment in human capital is high, employees are motivated to become efficient in the discharge of their duties and responsibilities. The relationship between human capital cost and financial performance (measured by return on asset) of listed commercial banks in Nigeria within the period of 2011 to 2020 is significantly moderated by firm size. This means that the larger the bank, the more investment on human capital, and vice versa. Finally, a well-developed system of human capital cost contributes significantly to internal decisions by management and external decisions by investors.

RECOMMENDATIONS

Based on the findings of this study and the conclusion drawn thereof, the following recommendations are made:

- (i) Recruitment and hiring competent personnel are very essential in facilitating not only the level of productivity but also the development of personnel in any organization. The bank therefore, should take recruit and staff training seriously as it has positive impact on the banks performance.
- (ii) The ever increasing technological sophistication especially in this age of computer technology has really made it compulsory for organizations to meet changing situations. Training for capacity building is therefore recommended to sustaining economic growth and development because human capital is the greatest assets of any organization.
- (iii) There is the need for the bank to invest more to increase in size, as size was identified as a moderator variable between human capital cost and financial performance.

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