EFFECT OF HUMAN CAPITAL INVESTMENT ON PERFORMANCE OF NIGERIAN BANKS

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Abstract
This study focused on the effect of human capital investment on financial performance of deposit money banks in Nigeria from 2011–2020. The study employed Ex-Post Facto research design. Data were extracted from annual accounts of the selected banks in Nigeria. The data were analyzed and the formulated hypotheses were tested using regression analysis with aid of e-view 9.0. From the result of the statistical analysis, it was revealed that human resource investment has no significant effect on both return on equity and earnings of deposit money banks. The researchers recommended among others, that relevant tools should be developed in order to facilitate accounting for the Human Resources, its quantification or measure and should be made inclusive as part of an organization’s total worth

Keywords: Human capital investment, Return on equity and Earnings
1.0 INTRODUCTION
Every corporate organization's main purpose has been to maximize profit and shareholder wealth throughout time. Without investing in human capital, this goal will be impossible to achieve. Employees of the required caliber are expected to assist firms in achieving their key objectives. Human capital refers to an employee's acquired talents, as well as his or her knowledge and experiences (Kucharcikoval 2011). Individual devotion, according to Alika and Stan (2014), is the most significant component of human capital traits. They highlighted that regardless of the employee's skills, abilities, and experience, the person will not execute as anticipated unless there is a commitment to complete the assignment in a creditable manner. An organization that does not offer value to its human resources investment is doomed to fail (Imeokparia and Oyinloye, 2020). According to definitions, human capital (in entrepreneurial activity) is the mix of an employee's intellect, skills, experiences, talent, and artistic ability that is directed to provide value-added to a product or service (Bruce-Lockhart 2016; Markjackson and Innocent 2020; Sawulski and Paczos 2021).

In addition, in recent years, the advancement of information and communication technologies (ICT) as well as social and communication interactions has had a significant impact on working with and using human capital. The quality of a company's human potential, which comprises knowledge, skills, abilities, information, and experience, determines its human capital. Individuals' willingness to use this potential, as well as their capacity to use it, affect their rate of utilization. The current expenditure of non-monetary funds to obtain future monetary or non-monetary returns is the essence of generating and enhancing the value of human capital. Thus, whether one-time or long-term actions (Vodák and Kucharcková 2011), while investing cash in the formation and development of human capital, investing in human capital (and thus mostly in education) can be evaluated using comparable methodologies as other forms of investments (Psacharopoulos and Patrinos 2004).

The amount spent on an employee's knowledge, skills, experience, principles, engagement, and training is referred to as human capital investment. Human capital investment can be defined as the monetary resources that a firm contributes to or spends on its employees in exchange for their experience, skill, education, and dedication. According to Rosak, Szyrocka, and Borkowski (2007), business capital includes money, finance, labor, and machine, but the most essential resource is labor, or human capital. As a result, regardless of the amount of activities accomplished, workers are the most valuable asset of any organization. Organizational performance, on the other hand, is concerned with the efficacy and efficiency of a company's operations. It is the process of following a preset set of instructions and attaining the desired results within that framework. Performance indicators are intended to provide information on the quality of procedures carried out within a company, as well as assistance in meeting goals on time and within a budget.

In general, one of the primary determinant elements that are commonly utilized in measuring the success or failure of businesses is performance. Although various research studies have been conducted on performance-related issues that influence organizations, enterprises, and even manufacturing industries, academics have found it difficult to define it. Researchers have found it difficult to define organizational performance because of its multiple connotations, according to Gavrea, Ilies, and Stegerean (2011). According to Akindele (2007), the question of who is responsible for the efficient use of all other business resources has been a hot topic. Human resources, the traditional designation for human abilities used in organizations, have remained undervalued and underrecognized in accounting literature over the years. Human capital is a re-description of human resources that adds value. Human capital generates human capital assets, which have a high value for businesses. Baker (2003)
stated that, human capital asset (HCA) brings out the investment in human capital. How do will evaluate the value attributable to human capital? There has always been the problem of accounting for human capital value, which is conventionally being applied in reducing the profit of Micro-Finance Bank (MFB) and by implication; result is huge loss to organizations. Several studies have been conducted on the effect of human capital investment and financial performance in Nigeria by various authors (Ezejiofor, Nwakoby, and Okoye, 2016; Imeokparia and Oyinloye, 2020; Ezejiofor, John-Akamelu, and Iyidiobi (2017); Charles 2016), but the majority of them focused on other sectors, whereas this paper focused on the banking sector and used multiple regression analysis, it is necessary to study if employee development will improve the financial performance of Nigerian banks. As a result, the purpose of this study is to see how much human capital investment affects the financial performance of deposit money banks listed on the Nigerian stock exchange. The main objective of this study is to empirically examine the effect of human capital investment on the financial performance of listed firms on Nigeria stock exchange. The specific objectives are:-

1. To ascertain the extent to which human capital investment affects return on equity of deposit money banks in Nigeria.
2. To determine the extent to which human capital investment affects earnings per share of deposit money banks in Nigeria.

2.0 REVIEW OF RELATED LITERATURE

2.1 Human Capital Investment

Both qualitative and quantitative evaluations are possible for human capital investments. The quantitative approach aims to measure the number of individuals and working hours in relation to financial indicators (Matiuaityte arkiunaite Prakapaviciute and Korsakiene, 2016). The qualitative approach aims to measure excellence and knowledge on a company or branch level, contributing effectiveness. Human capital investments are made for a variety of reasons in each firm. One of them is when an organization's management is forced to seek compromise solutions in order to set the framework for future anti-crisis efforts (Irfan and Qadeer, 2020). The second option saves money for HR by hiring professionals to handle new equipment on their own (Mikhailov and Miasnikov 2019). Mikhailov and Miasnikov (2019) studied the relationship between investment expenses (C) and productivity (Q) at various stages of a business. Furthermore, "an amalgam of qualities like as education, experience, training, intelligence, energy, work habits, trustworthiness, and initiative that determine the value of a worker's marginal product" has been termed as "human capital" (Frank & Bemanke, 2007).

Human capital refers to the processes that involve training, education, and other professional initiatives in order to improve an employee's knowledge, skills, abilities, values, and social assets, which will ultimately affect the employee's satisfaction and performance, as well as the performance of the company. "Human capital is a vital input for firms, especially for employees' ongoing progress," Rastogi (2000) noted.

2.2 Return on Equity

A company's financial efficiency is measured by its Return on Equity. Higher values suggest that the corporation is effective at earning income from its investments and passing it on to its stockholders. It is frequently used in economic literature (Poddi & Vergalli, 2009). Net income divided by total equity, stated as a percentage, is the ROE for a fiscal year. It calculates the rate of return on common stock owners' ownership interest (shareholders' equity). It demonstrates how successfully a corporation uses investment money to achieve
earnings growth. It assesses a company's efficiency at creating profits from every naira of net assets (assets minus liabilities). It is mathematically represented as follows:

\[ \text{Return on equity} = \frac{\text{profit after tax}}{\text{Total equity}} \]

Return on Equity (ROE) is the amount of net income returned as a percentage of shareholder’s equity. Return on equity (also known as “return on net worth” [ROWN]) measures a corporation’s performance by revealing how much profit a company generates with the money shareholders have invested.

2.3 Earnings per Share

The phrase earnings per share (EPS) refers to the part of a company's earnings that is distributed to each share of common stock, net of taxes and preferred stock distributions. Earnings per share is a metric that measures a company's profitability. Calculated as follows: 

\[ \frac{\text{Net Income} - \text{Preferred Dividend}}{\text{Average Outstanding Shares}} = \text{Earnings Per Share (EPS)} \]

There are two ways for calculating EPS: basic and fully diluted. Fully diluted EPS, which takes into account the potentially dilutive impacts of warrants, stock options, and instruments convertible into common stock, is a more accurate figure and is used more frequently. EPS can be further segmented according to the time period concerned. Prior (trailing) earnings, recent (current) earnings, and expected future (forward) earnings can all be used to determine profitability.

2.4 Empirical Review

A number of empirical studies on the impact of human capital investment on financial performance in Nigeria have been done. Jarmila and Cristina (2022) investigated the factors that influence investing decisions when a 20% profit is normally invested with a model return of roughly 14%. The results reported in Archetype models based on similarity clustering confirm these findings. The findings are based on a Czech Republic empirical investigation (278 respondents, omnibus survey). Furthermore, the study finds that company experience has a favorable impact on human resource management and future development, resulting in a higher investment share. In summary, this article demonstrates the critical necessity of human resources and human resource management in the international business environment, indicating that human resource investments are critical to success, Supporting the functioning of companies in a favorable and consistent manner, and entrepreneurship will continue to be an important component of post-COVID-19 activities. Mohammad, Mahi, and Nazamul (2017) evaluated the influence of human resource development investment on the financial performance of Bangladesh's banking sector. The study concluded that there is a substantial association between human resource development and investment and financial performance, based on economic data, regression models, and survey data. Using performance indicators such as profitability ratios, dividend coverage ratios, debt-equity ratios, and efficiency ratios, Ezejiofor, Olise, and John-Akamelu (2017) evaluated the investment value of a telecommunication corporation to see if it is equivalent to commercial banks in Nigeria. The research design was ex-post-facto. To compute the ratios on profitability, dividend cover, long-term solvency, and operating efficiency, data were gathered from seven years of annual reports and accounts of telecommunication companies and commercial banks, and examined using financial ratios and the t-test statistic. The findings reveal that there is a large discrepancy between telecommunication firms’ debt ratios and those of commercial banks in Nigeria, as well as a considerable divergence between telecommunication firms' efficiency ratios and those of commercial banks. The adoption of Human Resource Accounting (increase in staff compensation, increment in staff, and staff retirement benefits) on the Profitability of Corporate Organizations is studied by Ezejiofor, John-Akamelu, and Iyidiobi
(2017). This study used an exploratory research design and time series data. With the help of SPSS version 20.0, the data was analyzed and assessed using the t-test statistical tool. The study discovered that a raise in staff compensation has a beneficial impact on organizational profitability, as well as that the amount of staff increment has an impact on organizational profitability. Another result is that employee retirement benefits have a beneficial impact on the profitability of the company. Asset recognition criteria and disclosure requirements, according to Ogenyi and Oladele (2015), were a major factor in the non-accounting of Human Resources in Nigeria, even on a voluntary basis. Ezejiofor, Nwakoby, and Okoye (2016) investigated the investment choice of a manufacturing firm to see if it is comparable to that of Nigerian commercial banks. The study used an ex-post facto research design. With the help of SPSS version 20.0, the data was analyzed using financial ratios and the t-test statistic. The findings reveal a large gap in profitability between manufacturing enterprises and commercial banks in Nigeria. Ezejiofor, Nwakoby, and Okoye (2015) investigated the impact of Human Resource Management on the performance of businesses. The data was examined using a five-point Likert's scale in this study, which used a survey research approach. Simple regression analysis was used to examine the hypotheses. Human Resource Management has an impact on the performance of a corporate organization, according to the findings of this study. "The Effect of Human Capital Development on Organizational Productivity," according to Okoye and Ezejiofor (2013). The data was evaluated with the help of means, variance, and standard deviation, and the three hypotheses were checked with the help of the z-test statistical tool. The study discovered that human resource development is extremely important for any organization, small or large, because it is generally known that no firm can survive wholly without humans. In a study titled Human Resource Accounting: Recognition and Disclosure of Accounting Methods and Techniques, Islam, Kamruzzaman, and Redwanuzzaman (2013) state that the major benefits of such accounting include developing effective managerial decision making, quality of management, preventing misuse of human resources, increasing human asset productivity, improving morale, job satisfaction, and creativity, and so on.

Various study reviewers have emphasized the impact of human capital investment on corporate financial performance in Nigeria over the years. According to several studies, the present global economic downturn has resulted in a greater emphasis on human capital as a result of increased globalization and job market saturation. Both developed and developing countries place a premium on human capital development in order to boost economic growth by devoting more time and effort. So, in order to bridge the research gap in explaining the impact of human capital investment on the financial performance of publicly traded companies, this paper discusses human capital theory, agency theory, and stakeholder’s theory.

3.0 METHODOLOGY
3.1 Research Design
Ex-post facto research design was adopted for this study. Asika (2005) defined ex-post facto design as a type of research study in which groups of participants are determined by pre-existing conditions and events from the past.

3.2 Population and Sample Size
The population for this study comprised all deposit money banks listed on the Nigeria Stock Exchange. In order to reduce the large population size to a manageable size, judgmental sampling techniques were adopted to select the deposit money banks in Nigeria during the period of 2011-2020; those banks whose data are adequate and consistently made their financial statements available to the respective Stock Exchange for the studied period were
chosen for this study. A sample of Nine (9) Nigeria deposit money banks listed on Nigeria Stock Exchange was selected. They include Union Bank Plc, Sterling Bank Plc, FCMB, UBA, Fidelity Bank Plc, Access Bank Plc, First bank Plc, Guaranty Trust Bank Plc and Zenith Bank Plc.

3.3 Source of Data
This research relies heavily on secondary data. The information was gathered from the Nigerian Stock Exchange’s (NSE) publications, as well as the annual reports and accounts of the listed deposit money banks, particularly the comprehensive income statement and statement of financial situations, as well as their respective notes to the accounts. The dependent and independent variables were calculated using data gathered from Nigerian stock market publications (NSE).

3.4 Method of Data Analysis
This study employ Ordinary Least Square (OLS) estimate using panel data from 2011 to 2020 covering a period of ten (10) years for 9 deposit money banks, to estimate and provide evidence on the nature of relationship between accounting information and share price. The hypotheses' inferential statistics were calculated with the help of E-view 9.0 statistical software, using the coefficient of correlation, which is a good measure of relationship between two variables and tells us about the strength and direction of the link. The OLS Regression Analysis was used to predict the value of a variable based on the values of the other variables, as well as to explain the influence of changes in the variables' values.

3.5 Model Specification
The study adopts the simple Regression Analysis valuation to examine the value relevance or degree of association between the stated variables. The empirical model is specified as follows: The independent variable is the human capital investment measured with Human Resource Accounting Disclosure Index (HRI).

ROE=$\beta_0 + \beta_1 \text{HRI} + \epsilon$ - - - - - - - - i
EPS=$\beta_0 + \beta_1 \text{HRI} + \epsilon$ - - - - - - - - ii

Where:
ROE= return on equity
EPS= earnings per share
HRI = human resource accounting disclosure index
$\beta_0$= Constant
$\beta_1$= Co-efficient of HC
$\epsilon$= Stochastic Error Term

Decision Rule:
Accept null hypothesis if P-value $> 5\%$ level of significance and reject null hypothesis and accept alternate hypothesis if p-value $< 5\%$ level of significance.
4.0 DATA ANALYSIS AND RESULT

4.1 Data analysis

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>HRI</th>
<th>ROE</th>
<th>EPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.119000</td>
<td>-0.077000</td>
<td>0.504000</td>
</tr>
<tr>
<td>Median</td>
<td>0.120000</td>
<td>0.215000</td>
<td>0.460000</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.160000</td>
<td>0.450000</td>
<td>0.730000</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.080000</td>
<td>-0.920000</td>
<td>0.380000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.026437</td>
<td>0.542649</td>
<td>0.115778</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.303514</td>
<td>-0.615773</td>
<td>0.852312</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.230247</td>
<td>1.765769</td>
<td>2.511086</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>0.400418</td>
<td>1.266679</td>
<td>1.310324</td>
</tr>
<tr>
<td>Probability</td>
<td>0.818560</td>
<td>0.530816</td>
<td>0.519358</td>
</tr>
<tr>
<td>Sum</td>
<td>1.190000</td>
<td>-0.770000</td>
<td>5.040000</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>0.006290</td>
<td>2.650210</td>
<td>0.120640</td>
</tr>
<tr>
<td>Observations</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: E-view output, 2021

Table 1 shows the merged data of the nine (9) sampled deposit money bank. It represents the average data calculated annually for the period of ten (10) years for each and every variable of this study. It was based on these data that the hypotheses were tested.

4.2 Test of Hypotheses

Hypothesis I

Ho: Human capital investment does not have significant effect on return on equity of deposit money banks in Nigeria.

Table 2: Simple regression analysis between HRI and ROE

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.665946</td>
<td>0.840765</td>
<td>0.792071</td>
<td>0.4512</td>
</tr>
<tr>
<td>HRI</td>
<td>-6.243243</td>
<td>6.913383</td>
<td>-0.903066</td>
<td>0.3929</td>
</tr>
</tbody>
</table>

Source: E-View output, 2021

The results of the regression on tables 2 shows that there is positive relationship between ROE and HRI ($\beta_1 = -6.243243$). The slope coefficients show that the variables are not statistically significant because the probability values are higher than 5%. This implies that variable have negative insignificant relationship with ROE.
The result in table 2 indicate that the R-squared for the model is .009, meaning that the regression model used for this study predict 9%. The independent variable explained 9% of the variation in ROE. 91% of variation in ROE is not explained by the regression model. The Durbin-Watson value of 1.562016 indicates the absence of serial correlation in model. From the test of coefficients result in table 2, the probability value of F-statistics = 0.815529 implies that the regression model is insignificant in predicting the relationship between the independent variable and the dependent variable. The significance between the variables is higher than α=0.05.

**Hypothesis II**

Ho: Human capital accounting has no significant effect on earnings per share of deposit money banks in Nigeria.

**Table 3: Simple regression analysis between HRI and EPS**

<table>
<thead>
<tr>
<th>Dependent Variable: EPS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Method: Least Squares</td>
<td></td>
</tr>
<tr>
<td>Date: 03/15/22  Time: 10:12</td>
<td></td>
</tr>
<tr>
<td>Sample: 2011 2020</td>
<td></td>
</tr>
<tr>
<td>Included observations: 10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.817297</td>
<td>0.150479</td>
<td>5.431296</td>
<td>0.0006</td>
</tr>
<tr>
<td>HRI</td>
<td>-2.632750</td>
<td>1.237350</td>
<td>-2.127733</td>
<td>0.0660</td>
</tr>
</tbody>
</table>

R-squared 0.361392  Mean dependent var 0.504000
Adjusted R-squared 0.281566  S.D. dependent var 0.115778
S.E. of regression 0.098134  Akaike info criterion -1.628117
Sum squared resid 0.077042  Schwarz criterion -1.567600
Log likelihood 10.14059  Hannan-Quinn criter. -1.694504
F-statistic 4.527249  Durbin-Watson stat 1.672067
Prob(F-statistic) 0.066026

*Source: E-View 9 output, 2021*

The results of the regression on table 3 show that there is positive relationship between EPS and HRI (β1 = -2.632750). The slope coefficients show that the variables are not statistically significant because the probability values are higher than 5%. This implies that variable have negative insignificant relationship with EPS.

The result in table 3 indicate that the R-squared for the model is .36, meaning that the regression model used for this study predict 9%. The independent variable explained 36% of the variation in EPS. 64% of variation in EPS is not explained by the regression model. The Durbin-Watson value of 1.562016 indicates the absence of serial correlation in model. From the test of coefficients result in table 3, the probability value of F-statistics = 1.672067 implies that the regression model is insignificant in predicting the relationship between the independent variable and the dependent variable. The significance between the variables is higher than α=0.05.

Conclusively, since the P-value of the test is less than α=0.05, going by the rule of thumb, H1 is accepted and Ho rejected. Thus, human capital investment has no statistical significant effect on earnings per share of selected listed deposit money banks in Nigeria.
5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions
The impact of human capital investment on financial performance was the subject of this study. The financial statements of nine publicly traded companies from 2011 through 2020 were used. Because people are considered vital assets critical to the survival of firms in a competitive economic climate, the statistical research demonstrated that human resources have a considerable impact on financial success. The data gathered from secondary sources was examined in light of the study's goal. The study indicates that human resource investment has no substantial impact on both return on equity and earnings of deposit money banks based on inferential statistical analysis of the data and the conclusions.

5.2 Recommendations
The following suggestions were made:

1. Relevant tools should be developed to assist accounting for human resources, their quantification or measurement, and their inclusion as part of an organization's total worth.

2. Corporate executives, such as those in the banking industry, should make it a routine to attend seminars and conferences. These are places where new skills can be found and cultivated. Firms should have a culture of teaching, developing, and inspiring employees to do their best for the company's financial growth.
References


