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HUMAN CAPITAL EFFICIENCY AS A PARADIGM FOR IMPROVED BANK PERFORMANCE IN NIGERIA.

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ABSTRACT

Recently the Nigerian banking industry, has seen an upsurge on the reliance of contract personnel and staff as an intergarl part of human resources. There has been a debate on the effect and implications of this paradigm shift on performance as human capital reporting is yet to be standardized. This study examined the effect of human capital efficiency on the financial performance of quoted commercial banks in Nigeria. A cross-sectional analysis of all the banks quoted on the Nigerian Stock Exchange as at 31st December 2018 for a period of 9years (2010 – 2018) was conducted. Expost-facto research design was employed and secondary data were obtained from Nigerian Stock Exchange fact books, annual reports and accounts of the sampled banks. The data obtained were subjected to statistical analysis using Pearson coefficient of correlation, heteroskedasticty, normality test and ordinary least square regression test at 5% level of significance. The results reveal there is a positive and statistically significant relationship between Human Capital Efficiency and financial performance of commercial banks in Nigeria. The researcher recommends the employment of efficient work-force rather than cheap labour in the Nigerian banking system, recognition and inclusion of human capital accounting in the reporting framework of banks and constant effort made to improve human capital efficiency for improved financial performance.

Keywords: Human Capital Efficiency, Intellectual Capital, Financial Performance.

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1. Introduction

All employees' contribution to the growth and value of the firm is refered to as human capital. Human capital is regarded as an aspect of intellectual capital which is considered an intangible asset. The present corporate performance measurement system is heavily inclined towards financial and physical aspects of the company and thus lacks relevant information regarding the performance of the intangible assets or intellectual capital efficiency (Rubina,2011). However, over the past decades, businesses have recognized the importance of managing their intangible assets and have considered brand development, stakeholder relations, reputation and organisational culture as the most important resources of sustainable business advantage (Masoud, Ayyub, & Mohammed, 2014). These ideas and processes add value to the organisation and thus improve their financial performance. The term intellectual capital for human capital has gained widespread interest in recent times and refers to the resources available to the company that are not shown explicitly in the statement of financial position. It is of an intangible nature, hence making it quite cumbersome to place a measurable value on it. It also refers to the abilities of human brain or mind that create value addition (Rubina, 2011).

Human capital as an intellectual capital consists of the stock of knowledge, capital skills, attitudes and intellectual agility of organisation's employees of all categories and their capacity to make quick decisions, cope with problems and create good personal inter-relationship (Gogan & Draghici, 2013). Financial sectors especially banks require an influx of highly qualified professional executives, as well as flexible customer-centric technology-savvy agility of skills that are more comprehensive than before (Shamsudin &Yian, 2013).

Few studies have been conducted to find out the contribution of intellectual capital on the financial performance of organisations especially the commercial banks. This is because the term " intellectual capital'' has just recently gained wide-spread interest in Nigeria. Much of the studies on intellectual capital has focused on western countries (Ogbo, Ezeobi, & Ituma, 2013). To date, few scholars have focused on the effect of intellectual capital on the financial performance of commercial banks in Nigeria. This is surprising given that many scholars (e.g., Ruta, 2009; Yang & Lin, 2009) argue that intellectual capital development is the hidden value that is not reflected in organisational financial statements, but has the potential to

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contribute to organisational profitability and competitive advantage (Ogbo, Ezeobi, & Ituma , 2013). Organisations ignore human capital development because by merely looking at the finacial statements, the value is not readily ascertained. However, this is wrong as findings have noted that intellectual capital is positively related to innovation. Wealth cannot be created until profits are generated from innovations (Waheed & Arshad, 2014). Most of these past studies are further considered out of date. Therefore, there is need to identify the Effect of human capital efficiency on financial performance (using return on asset (ROA)) of commercial banks in Nigeria in order to assess human capital as a paradigm for improved bank performance.

Thus, the question before us is; what is the effect of human capital efficiency on return on asset? Based on these, the study formulates the following hypothesis in the null form as follows:

Ho_1: Human Capital Efficiency (HCE) has no significant effect on financial performance of commercial banks in Nigeria [ROA]

2. Review of Related Literature

2.1 Conceptual Review

2.1.1 Human Capital

An employees contribution to the growth and value of the firm is referred to as human capital. Human capital is a measure of the economic value of an employee's skill set. The concept of human capital recognizes that not all labour is equal and that the quality of employees can be improved by investing in them. Efficiency of human capital is thus calculated as; $HCE = \frac{VA}{EC}$

Where:

HCE = Human Capital Efficiency Coefficient
VA = Value Added
HC = Total Salaries and wages for Company
VA = OP+EC+D+A

Where:

OP = Operating Profit
EC = Employee Costs [salaries & social costs]
D = Depreciation

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Pulic (2004) defines Human Capital (HC) as all employees and the value created by organisations in employees under a market assessment. Lonnqvist and Mettanen (2002) describes it as non-material sources of creating a companys' value based on the employees capabilities, organisations resources, the way of operating and relations with the share holders. Chizari, Mehrjardi, Sadrabadi, and Mehrjadi (2016) defined Intellectual Capital (IC) the set of all knowedge which has been possessed by the employees and the company and creates a competitive advantage. From the above definitions, it can be deduced that IC are the unique abilities of the human mind that adds vaule to a company and enables it maintain a competitive advantage. This consists of the stock of knowledge capital skills, attitudes and intellectual agility of organisation's employees of all categories and their capacity to make quick decisions, cope with problems and create good personal inter-relationship (Gogan & Draghici, 2013). Hashim, Osman, and Alhabshi (2015) sees it as an amalgamation of genetic inheritance, altitude, education and people experience in the life and business. They went further to cite Baron (2011) who is of the opinion that human capital refers to experts or employees skills, knowledge and experience shared with their organisation in order to add value. People have knowledge that they contribute to a firm when they are employed and firm total assets.

2.1.2 Financial Performance

According to Business Dictionary (2016) financial performance invovles measuring the results of a firm's policies and operations in monetary terms and these results are reflected in the firms return on Return on assests [ROA] given as : $\frac{\text{Profit before Interest \& Taxes}}{\text{Total asset}} \times 100$

It measures how effectively the firms assets are used to generate profit. For the purpose of this research, the ROA will be used as a measure of financial performance. A higher ratio is more favourable to investors because it shows the company is more efficiently managing assets to produce greater amounts of net income.

2.2 Theoretical Framework

2.2.1 Signalling Theory

This theory assumes managers are better informed than shareholders and others concerning the firms position and given this reason may choose to disclose information in an attempt to signal to the public regarding the firms position, More profitable firms will disclose more

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information to inform their stakeholders about their good performance are more likely to disclose more information regarding the intellectual capital as compared to firms with bad performance (Neysi, Mazraeh, & Mousavi, 2012). Signalling theory is concerned with how to address problems arising from information asymetry in any social setting. It suggests that the information asymetry should be reduced if the party possessing more information can send signals to other interest related parties (Kamath, 2014). Based on this theory annual reporting disclosure (of intellectual capital) of companys is important information because it affects investors decision making process (Dewi,Young, & Sundari, 2014).

2.2.2 Stakeholder Theory

Business Dictionary defines a stakeholder as a person,group or organization that has direct interest or concern in an organization, e.g., includes creditors, employees, government and its agencies, shareholders, suppliers and the community from which the business law draws its resources. Since the contribution of intangibles in the profit of a firm is increasing,it is felt by management that the financial reporting should also include IC disclosure which would give the stakeholders a broader and correct picture of the true value of firm and performance (Kamath,2014). The stakeholder theory suggests that all activities of the firm are carried out for the benefit of the stakeholders.

2.3 Empirical Review

Feng and Li (2001) investigated the impact of human capital as a component of intellectual capital. The study was on the senior managers who control the core technology and the result showed that human capital has an impact on performance.

Pulic (2004) measured Australian Banks intellectual performance [1993-1995] and Crotian banks capital performance [1996-2000] with the Value Added Intellectual Coefficient [VAIC] model. His findings show that performance rank and classic accounting rank give banks significantly different positions.

Kamath (2007) measred the intellectual capital of 98 indian banks with the [VAIC] Model and the final results showed that they make the best use of IC and financial capital out-perform those that fail to reach the effective operant level.

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Lui (2009) conducted an exploratory research on the relationship between IC and performance among China listed commercial banks in 2008. The results showed that the human capital value added coefficient and structual capital value added coefficient both had positive correlation with profitability.

Another study by Rubina (2011) aimed at identifying the influence of IC on the financial performance of 13 private commercial banks of Bangladesh listed with Dhaka stock Exchange ltd showed statistical significant correlation among the IC efficiency scores and performance indicators. The study made use of empirical data of 1998 – 2009 drawn from annual reports.

Khalique, Shanri, Mdilsa, and Samad (2013) conducted a research on impact of IC on the organisational performance of islamic banking sector in Malaysia. A total of 120 individuals were interviwed. Pearson correlation and multiple regression analysis were used to determine the influence of IC on the performance of islamic banking sector. The results revealed that IC has significant influence on the performance of lslamic banking sector in malaysia.

Hashim, Osman, and Alhabshi (2015) investigated the relationship between 6 elements of IC such as human capital, structual capital, customer capital, social capital, technological capital spiritual capital. The study was conducted using a structured questionnaire distributed to high-level management working in various organizations in Malaysia. The sample size was 187 respondents selected randomly based on non-probability convenience sampling . The data were analysed using the multiple regression technique. The results revealed that IC has significant influence on organisational performance in Malaysia.

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3. Design and Methodology

The study adopts the *ex post facto* research design. For the purpose of this study, an ex-post factor research design was adopted to see how the independent variable (Human Capital Efficiency) affect profitability (ROA). According to Onyeizugbe (2013) it is a systematic empirical study in which the researcher does not have direct control over the variables because they have already occurred or they cannot be manipulated. The population and sample of the study consists of 15 commercial banks listed on the Nigerian Stock Exchange as stated in the Nigerian Stock Exchange Fact book from 2010 to 2017. The 15 quoted banks represents the sample size for this study. The data for the study were sourced from NSE fact books, annual reports and accounts, and other relevant publications. Inferential statistics was employed in this study with the aid of STATA 13 using coefficient of correlation, which is a good measure of relationship between two variables that tell us about the strength of relationship and the direction of the relationship as well. Ordinary Least Square (OLS) regression analysis was used to validate the hypothesis.

3.1 Model Specification

$ROA_{it} = \beta_0 + \beta_1 HCE_{it} + \beta_2 PC_{it} + \beta_3 DER_{it} + \mu_{it}$

Control variables

PC = Physical Capacity (Non-current Assets/ Total Assets).

DER = Debt to Equity Ratio (Total Debt/Total Equity).

4. Data Analysis and Results

4.1 Descriptive Statistics

Table 1: Descriptive Statistics of variables used in this study

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	70	.1527778	.1723534	.05	1.39
hce	70	3.864222	5.441194	-11.39	30.29
pc	70	.6108889	.7088536	0	6.69
der	70	131.9228	879.8665	0	7370.77

Source: Researcher's computation using STATA 13, 2019

The mean in table 1 serves as a tool for setting benchmark. The median re-ranks and takes the central tendency. While the maximum and minimum values help in detecting problem in a data. The higher the standard deviation, the higher the risk. The standard deviation is a

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measure that summarises the amount by which every value within a data set varies from the mean.

Table 2: Normality Test of variables used in this study

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
roa	70	0.6010	0.3000	.	0.1300
hce	70	0.5700	0.0900	47.87	0.0720
pc	70	0.1200	0.0541	.	0.2100
der	70	0.0700	0.5700	.	0.0690

Source: Researcher's computation using STATA 13, 2019

All result for pr(skewness) and kurtosis are greater than 5%. Which implies that skewness and kurtosis asymtotically normally distributed. This implies that our data did not violate the normal distribution assumption of error terms.

H_o = significantly normally distributed
H_1 = not significantly normally distributed
If the joint probability value (Prob>chi2) is more than 5% = Accept H_1, (It is not significant)
If the joint probability value (Prob<chi2) is less than 5% = Accept H_o (It is significant)

Table 3: Correlation matrix of variables used in this study

Variable	ROA	HCE	PC	DER
roa	1.0000			
hce	0.1098	0.1919		
pc	0.6252	-0.0657	1.0000	
der	-0.0336	0.0387	-0.0909	1.0000

Source: Researcher's computation using STATA 13, 2019

4.2 Test of Hypotheses

4.1.1 Test of Hypothesis One

H_0: Human Capital Efficiency has no significant effect on Return on Asset (ROA) of quoted banks in Nigeria

Table 4: OLS Regression Analysis showing the relationship between ROA and HCE, PC, DER in Banking Industry.

Source	SS	df	MS	F(3, 66) = 35.25		
Model	1.45804175	3	.486013916	Prob > F = 0.0000		
Residual	1.1857638	86	.013787951	R-squared = 0.5515		
Total	2.64380555	89	.02970568	Adj R-squared = 0.5358		
				Root MSE = .11742		
roa	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
hce	.0049798	.0022937	2.17	0.033	.0004201	.0095396
pc	.179437	.0176665	10.16	0.000	.1443171	.2145568
der	5.37e-06	.0000142	0.38	0.007	-.0000229	.0000336
_cons	.0232105	.0191364	1.21	0.228	-.0148314	.0612524

Source: Researcher's computation using STATA 13, 2019

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Interpretation of Regression Result:

The regression result in table 5 shows the existence of a positive relationship between ROA and the independent/explanatory variables (hce, pc, der) at a statistically significant level of 5% significance levels. The coefficient of determination obtained is 0.55 (55%), which is commonly referred to as the R^2. The cumulative test of hypothesis using R^2 to draw statistical inference about the explanatory variables employed in this regression equation, shows that R-Squared value shows that 55% of the systematic variations in the dependent variable can be jointly predicted by all the independent variables. 45% was explained by unknown variables that were not included in the model. The overall significance of the model (F-statistic=0.0000) is statistically significant at 5%.

Model values:

ROA = .0232105 + .0049798HCE

The implication is that for there to be a unit/one naira increase in ROA, there must be 0.0232105 multiplying effect of HCE.

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance
Variables: fitted values of roa
chi2(1) = 12.49
Prob > chi2 = 0.0004

Decision:

The P-value of the test (Prob > F = 0.0000) is less than the critical value 0.05. In view of the rule of thumb, H_0 will be rejected and it is agreed that HCE has a positive statistically significant effect on ROA of banks quoted on the floor of Nigerian Stock Exchange at 5% level of significance.

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5. Conclusion and Recommendations

Human Intellectual capital plays a very vital role in the evaluation of organization's financial statement. The rationale for intellectual capital essentially arises from the fact that employees are the key to organizational success, in terms of efficiency and effectiveness. Intellectual capital therefore provides information about human resource cost and value which facilitates decision making and is expected to induce management to motivate its employees financially, educationally and otherwise for increased productivity and proper resource management. A firm with good quality and stable personnel is likely to improve on shareholders wealth. We therefore conclude that Human Capital Efficiency is a paradigm for improved bank performance in a competitive and growing economy like Nigeria. Based on this, the study makes the following recommendations:

1. Inclusion of Human Capital Accounting in the Financial Reporting of Nigeria Service Firms: Human Resource capital should be included in the statement of financial position of organization to aid investment decision. Major financial regulatory bodies such as International Accounting Standard Board, Central Bank of Nigeria, Financial Reporting Council of Nigeria, Nigeria Stock Exchange, Stock Exchange Commission et cetera should encourage the inclusion of human capital accounting in the financial reporting of Nigeria services firms.
2. Creation of Standards: Standards should be created for human resources identification and measurement by the Financial Recporting Council of Nigeria. This will enhance valuation of human capital, ensure a higher degree of utility to stakeholders, uniformity in disclosures and will show a reliable comparison of human capital values. Then banks in a bid to report higher value for employees peg higher pay and adopt the employment of more stable and qualified workforce.
3. Recruitment of highly qualified personnels by bank who can add value and not rely on cheap labour without relevant qualifications.

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Appendix 1

Banks quoted on the Nigerian Stock Exchange as at 31st December, 2017

1. Access Bank Plc
2. Diamond Bank Plc
3. ECO Bank Plc
4. FCMB Bank Plc
5. Fidelity Bank Plc
6. First Bank Plc
7. Guaranty trust bank Plc
8. Skye Bank plc
9. Stanbic IBTC Bank Plc
10. Sterling Bank Plc
11. Union Bank Plc
12. United bank for Africa Plc
13. Utility Plc
14. Wema Plc
15. Zenith international bank Plc

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