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INTELLECTUAL CAPITAL ACCOUNTING AND FINANCIAL PERFORMANCE OF QUOTED BANKS IN NIGERIA.

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Abstract

Knowledge management, skills, innovation and technological advancement have been the distinctive attributes of modern business organizations. The success and continuity of business corporations result from continuous innovation, application of new technological discoveries, and enhancement of the skills and knowledge of their workers instead of tangible assets like plant, property and equipment to produce expected performance. Corporate management have embraced the power of knowledge because of its ability to generate value though denied recognition and accountability in the financial statements. The Nigerian financial sector is a highly competitive type with each stakeholder struggling to lead to market. However, the success and excellence in such competitive environment depend immensely on the application of skills management, creativity and innovation. Despite that these intangible assets (intellectual capita!) have measurement difficulties, they are inevitable in the successful management of modern business enterprises. This study x-rayed the impact of intellectual capital accounting on the financial performance of quoted commercial banks in Nigeria, for the period of 2010 to 2016. It focused on value added intellectual capital, and structural capital as predictor variables while Net Profit Margin, and Return on equity are the response (dependent) variables. Multiple regression analysis with the aid of SPSS version 20 was used. The findings indicated that Human Capital (HC), has positive relationship with net profit margin (NPM) and Return on Equity (ROE) as indicated by the obtained significance values of 0.988 and 0.726, against the critical significance value of 0.05 respectively. The implication of this result is that intellectual capital makes constructive contribution towards the impressive performance of the banking industry and as a result, should be separately accounted for in the statement of financial position.

Key Points: Intellectual Capital Accounting, Structural Capital Accounting, Value Addition Intellectual Capital Accounting.

Introduction

The power of innovation and technological discoveries has made the economies of the nations of the world to become knowledge-based. This postindustrial society has witnessed a change from a goods-producing to a service economy that is based on “the growing power of ideas and virtual value, the turn from steel and hamburgers to software and intellectual property” (Peters 2010:20). This is because the indispensability of knowledge in corporate (organizational) management cannot be overemphasized. Unfortunately, the worthwhile value generated by this

intangible asset is denied inclusion in the financial statements. However, viable and forward- looking organizations often realize that these intangible assets are vital mechanisms through J which their performance can be evaluated. Ting and Lean (2009: 588) posit that knowledge- I based resources are the main source of businesses for catalyzing and sustaining competitive advantage in a dynamic business environment. Nevertheless, the success in such an environment is a function of creativity, innovation as well as skills management. Although these intangible assets according to Omete (2016:2), have typical relationship with intellectual capital which is cumbersome to measure, they have critical impact on successful management of modern organizations. Irrespective of the impact of intellectual capital on organizational growth, Omctc (2016:2) noted that most business enterprises drive their profitability by investing more in physical asset rather than intangible assets. People are usually regarded as the greatest asset of a company, faking a look at some of the items accounted for in a company's statement of financial position: cash, land, property, plants and equipment, inventory etc, one would observe that neither the asset 'people' nor its value exists. This poses a challenge to users of financial statement to make rational decisions when the most important, and potentially most valuable information is deliberately omitted. Abdel-Khalik (2003: 661) opines that not only is the value of intellectual capital important for financial statement users, the stock of intellectual capital embodied in people produces value for a company's final product or service and contributes to the entity's earning power and deserve quantitative value. Therefore, Intellectual Capital Accounting is an attempt towards placing monetary value on the knowledge and skills possessed by individual employees of an organization which are used in creating value for the company. Intellectual capital facilitates corporate expansion and achievement of organizational goals efficiently. Hence, for a firm to have competitive advantage, it must embark on human capital investments which Muhamad and Naintara (2013:76) defined as "the process of developing employees by providing them education or training or both". Education is usually an instrument used to develop employees' skills in such areas as Accounting, production, Banking and Finance, management, marketing, etc. Training on the other hand is carried out by supervisors working with the employees and teaching them specific functions and imparting the requisite knowledge to complete a given task effectively and efficiently. Intellectual capital has therefore become the oil that lubricates the engine room for firms and corporations, especially the banking industry which cannot survive without intellectual power and depends immensely on its for its continuity and growth.

Aim/Objectives of the Study

The aim of this study is to ;

determine the relationship between human capital accounting and net profit margin (NPM) of banks, in Nigeria.

establish how human capital accounting on return relates to equity (ROE) of banks in Nigeria.

Research Questions

What is the relationship between human capital accounting and net profit margin?

What is the interactive relationship between human capital accounting and return on equity?

Statement of Hypotheses

Hoi: There is no significant relationship between human capital accounting and net profit margin.

Ho_2: There is no significant relationship between human capital accounting and return on equity.

Scope of the Study

The study investigated the intellectual capital components of quoted banks in Nigeria as a geographical area, and their performances over a period of time. The study unit scope are banks located in Port Harcourt, the capital of Rivers State which arc quoted in the Nigerian Stock Fxchange (NSK) and have adopted the International Financial Reporting Standard (IFRS). The study examined the accounting systems and practice, accounting books as well as personnel records maintained by the respective banks with regard to intellectual capital accounting. On the time scope of the study, we shall consider the published audited financial statements of quoted commercial banks between the period of 2010 to 2016.

Literature Review Theoretical Framework *Human Capital Theory*

The theory of human capital emanated from the field of macroeconomic development theory (Schultz 1993). Also, Becker, in his classic Book *"Human Capital: A Theoretical and Empirical Analysis"* with particular reference to education, made an illustrative agreement to this domain. 1 le claimed that different kinds of capital exist such as: schooling, computer training programme, medical care expenditures, even lectures on virtues of punctuality and honesty. This according to him is because they contribute to the improvement of one's health, earning capacity, and development overtime.Consequently, this concurs with the capital concept which traditionally, claimed that expenditures on education, training, and medical care, etc are investment in capital rather than cost, with valuable returns that can be determined. Human Capital theory emanates from the assumption that formal education is greatly instrumental and inevitable towards the improvement bf the production capacity of a nation, like Nigeria. Infact, Aliyu, Suhal, &Suriyani (2014) agreed with the views of human capital theorists that "an educated population is a productive population". This implies that increase in performance and efficiency is a function of education since it enhances the capacity of workers' cognitive skills. Schultz Becker, and Mincer as cited in Babalola (2003:28) embraced the idea that people invest in education in order to increase their wealth of human capabilities which results from the combination of innate abilities and investment in individuals. From the opinions of classical economic theory, human capital sees labour as a merchandize commodity. It declares that labour should be exploited for the sake of capital.

Objectives of Human Capital Accounting

Human capital accounting when established, is expected to settle a number of objectives

To make effective supervision on the use of human capital by the management.

To supply cost value information for rational decision making on the acquisition, allocation and development of human capital so as to realize cost effective predetermined objectives.
To make adequate analysis of human asset (capital) on the basis of conservation, depreciation or improvement.
To facilitate sound development of management principles and informed future decision making through classification of financial implications of adopted practices.
The Necessity for Intellectual Capital Measurement
Human capital cannot be easily measured because of its intangible nature. However, it provides the organization with the ability to accomplish its strategic goals, undertake research and development projects by providing vital information (Paturcl and Ferchichi 2013 as cited in Omele 2018:7). Human capital can be measured using both direct and indirect methods. Pulic (2004) applied an innovative intellectual capital measurement called 'Value Added Intellectual Capital (VAIC). Among the many other intellectual capital measurements that emerged: (Tobin's Q Ratio, Direct Assessment Approach etc), VAIC method is adopted for this study. As an accounting method, the value Added is scarcely utilized in preparing and presenting financial performance of firms, yet it is an inevitable critical strategy for commendable performance of commercial banks (Omete 2016:7). In consideration of the advance nature of banking operations, intellectual capital is now an essential driver of firm's performance. In order to strive successfully and adapt to the dynamic economic environment, many banks have started providing value added services to their customers so as to retain and improve their growth targets. The rationale for the adoption of VAIC in the banking industry emerged from the strict regulation of banking activities by the Central Bank of Nigeria. Yet the close supervision and control of banking operations provide negligible avenue for competition. The implication of this Omete (2016) stressed is that sustainable business growth is assured through increase of intellectual potential efficiency of the employees.

Rationale for the Adoption of VAIC

The VAIC has been successfully applied at different times in many countries of the world and each of these applications justifies its credibility, reliability and effectiveness in measuring ; intellectual as well as human capital efficiency. The model was adopted in Turky(Yalamaandij Coskun, 2007), in India (Kamath, 2008), in Japan (Mavridis, 2004), in Malaysia (Muhammad and Bhary 2009), in Kenya (Omete 2016) etc. The fundamental reasons for adopting VAIC^{TM}in this study came from the results of research conducted on its applicability. However, Omete (2016:8) identified a number of justifiable reasons for the adoption of VAIC^{TM}.
The model produces quantifiable, objective and quantitative measurements without the
requirement ofany subjective grading.
It provides relevant, useful and informative indicators to all stakeholders with which they can identify and compare vital components of human capital for performance evaluation.
The model applies financial measures, such that any indicators, relations or ratios calculated may be compared with traditional financial indicators which are based on monetary measures.

The approach adopts relatively simple and direct procedures in calculating the relevant indexes and coefficients which are easy to understand especially to people that are used to traditional accounting information.
c) The model provides a kind of standardized measurement. The indexes calculated can be consistently applied and used for comparison within and outside the company or nationally.
f) VAIC makes use of published financial information so as to improve its measurement reliability. It also provides an intellectual capital measurement system which is coherent with the resource based-view as well as stakeholder view.

Research Methodology ***Research Design***

With reference to the aims of the study, ex-post facto research design was adopted in carrying out the research. Although this design is related to experimental research because it intends to create a cause-effect relationship between the variables under consideration, it also differs from it because the research subjects (variables of interest) were individuals in various banking operations or firms whose behaviours, opinions and inferences can neither be controlled nor manipulated by the researcher.

Population of the Study

The population designed for the study is the entire Nigerian banking industry. This is comprises the fifteen (15) commercial banks quoted at the floor of the Nigerian stock exchange. Below are the banks for the study; FCMB PLC, UBA PLC, Access Bank ECO Bank, Fidelity Bank, PLC, Zenith Bank, Stanbic IBTC Holding PLC, Union Bank PLC, Guaranty Trust Bank, Diamond Bank.

Sampling Technique/Sample Size

From the above population of study, we find it eminent to use census approach to conduct our survey. This implies that all the fifteen (15) commercial banks quoted at the floor of the Nigerian stock exchange would be covered by the study.

Method of DatSa Collection

The data for this research study was generated from secondary data. Specifically, data were obtained from the published financial statements (Statement of Financial Position, Statement of Comprehensive Income, Notes of the Accounts, and Value Added Statement) made available at the website of the selected banks listed at the Nigerian Stock Exchange. The selection of the banks were based on CBN local ranking as indicated by their asset base. The period of the study is between 2010 and 2016. Information was extracted from the financial statements through content analysis technique.

Table 2 Measurement of Variable**.;**

Independent variable		**Dependent variable**	
Proxies	Measurement	Proxies	Measurement
1ICA	IC-SC		
VAICA	SC + CF+ 1C	NPM	Profit After Tax xlOO
			Revenue
SCA	VA -HC	ROE	Profit After fax
			Shareholder Equity

Results and Discussion

Presentations of data:

Descriptive Statistics

The descriptive statistics of the variables used within the scope of this study is presented in the table below:

Table 2The data covers a period of seven years from 2010 - 2016

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Human capital accounting	104	21.00	58000000.00	7753729.3942	11199929.11417
Structural capital accounting	104	-11134115.00	166735785.00	15435545.9519	32192009.96344
value added intellectual capital	104	73880.00	1287521068.00	151649802.4423	277628868.0758
net profit margin	104	-125.19	103.56	20.0472	29.60989
return on equity	104	-394.32	109.44	5.0498	44.30456
Valid N	104				

Starting with the mean which represents the normal state of variables, it can be discovered the average human capital accounting (pre) is N7753729.39. With standard deviation of approximately 11199929.11.The maximum HCA 58000000.00 and the minimum HCA 21.00. For structural capital accounting, the average is 15435545.95, having a standard deviation of 32192009.96 with a maximum valve of 166735785.00 and a minimum of 11134115.00 (-ve). Also, the average value-added intellectual capital was 151649802.4423 with a standard deviation of 277628868.075. the maximum VAIC was 1287521068.00 and a minimum of 73880.00. for the dependent variables, net profit margin has an average of 20.04, with a standard deviation of 29.60 and a maximum of 103.56 and a minimum of 125.19 (-ve) while return on equity has a mean of 5.05 and a standard deviation of 44.30 with a maximum of 109.44 and a minimum of 394.32 (-ve)

Data Analysis

Test of Hypotheses

The study adopted multiple regression analysis with Ordinary Least Square, Table 3 presents a summary of the model specified extracted from the SPSS statistic version 20.0 output (see: Appendix I-VI). *i*

Table 3 Extract of the Model specified (Model 1 -VI)

R^2 Beta t Sig. (2-tailed)

NPM al b, (VAICA) l e (1)

VAICA	.007	.082	.826	.411

ROE a i b_2 (VAICA) +e (2)

VAICA	.009	.094	.958	.340

Hypothesis One

The first hypothesis of the study posits that there is no significant relationship between human capital accounting and net profit margin. Utilizing the regression output above, human capital accounting has a positive (B - -.001, t -.015, sig. " .988) relationship with net profit margin and judging by the significance level of .988 which is greater than the 0.05 significance level as depicted in the regression table above, the study therefore rejected the null hypothesis and concludes that there is a significant relationship between human capital accounting and net profit margin.

Hypothesis Two

The second hypothesis of the study posits that there is no significant relationship between human capital accounting and return on equity. From the regression output above, human capital accounting has a positives (B ;; .035, t ~ .351, sig. = .726) relationship with return on equity but was insignificant and judging by the significance level of .726 which is greater than the 0.05 significance level as depicted in the regression table above, the study therefore rejected the null hypothesis and concludes that there is a significant relationship between human capital accounting and return on equity.

Discussion of Findings

In line with the analysis and testing of the hypotheses formulated to examine the relationship between intellectual capital accounting and financial performance of quoted banks in Nigeria, the results disclose that net profit margin and return on equity have a positive relationship with human capital. This was supported by the works of Ezeagba (2016); Prosvirkina (2014); Sowunmi, Eleyowo, Salako, &Oketokun (2015). They examined and found a statistically significant relationship.between human capital and selected performance measurement indicators of quoted commercial;banks. However, our findings was in contradiction with the works of Yusuf (2013) who stated that efficient human capital utilization have no significant relationship on return of equity of banks.

Conclusion

The study examined intellectual capital accounting and financial performance of quoted banks in Nigeria. The ex-post facto research design was adopted in carrying out the research. Census approach was used to parry out our survey. This comprises all the fifteen (15) commercial banks quoted at the Nigerian Stock Exchange. The data for this research study was generated from secondary data. Specifically, data were obtained from the published financial statements (Statement of Financial Position, Statement of Comprehensive Income, Notes of the Accounts, and Value Added Statement) made available at the website of the selected banks listed at the Nigerian Stock Exchange. The selection of the banks were based on CBN local ranking as indicated by their asset base. The period of the study is between 2010 and 2016. Information was extracted from the financial statements through content analysis technique. The analysis was done using ordinary least square with the aid of SPSS version 20.0. The findings revealed that there is a significant relationship between intellectual capital accounting and financial performance of quoted banks in Nigeria.

Recommendations

With regard to the findings and conclusion of the study, the following recommendations arc made, on the belief that if implemented conscientiously and timely, it would not only ensure the completeness of the financial statements but also enhance the fairness, objectivity, and faithful representation of the information contained therein for rational decision making purposes. Knowledge is an indispensable asset whose worth cannot be debated. Consequently, all assets (tangible and intangible) should be capitalized in the statement of financial position.

The results of the tested hypotheses in the study revealed that intellectual capital is the heart of impressive financial performances of the banking industry. Therefore, the de-recognition and non-accountability of this intangible asset in the statement of financial position or regarding it to be part of goodwill will give rise to the problem of window-dressing accounting.

If equity and objectivity are to be allowed to take their full course in the treatment or capitalization of every asset, then the accounting profession should consider the nonaccountability of intellectual capital as an exercise of professional negligence. Hence, effort should be made to critically reconsider the debate on its due recognition in the statement of financial position.

Contributions to Knowledge

Sequel to the results obtained from the tested hypotheses confirming the relationship between intellectual capital and financial performance of quoted banks in Nigeria, the non-accountability of intellectual capital, unlike other assets, in the statement of financial position is a clear indication that the certification of the financial statements by relevant professionals, in that regard, is made in error. Hence, in addition to the outcomes of previous studies, the following contributions are pertinent, finally, the contribution of intellectual capital towards the profitability of the corporation can be evaluated and prompt action taken to remedy any incident from such evaluation that may likely jeopardize the attainment of corporate economic objectives.

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