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IMPACT OF HUMAN CAPITAL ACCOUNTING ON CORPORATE FINANCIAL PERFORMANCE- A STUDY OF SELECTED BANKS IN NIGERIA.

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ABSTRACT: *This study examines the Impact of Human Capital Accounting(HCA) on financial performance and market valuation using four publicly quoted companies(banks) in Nigeria. It presents a comparative analysis between the current accounting practice of corporate valuation(net worth) and what it should be if investments on human capital are treated as assets, capitalised and amortized over the useful life span of the assets. Data for this study were sourced through questionnaire which were administered to a randomly selected respondents of accountants of management cadre. Secondary data were sourced from the annual financial statements of five selected firms, relevant textbooks and the internet. Data were analysed using percentages and Chi-Square statistical test. The study reveals among others that there is a significant increase in firms' networth when investments on human capital are treated as assets and capitalized as against the current practice where such expenditures are treated as mere revenue expenses thereby leading to gross undervaluation of firms' Statement of Financial Position(Balance Sheet) and the Income Statement (Profit and Loss Account). The study recommends that investment in human capital should be treated as asset and so amortised over the expected period of service while the current practice of writing-off the annual investment on human capital from the the year's income statement should be discouraged as the practice grossly undervalues firms. Relevant regulatory bodies such as Financial Reporting Council of Nigeria, SEC, CBN, NDIC and so on are implored to make laws that will compel quoted firms to compulsorily integrate HCA in their financial reports.*

KEYWORDS: Human Capital, Human Capital Accounting,Human Assets, Corporate Valuation, Financial reports.

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INTRODUCTION

Background of the Study

Human capital also known as human resource has been severally refered to as a key factor of production. Many organisations have explicitly acknowledged the vital place of their human capital by designating it as their most valuable assets. Enterpreneurship/Human capital is considered veritable because the human capital is indispensable in the success of any organisation as it controls and cordinates the other factors of production. Human Capital is defined as the knowledge that individuals acquire during their life and used to produce goods and services or ideas in the market or non-market circumstances(Barker, 2003). Parameswaran and Jothi(2005) submit that human resource accounting can be examined from investment in human resource and the value of human resources. They note that these investment/expenditures that are incurred for creating, increasing and updating the human resource quality of an organisation. These investments encompases two key issues namely:

- the productive capacity arising from knowledge;
- the utility and improving methods of assessing the productive capacity of human capital.

Human capital is related to intellectual capital, knowledge management and or intangible assets via intellectual property, right of patents, trade marks, copyrights and registered design through contracts, trade secrets, know-hows, networks, organizational culture and reputation of products and company Barker(2005). Archel as cited by Parameswaran and Jothi(2005) avers that with the same technology, a solid human resource team makes all the difference. They notes that Human capital accounting would measure all the data relating to the people of an organisation, and that this data when reported to either the shareholders or managers or government or any other agency will be helpful in making relevant decisions. HCA aims at depicting the human resources potential in money terms while casting the organisation's financial statements, Parameswaran and Jothi(2005).

Human Capital Accounting is defined as the process of identifying, measuring and communicating information about human resources in order to facilitate effective management within an organization Frederiksen and Westphalen, (1998) in Okafor(2010). HCA aims at articulating and reporting investments in staff recruitment and development as expenses that will be distinctly reported in the financial statements. Human Capital Accounting is directly related to human resources management in the knowledge economy, life-long learning, management, the electronic learning record e-portfolio(Barker,2003).

Human capital accounting though a relatively new concept is being progressively championed as very vital element that would strenghten financial reporting in Nigeria and that is the whole trust of this research report. The rest of this paper is primarily divided into five; the second section will review some relevant literature on the topic; the third section will present and analyse the data collated while the fourth section discusses major findings and the fifth will conclude and proffer recommendations.

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Statement of the Problem

The conventional financial reporting practice has over the years failed to classify the very huge investments incurred on staff recruitment and other related expenses in the income statements and balancesheets as long term assets to be amortised as appropriately. Employees are often spoken as assets, but are generally treated as costs because there is no credible system of valuing then(Mayo,2006). The bulk of the expenditures are regarded as revenue expenses and charged against income for the particular accounting year giving rise to income understated being reported and this practice has adversely affected the overall networth of businesses. Fajana (2004) notes that under conventional accounting system, utilisation of money and materials are reported whereas, the value of human resources employed is seldom incorporated in financial statements.

Scholars and advocates of human capital accounting have made case for the inclusion of Human Capital Accounting in financial reporting. Kaplan(2004) submits that senior managers should desist from placing too much emphasis on managing only the financial numbers, as the organization's long-term viability might be jeopardized. He opines that corporate decision makers who depend solely on financial indicators will be working with incomplete set of management tools. Barker(2003) notes that firms had begun to think of employees as investments rather than costs and as the cost-to-investment-based thinking evolve, the transition continue towards full accounting of human capital investmens as assets that produce returns over an extended period of time.

Rao(2005) posits that human capital accounting helps potential investors judge a company better on the strength of human resources utilized. Fajana(2002), submits that a well developed system of human resource accounting could contribute significantly to internal decisions by management and external decisions by investors and the urgent need of modality for reporting intellectual capital in the financial statements that could provide basis for true firms' valuation hence this study. The paper seeks to x-ray the impact of Human Capital Accounting on the corporate valuation of firms with an aim of developing ways of integrating HCA into financial reporting in Nigeria to better value firms.

Objectives of the study:

The main objective of this study is to examine the impact of Human Capital Accounting on firm's valuation. Other specific objectives of the study are:

i. Determine the relationship between Human Capital Accounting and firms' profitability.
ii. Assess if there is any relationship between Human Capital Accounting and firms' networth.
iii. Appraise the extent to which Human Capital Accounting influence firms' share prices.

Research Questions

This study aims at addressing the following questions:

i. To what does Human Capital Accounting influence profitability of firms?.
ii. To what extent will the application of Human Capital Accounting enhance firms' networth?

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iii.To what extent will the application of Human Capital Accounting impact firms' share price?

1.5 Research Hypotheses

The following null hypotheses are formulated for this study:

Ho: Human Capital Accounting does not significantly influence the profitability of firms in Nigeria;

Ho: Human Capital Accounting does not significantly enhance firm's networth;

Ho: Firm's share price is not significantly influenced by Human Capital Accounting.

REVIEW OF RELATED LITERATURE

Human Capital Accounting: Historical Perspective

The origin of human capital accounting could be traced to Theodore Schultzan, a political economist, who prior to 1960's dealt with the concept of organizational workforce (Okpala and Chidi, 2010). Petty(1961) attributed the profitability of an organization to the labour of the people. The term "human assets" was first used by Rensis Likert in 1967. He described it as the human resources available to a firm while the origin of the term "human capital'' is attributed to Schultz in1981 when he stated that all human abilities can be considered either innate or acquired and that all attributes which can be augmented by appropriate investment is human capital. Human capital comprises behavioural, knowledge, experience, attitude and morale, corporate culture and so on which when put together become of economic value to the organization. Schultz(1961) as cited in (Okpara and Odogwu, 2010) notes that human resource accounting was developed in the 1960s and that human capital can be defined as the ability and skills of certain people or an individual that have values.

The American Association of Accountants defined Human Capital Accounting as 'a process of identifying and measuring data about human resources and communicating this to interested parties', (Rao,2005, Okpara and Chidi, 2010). Amaefule(2008) notes that one of the companies that took steps to popularise human accounting practice was Berry R.G, though it was greeted by controversy, with many people opposing the idea, stating that it treated people as assets-management ownership or control of employees". Human capital accounting however was further popularized with companies shifting emphasis from production-oriented to service-oriented operations. Though a lot of awareness has been created, the practice in which only physical assets are reported as valuable to the organization still persist in Nigeria, Okpara and Chidi (2010). Human Capital Accounting relates to other concepts as intellectual capital, knowledge management, Human Resources Accounting, Human Capital Management and intangible investment that are directly related to human resource management in the knowledge economy(Barker, 2003).

Human Capital Accounting and Firms' Valuation

Human Capital Accounting refers to financial accounting that gives monetary value to people's worth which in turn affects the value they add to the business growth. Many proponents have adjudged HCA as very veritable in the valuation of firms' worth. First, Trustees(2008) avers that valuing company's share involves more than just forecasting the company's cashflow. It

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involves analyzing the more subjective and qualitative aspects known as qualitative analysis. He further submits that while the quantitative analysis is mainly concerned with numerical attributes found in the balance sheet, the income statement, the qualitative analysis involves the non-numerical attributes of the company such as management, employees moral and quality of staff which he noted are highly intangible. Many of the best performing companies like have very little tangible assets yet their intangible assets have market capitalization greatly exceeding their book value Amit(2002) in Okafor, (2010). He further aver that the value the intellectual capital can add to a firm's value is vary conspicous in the service sector, information technology and manufacturing where experts estimates that about 75 percent of the market value comes from knowledge, Amit, Amit(2002) in Okafor, (2010). They submit that Intellectual Assets of a company are often worth three to four times the tangible book value, that the information on intellectual capital both current and future they asserts should occupy at least one third of the annual reports. HCA aims at ensuring that investments in human resources are treated as assets, capitalised and written-off within the expected period that the staff will serve the organization. Human capital accounting will ensure that existing and potential investors appreciate the changes and value in human assets in order to evaluate assets and income properly. The significance of the human capital theory is that it regards people as assets and stresses that investment by organization in people will generate worthwhile returns (Okpara and Chidi,2010). Barnney (1991) as cited in Okpara and Chidi (2010) noted that sustainable competitive advantage is attained when the firm cannot be or substituted by its rivals. These proponents came to the conclusion that Human Capital Accounting is very veritable in potraying the actual values of firms as both the quantitative and qualitative variable are brought to bare.

Benefits of Human Capital Accounting in Firm's Valuation

Fajana(2002),Okpala and Chidi,(2010) posit that a well developed human capital accounting could:

(i) Significantly contributes to internal decisions by management and external decision by investors concerning the valuation of the firms;

(ii) Human capital accounting helps potential investors judge a company better on the strength of human assets utilized;

(iii) Thorough appreciation of human capital accounting will help management take suitable decisions regarding investment in human resources;

(iv) Proper appreciation of human capital accounting will provide comparative information regarding costs and benefits associated with investment in human assets;

(v) It will particularly be of benefit to external users of accounting information such as investors who will get to appreciate the critical impact that quality human assets will have on the earnings potential of a firm;

(vi)It will help customers and human resources managers to develop management principles of classifying the financial consequence of various human resources practices and monitoring effectively the use of human resources;

(vii) It will help the human resources and indeed management to better articulate the cost of hiring, replacement and opportunity cost of any exit or entrance of a personnel.

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Human Capital Accounting: Proponents of Basis for Evaluation

The study into Human Capital Accounting as a basis for true assessment of a business value is traced to 1960's with Rensis Linkert's efforts aimed at establishing long-term planning on human resource qualitative variables which result in greater benefits in the long run. Berker, Thunw, Jacob and Shultz dealt with the concept of rate of return of investment in human capital and came out with different forms of observation. The development of Human Capital Accounting as submitted by (Parameswanam and Jothi, 2005) can be attributed to some of the following scholars:

1. Flamholtz (2002), advocates that human resources value be measured to be equal to the present value of the future rewards adjusted with the profitability of mobility and separation. His theory lies in the premise that-people are valuable resource of an enterprise and information on the investment and value of human resources is useful for internal and/or external decision making.

2.Brummet, et al avers that the aggregate of the expenditure on recruitment, selection, training and development of people be capitalized and treated as assets for accounting and shown in the balance sheet as human assets quite distinct from physical assets. He advocates that amortization and write-off policies of conventional accounting be applied to the human assets.

3. Hekimian proposed an opportunity cost model- this model submits the assesment of key employees using opportunity cost for quantitative base for planning and controlling the activities of human resources function.

4. Schwartz proposes the valuation of human capital based on the present value of the future earnings of the people till retirement.

5. Likert(1967),developed a model to diagnose the changes in human organization over a period of time. He divided the variables into Casual, Intervening and End-result. He further submitted that interaction between casual and intervening variables affect the job satisfaction cost, productivity and earnings.

6. Rao(2005), developed a system in which the output variables of the system are described to be the indicators of human resource development and utilization. Human resource investments are measured through human resource investment sub-systems, noting that to identify the human resource investment, a distinction should be made between human resource current cost and human resource investment.

7. Corner's theory submits that the competitive position of a firm depends on its specific and not duplicated assets. It noted that most specific assets that an enterprise has is its personnel. Firms take advantage of their interdependent knowledge and that explains why some firms are more productive than others.

8. Hermanm, R.H proposes an adjusted present value model to quantify the value of human capital in a company. He noted that the amount of future wages payable represent a liability while human resources are presented as assets in the balance sheet.

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Components of Investment in Human Capital

According to Flamholtz et al (2002), investments on human resources 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.

Evaluating Investment on Human Capital: Basis for Measurement and Reporting

Training better adapts the worker to the job and development focuses on promotion to higher job levels. An effective training will ensure that the maintenance of competitive edge/levels. Parameswaram and Jothi(2005) notes that the financial treatment that can be offered for human capital accounting should be such to fill the gap in the conventional balancesheets. Cea Garus as cited in Parameswaram and Jothi (2005) avers that the real assets in the present firms and those recognized in the traditional balancesheet are in disparity. They advocate the following methods to overcome problems arising from the valuation of intangible assets which has presented divergent information to investors in traditional balance sheet:

1) **Acquisition and Learning Cost**: Human resources can be quantified by the original cost of learning which includes such cost as personnel recruitment, training and development. Here, the cost of hiring, training costs of employees are capitalized and written-off over the expected useful life of the employees.

2) **Substitution Costs:** Likert (1967), imagines an extreme situation for the firm's management, valuation of human resources under substitution or replacement/cost criteria. Linkerts proposal imagines calculating the cost of totally substituting or replacing human resources. To calculate substitution cost, figure in the cost of sacrifice to replace human resources that is already employed. It includes exact cost of leaving employee and recruiting and training the replacement.

3) **Opportunity Cost:** Opportunity cost here are considered as "an assets value when (they are) the target of an alternative use", (Hekimian and Janes). Human resources valuation is based upon the conflict of interest that can take place in a firm's internal, fictitious market where several organization units (division) participate. These units must be profit centres whose objectives must be expressed in terms of profitability.

4) **Replacement Cost**: This is the current amount needed to expand a business entity to replace its existing investment is human resources. The human resources are valued at their replacement cost that is the monetary implications of replacing existing personnel. This should be in the form of positional or personnel replacement.

5) **Economic Value Models:** This value refers to the appropriately discounted amount of net cash inflow generated by the human resources of a firm over their economic service lives. It is also referred to the method valued at present value measuring technique or use the term in conjunction with the opportunity cost approach.

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6) **Standard Cost Method**: The standard costs of recruiting, hiring, training and developing every cadre or grade of employees are determined annually.The total standard cost for all personnel of the is the value of human resources.

7) **Competitive Bidding Method:** This approach suggests competitive bidding for scarce employees in an organization. In this case the opportunity cost of employees is linked to scarcity. The approach proposes the capitalization of additional earning potentials of each human resources within the company.

8) **Non-Monetary Measures:** This method measures of human resources may refer to a simple inventory of skills and capabilities of people within an organization; i.e a list of professional credentials of key personnel within an organization or to the application of some non-monetary behavioral measurement technique for assessment of the contribution of various individuals group to an entity. This method appears to have substantial promise for successfully measuring all elements of the total value to an entity.

2.7 Application of Human Capital Accounting: Limitations/Challenges

Since 1960s of it's conception, HCA has faced some challenges which is why it has not been universally accepted in financial reporting. Some of which are namely:

1) Lack of uniform human resources accounting model:

The existence of various methods for accounting for human resources without any being adopted as generally accepted model has been a major hinderance to the adoption of Human Capital Accounting in financial reporting. The three most popular methods as propounded by Linkert using replacement cost, Flamholtz of present value, and capitalization of Brummet have not been accepted as a uniform basis of valuing investment on human resource as none of the e method appears to satisfy all organizational and professional interests. Though few organizations have implemented the original cost method and number data is available to compare the validity of the accounting methods. Consequently, firms in the production industry may opt to adopt different method from those in the service industry.

2) **Absence of generally accepted model for remunerating knowledge/talent or known-how:** Barker(2003) regretted that many countries do not provide financial recognition of human capital as assets in financial accounting reporting system at any level while individuals find it difficult to establish readily accepted record of the asset value of their skills beyond the conventional certificates of human capital acquisition. They note that the measurement of human capital is unattainable because human embodied knowledge is non-physical, non-appropriable, immeasurable and inherently incompatible with the convention that guide financial accounting and reporting.

3) **Issue of measurement and validation of learning:** Validation of competencies is very crucial. Barker(2003) argues that without adequate measure of acquired competence, there is little incentive for individual or firms to collect or develop high quality human capital information and without practical recognition of human capital as an asset, there is little

incentive to establish even inexpensive high quality system for the identification and validation of competency.

4) **The constraint that human capital accounting may be used by management to manipulate the financial statements:** There is a serious fear that the collapse of Enron, Worldcom and and many others caused by called creative accounting may reoccour.

5) **Fear of demotivation among employees:** Assigning values to employees may cause demoralization. Assigning value to employees could become very low motivator for some employees who thinks high of their jobs than the value assigned by management,(Appelbaum and Hood,1993; Okpala an Chidi,2010) . A lot of scholars have also criticize strongly the documentation of people as book assets as (Okpala and Chidi, 2010) argue that such practice may present employees as property of organization.

6) **Existence of different GAAP among countries**: Different countries have varying requirements and that create barriers for uniform method. The current US GAAP stipulates financial reporting guidelines which are different from those of India and to some extent Nigeria(Gebauer,2003).

RESEARCH METHODOLOGY

Research Design: This study adopted both the survey and descriptive approach.

Population/Sample of the study: The population of this study constitutes investments in human capital made by corporate organisations in Nigeria. Since studying this population will be near impossible, the researcher randomly selected four companies for this study namely namely**:** First Bank of Nigeria Plc, Guaranty Trust Bank Plc and UBA Plc. The study is based on their 2010 financial year. The sample size of the study will comprise all the investments made on Human Capital by the companies, their reported profit after tax, price per share, the earnings and networth for 2010.

Sources of Data: Both primary and secondary data is employed for this study. The primary data of this study were sourced through a structured questionnaire which comprised of 21 questions designed with the Linkert Scale ranging from 1-5. The questionnaires were administered to 72 randomly selected respondents cuting across accountants in the banking industry, manufacturing outfits and the academia. Out of the respondents, 60 completed and returned the questionnaires representing 83.33% return rate. Secondary data were sourced from annual reports and accounts of companies under study and the internet.

Research Variables:
Independent Variables: The actual investments in human resources in terms of wages, salaries and allowances and pensions are used in this study as the proxies for independent variable for human capital investments.

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Dependent Variables: Profitability that is the Earnings after Tax is used as proxy for firm performance while Firms Net worth and Share price are used as proxies for firms' valuation.

3.5 Tools for Data Analysis: Data collected using the questionnaire were analysed with the aid of Statistical Package for Social Sciences(SPSS) while Chi-square statistical technique was used to test the hypotheses at 5% level of significance. Simple percentages were also used to analyse the data collected from the firms' annual reports and accounts.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Presentation of Data: The data for this study are basically sourced through questionnaire administered and other related write ups on human capital accounting. Data were also collated from the annual reports and accounts of five organisations through which information on human resources management and reporting were extracted. This section of the report is to present and analyse those data.

Basic assumptions applied in the computations:

1. The adoption of original cost method of evaluating HCA by Brummet in which the cost of training, development and other anciliary costs which are part of the original costs be capitalized. This method has appeared to be the most acclaimed and widely used among companies. The study also capitalized expenses such as hiring/recruitment and retirement benefits as they should be amortized over the period the staff is expected to serve the firm.
2.That staff cost comprises some basic expenditures incurred on staff such as hiring/recruitment, training and development, salaries and wages, directors' emoluments, Pension and other retirement benefits.
3.That staff cost such as salaries and wages are treated as recurrent and are written off in the year they were paid.
4. Expenditure on items such as staff hiring/recruitment, training and developments and pensions are to be capitalized and written-off over an expected minimum year of service.
5. This study has categorized the expenditure on staff cost thus**:**

a. Staff excluding directors-

Staff hiring and recruitment	10%
Training and Development	15%
Salaries and Wages	75%
Staff Pension and retirement benefits	100%

b. Director's Emolument

Allowances(Recurrent)	80%
Retirement	20%

6. That every staff is expected to spend an average minimum service year of fifteen in these firms. Thus:

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Table .1
FIRMS' INVESTMENTS ON HUMAN RESOURCES

Firms' Name	FBN Plc.	GTB Plc.	UBA Plc.
Variables:	₦'m	₦'m	₦'m
Staff Cost excluding Pensions and Directors emolument	40,675	16,926	35,001
Pensions and other retirement benefits	11,463	618	2,904
Directors' Emolument	8,154	459	764
Recurrent (80%)	(6,235)	(367.2)	(611.2)
Retirement benefits(20%)	(1,631)	(91.8)	(152.8)

Source: Researcher's Data computed from firms' 2010 Annual Financial Statements.

Table 1 shows the expenditure incured by the different firms in human resources for the 2010 accounting year. The companies expended the sum of ₦40,675m, ₦ 16,926m and ₦35,001 respectively on staff cost excluding pensions and directors' emoluments for the year. They also paid ₦11,463, ₦618 and ₦2,904as pensions to staff excluding directors. For the period the directors were assumed to earn as allowances 80% of the total payment that is ₦6,235, ₦367.2m and ₦611.2 respectively. The 20% trancends to a receipt of ₦ 1,631m, ₦ 91.8m and ₦ 152.8m.

Table 2: Human Capital Expenses to be capitalized

S/N	Expense heads	FBN Plc.	GTB Plc.	UBA Plc.
		₦'m	₦'m	₦'m
1.	Staff hiring, selection and recruitment (10%)	4,068	1,693	3,500
2.	Training and Development (15%)	6,101	2,539	5,250
3.	Retirement benefits excluding Directors'	11,463	618	2,904
4.	Retirement Benefits to Directors	1,631	92	153
	Total	**23,263**	**4,942**	**11,807**

Source: Data computed from firms' 2010 Annual Financial Statements.

Table 2 further analysed the data to show those expenses on human resources which are capitalized and written off within the expected service years of the staff. Out of the human resources cost incurred by FBN, 10% is expected to be expended on staff hiring/recruitment while staff training and development is 15%. The retirement benefits to staff and directors is also to be capitalised.

Table 3: Comparative Analysis of Impact of Conventional Accounting and HCA on Earnings

S/N	Variables	FBN Plc	FBN Plc	GTB Plc	GTB Plc	UBA Plc	UBA Plc
		C A ₦'m	HCA ₦'m	CA ₦'m	HCA ₦'m	CA ₦'m	HCA ₦'m
1.	**Gross Earnings**	**230,606**	**230,606**	**153,908**	**153,908**	**185,186**	**185,186**
2	PBT	43,188	41,299	48,456	48,456	3,219	3,219
3.	Add HC Expenses capitalised	-	23,263	-	4,942	-	11,807
	Adjusted PBT	43,188	64,562	48,456	53,398	3,219	15,026
4.	Less; Amortized amount	-	1,551	-	329	-	787
		43,188	63,011	48,456	53,069	3,219	14,239
	Less;Tax	9,777	15,206	10,540	11,144	2,621	11,534
	PAT/Attributable to equity holders	**33,411**	**50,907**	**37,916**	**41,925**	**668**	
	Appropriations;						
	General/ Statutory	4,070	6,109	11,621	12996	325	1,325
	Bonus share	-	-	2,915	3,228	-	-
	Statutory Contingency	-	-	125	138	-	-
	Retained Earnings	29,341	44,798	23,255	25,563	343	1,380
		33,411	**50,907**	**37,916**	**41,925**	**668**	**2,705**
	No of ordinary shares in millions	32,632	32,632	23,317	23,317	25,868	25,868
	Earnings per share	**102k**	**137k**	**163k**	**180k**	**3k**	**11k**

Note: CA= Conventional Accounting; HCA= Human Capital Accounting
Source: Computed by the researcher from firms' 2010 Annual Financial Reports.

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Table 3 shows the actual impact the adoption of human capital accounting could make in evaluating the value of firm as opposed to the values shown in the annual financial statement by the prevailing method of accounting. The table shows that First Bank Nigeria Plc made a Profit After Tax (PAT) of ₦33,411,000 as against the ₦50,907,000 using HCA. This has undervalued the networth of the firm by 52%. Again, the earings of the firm was reported to be 102k as against 137k, another undervaluation of 29%.

Guaranty Trust Bank Plc reported a PAT of ₦37,916,000 as against ₦41,925,000 shown by HCA. This shows an undervaluation of 10.6%. The earnings per share shown to be 163k by conventional accounting is reported to be 180k using the human capital accounting. It shows that the earnings per share was undervalued by 10.4%.

UBA Plc had reported a PAT of ₦668,000,000 as against HCA's figure of ₦2,705,000,000. The figure shows that the PAT was undervalued by 305%. The earnings per share was reported at 3k as against HCA's figure of 11k. Again, this shows an undervaluation of 266.7%.

Table 4
Comparative Analysis of Impact of Conventional Accounting and HCA on firms' Balance Sheet

	FBN	**FBN**	**GTB**	**GTB**	**UBA**	**UBA**	**NB PLC**	**NB PLC**
	C. A ₦'m	**HRA ₦'m**	**C.A ₦'m**	**HRA ₦'m**	**C.A ₦'m**	**HRA ₦'m**	**C.A ₦'m**	**HRA ₦'m**
ASSETS	2,305,258	2,305,258	1,152,002	1,152,002	1,617,696	1,617,696	114,389	114,389
Add: Unamortized investment on HR	-	21,712	-	4,613	-	11,807	-	5,577
	2,305,258	**2,326,970**	**1,152,002**	**1,156,615**	**1,617,696**	**1,629,503**	**114,389**	**119,968**
Liabilities	1,964,632	1,964,632	941,176	941,176	1,438,270	1,438,270	64,217	64,217
Equities	340,626	362,338	210,826	215,439	179,426	191,233	50,172	55,751
	2,305,258	**2,326,970**	**1,152,002**	**1,156,615**	**1,617,696**	**1,629,503**	**114,389**	**119,968**

Source: Computed by the researcher from firms' 2010 Annual Financial Reports.

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Table 4 shows the different impact of Conventional Accounting and HCA on firm's balance sheet.

The impact will be shown using the four firms under study. There were significant increases in the values declared in their balance sheets just the way it reflected an increase of values in the profit and loss accounts. This is because those investments as shown in table 2 were capitalised in the balance sheet instead of writing them off at a stretch as period costs.

The findings from the analysis in the balance sheet shows thus:

FBN Plc reported ₦2,305,258 against HCA's figure of ₦ 2,329,970. This shows that the firm's balance sheet was undervalued by ₦21,712.00 that is 0.9%. GTB Plc balance sheet reported ₦1,152,002 as against ₦1,156,615 reported by HCA. This shows an undervaluation by 0.4%. UBA Plc shows ₦1,617,696 as against ₦1,629,503. The balance sheet figure was undervalued by ₦11,807 representing 0.73%.

TEST OF HYPOTHESES

The first hypothesis which states that the application of Human Capital Accounting in financial reporting does not significantly influence the profitability of firms in Nigeria;
The study revealed that the application of Human Capital Accounting in financial reporting significantly influence profitability. This was affirmed by testing some variables with chi-square statistical test.
1. HCA should be incorporated in financial reporting(x^2= 40.37; p<0.05)
2. Current Financial Reporting Standards has not provided adequate insight on the investments on human resources(x^2= 17.82; p<0.05). These results are very significant and has provided a basis for the rejection of the null hypothesis. The researcher therefore concludes that the incorporation of investment in human resources in the financial statement will increase information to investors.

The second hypothesis which states that the disclosure of investment on human assets does not significantly enhance firm's networth. The study revealed that the disclosure of investment on human assets significantly enhance firms' networth. This was substantiated by testing some variables to chi-square test thus-
1. Inclusion of HCA in financial reporting will provide better basis for the assesment of firms' value(x^2= 30.86; p<0.05)
2. Costs incurred on recruitment,training/staff development, retirement benefits and other ancilliary expenses should be capitalised and amortized over the expected period of the staff service (x^2= 71.68; p<0.05). The outcome is quite significant and the null hypothesis is rejected and the researcher concludes that incorporating investment in human resources will enhance firms' value.

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In testing the third hypothesis, The disclosure of investments on human capital does not significantly enhanced firm's share price. The study reveals that the disclosure of investments on human capital will significantly enhance firms' share price.
The was arrived by testing the following variables with chi-square thus-
1. HCA is seeking ways of treating intellectual/knowledge abilities as assets to boost the value of firms(x^2= 28.16; p<0.05);
2. Firms which capitalize investment on human resources is likely to report enhanced profitability and increase in firm's value(x^2= 40.37; p<0.05). This outcome is statistically significant. This led us to reject the null hypothesis. The researchers conclude that capitalization of investment on human resources will enhance the reported networth of the firms.

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings:

The study as revealed by both data from annual accounts and the questionnaires shows significant increase in the value of the firms when Human Capital Accounting is applied compared to the present accounting practice. The findings confirm the assertion by the proposition by Fisher Trustees(2008) as cited by Okpala and Chidi (2010) which states that valuing a company involves more than just the company's outflows but it also involves analyzing the more subjective and qualitative aspects of a business also known as qualitative analysis. This is further supported by the assertion of Hitcher(2003) which states that in a free market, competition drives the price of business assets to certain equilibrium. Investors usually use the Price Earnings Ratio(P/E) to determine true firm's valuation. The price of the shares and the company's earning are usually compared. Secondly the study reveals that the earnings of the shares of the companies increased tremendously with some of the earnings doubling themselves. This is in conformity with the former proponents of HCA by Linkert and Hermanson(1984) the authors of ''Accounting for Human Assets'' stating that since intellectual assets of compannies are often worth three or four times the tangible book value; that information for investors about intellectual capital, both current and future, should occupy at least one third of their annual reports.

Another findings of the study is HCA's adheres to the accounting concepts of going concern and matching concept. The application of HCA will ensure that firms' expenditure especially investments on human resources are treated with a view of the going concern nature of the business, not just writing off such huge investments whose benefits is expected for quite a number of years in the accounting year in which it was incurred. Again the matching concept will be adhered to if expenditure is matched with the income generated with the relevant accounting year. This will also better inform the management and investors alike on the true networth of the business.

CONCLUSION

This research was a study on the impact of Human Capital Accounting on Corporate Valuation. It also x-rayed the desirability of HCA as a component of human resources in the financial reporting system in Nigeria. The study has revealed among others that HCA is very apt for

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application in financial reporting in Nigeria. This is because a lot of firms incure very huge expenditures on human resources and excluding these expenses will only amount to undervaluying such firms. It is also inferred from the study that including detailed information on human capital investment will provide both management and other stakeholders a more comprehensive platform for making informed decisions about the human resources of the organisations and general firms' value.

RECOMMENDATIONS

Human capital accounting no doubt will reposition financial reporting as a better tool at the disposal of managers and other stakeholders. This study therefore recommends:

i. Establishment of valid and reliable measurement techniques to reflect both the micro and macro dimensions of the human capital components for business enterprises.

ii. Human capital should be seen as an asset not just an expense since it is expected to serve for more than an accounting year, given the huge investment firms incure to acquire and retain them.

iii. The validation of competence assets of workers should be by providing market type incentives to labour and attaching value to the acquisition of human capital; that is, by enabling both employer and employees to internalize the cost and benefits of investment in human capital acquisition.

iv. The regulatory authorities like the Financial Reporting Council of Nigeria, Securities and Exchange Commission, Central Bank of Nigeria and other relevant regulatory agencies should compel companies to incorporate HCA in their financial reports.

v. Awareness should be created to make managers of organizations appreciate the impact HCA could do to enhance their firms' value.

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Appendix
Questionnaire

S/N	**Variables/ Scale**	**SA 5**	**A 4**	**UN 3**	**D 2**	**SD 1**
1.	HCA is that aspect of accounting which identifies and reports economic data concerning a firm's investment on its human resources.					
2.	Knowledge of HCA is relatively low in Nigeria.					
3.	HCA is seeking ways of treating intellectual/knowledge abilities as assets to boost the value of firms.					
4.	HCA is a relatively new concept seeking to be incorporated/popularised into financial reporting in Nigeria.					
6.	Current Financial Reporting Standards have provided adequate insight on the investments on human resources.					
7.	HCA should be made a compulsory element of financial reporting.					
8.	Distinct disclosure of investment on Human Capital is neccessary for better stakeholders' decision making on the assessment of value of firm.					

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9.	Inclusion of HCA in financial reporting will provide better basis for the assesment of firms' value.					
10.	HCA will assist management in the better formulation of policies concerning human resources.					
11.	HCA is susceptible to negative manipulation by management of firms.					
12.	Changes in human resources policies, strength and management should be reported in the financial statements.					
13.	Companies with better investment on human capital is a good indicator high performance.					
14.	Pronouncements on human capital should be accompanied by detailed financial reporting.					
15	Firms who capitalize investment on human resources are most likely to show enhanced profitability and increase in firms' value.					
16	Companies that invest heavily in human resources are more likely to have more qualitative staff that can add value to the operations of the company.					
17	An assessment of the performance of management and employees are very critical factor for consideration when making investment decisions.					
18	Costs incurred on recruitment, training/staff development, retirement benefits and other ancilliary expenses should be capitalized and amortized over the expected period of the staff's service.					
19.	The divergent models on human capital evaluation has constituted a huge impediments to its adoption of Human Capital Accounting in Nigeria.					
20.	Adoption of a universally accepted model for reporting investment on human capital will enhance the adoption of HCA in financial reporting in Nigeria.					
21.	Adoption of HCA will enhance accountability and transparency on human resources management in Nigeria.					

Source: Field Survey, 2012

Note: SA = Strongly Agree; A= Agree; UN= Undecided; D= Disagree; SD= Strongly Disagree;

HCA= Human Capital Accounting

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