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## Non-Financial Information Reporting and Firm Performance: Evidence from Listed Consumer Goods Firms in Nigeria

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### ABSTRACT

The study examined the effect of non-financial information on financial performance of listed consumer goods companies in Nigeria. Based on Ex-post facto research design, panel data was collected from seventeen (17) listed consumer goods companies within a nine-year period spanning from 2010 to 2018 financial year. The dependent variable of financial performance is proxied by return on total asset while the independent variable of non-financial performance of human capital efficiency together with two control variables; firm listing age and firm size were employed in specifying the econometric model of the study. Ordinary least square regression analyses technique is used to analyse the data and the results revealed that human capital efficiency has a significant effect on firm financial performance during the period under review. However, in line with the result obtained, we recommend that managers should focus on policies geared towards employee training, development and overall motivation of employees noting that such actions will spur up employees to maximize their potentials for increased returns.

**KEYWORDS:** Non-Financial Information, Financial Performance, Human Capital Efficiency, Ordinary Least Square Regression

### Introduction

Accounting plays a significant role within the concept of generating and communicating the values of a company. Today, accounting information is mainly disseminated through annual reports to a variety of

users. (Adedeji & Oboh, 2012; Casu & Girardone, 2005). In the views of Meyer (2007) annual reports still remain the most important source of externally feasible information on companies; a view which is consistent with the position of Wang, Fu and Luo, (2013) who claimed that information disclosed in annual reports is the main factor that most investors consider when making decisions. The information provided in annual reports includes financial and non-financial information or simply put off-balance sheets information (which will be employed interchangeably in this study). However, recent decades have witnessed a rise in the focus on off-balance sheet information due to inadequacies regarding traditional financial information reporting fulfilling the need to assess organizations' value (PWC, 2017). Firms however have moved from passive to active information disclosure, from strict-to-know compliance disclosure to right-to-know complete disclosure and they are aspiring to link corporate strategy with one comprehensive stream of off-balance sheets and balance sheets financial data (Maxwell, Smith & Brewster, 2010). The relevance and inclusion of off-balance sheet information in corporate reporting contributes greatly to information transparency therefore making it an issue of great significance in economies throughout the world (Maroun, 2017).

A growing number of organizations are publishing information evidencing the impact made by their activities on the environment, corporate governance, society, and human rights. This increased visibility of off-balance sheet items has heightened awareness of the importance of these reports in reflecting organizational status and practices. At the international level, off-balance sheet information disclosure has attracted considerable interest from a number of key stakeholders such as the United Nations Global Compact, the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC), and the Sustainability Accounting European Commission Guidelines on Reporting. Nevertheless, Global Reporting Initiative (GRI) guidelines on reporting principles and standard disclosures are still the most authoritative in the international arena (KPMG, 2017). In Nigeria, off-balance sheets information disclosure is regulated by code of corporate governance established 2020 and covers all categories of non-financial disclosures (environment, governance, human resources, risk management and society); National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007 & 2008; Environmental Impact Assessment Act 2004 and so on. These laws cover environmental and societal aspect of non-financial disclosures.

In developing nations, concrete efforts have been made to examine the usefulness and relevance of off-balance sheets information disclosure in meeting the expectations of investors and other stakeholders (Nahiba, 2017). But only a handful of such studies have been conducted in less developed societies such as Nigeria (Yusuf, 2016). Furthermore, conflicting outcomes seems to dominate the space which signals a call for more studies in this area. For instance, Nahiba, (2017) found a significant positive effect of off-balance sheet information disclosure proxied by corporate social responsibility on firm performance. Similarly, Ismail and Rahman (2013) document a significant positive relationship between risk management disclosure as off-balance sheets information proxy and firm performance also supported by the findings of Yusuf (2016) Atseye, Mboto & Lawal, (2020). However, Calmès & Théoret (2010) found no evidence that increasing off balance sheet items will significantly yield straight forward diversification benefits for European banks while Ge, (2006) noted that greater off-balance-sheet operating lease activities leads to lower future earnings.

Particularly, we find that a handful of related studies in Nigeria are only related to the banking sector (Achugamonu, Osunkoya, Aiyepoku, Adetiloye & Akinjare, 2016; Mohammed, 2018). Also, except for the study of Raheman, Salleh, Afza and Chek (2014) who attempted and covered two major categories of off-balance sheets information disclosure (risk management and human capital) no related study has been conducted on off-balance sheet information disclosure employing human capital efficiency as a proxy for off balance sheet information. Based on these observed literature gaps in both developed and developing nations, this study is geared towards examining the effect of off-balance sheet information disclosure

(proxied by human capital efficiency) on firm performance with reference to consumer goods firms listed on the Nigerian Stock Exchange.

## LITERATURE REVIEW

### Conceptual Literature

#### Non-Financial Information

In recent decades, off-balance sheet (non-financial information) disclosure has witnessed and gained attention and recognition in developing and emerging nations due to inadequacy of traditional financial information reporting to fulfill the need in assessing the organizations' value (PWC, 2017). The study also pointed out that most top managers and executives in multinational companies believe that off-balance sheet performance measures outweigh financial performance measures in terms of creating and measuring long-term shareholder value. According to Yusuf (2016), off-balance sheet disclosures are those metrics which include index scores, ratios, counts and other information not presented in the basic financial statements. It is recognized that off-balance sheet information disclosures may be an imperfect term as the information may ultimately have a financial dimension or impact. The study of Okoye (2016) measured off-balance sheet information using Intellectual Capital Disclosure (ICD) proxied by Human capital efficiency. Risk Management Disclosure was used as a proxy for non-financial disclosure by Ismail and Rahman, (2013) while Rouf (2016) proxy non-financial disclosure using Corporate Social responsibility disclosure. In this study we employ Human capital Efficiency as proxy for non-financial information disclosure

#### Human Capital Efficiency

Human Capital Efficiency (HCE) is one of the three components of Value-Added Intellectual Coefficients as postulated by Pulic 1998. Human Capital Efficiency, measures the value added by the Human Resources of an organization. Value Added Intellectual Coefficient (VAIC) is a method used to measure the value creation efficiency of a company by using its accounting-based figures (Pulic, 2000). VAIC is based on the relationship of three major components: Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE) and Capital Employed Efficiency (CEE). VAIC is considered as a "universal indicator showing abilities of a company in value creation and representing a measure for business efficiency in a knowledge-based economy" (Pulic, 1998). According to Sveiby (2001) the purest measure to produce economic value in a knowledge-based company is the Value added per individual's contribution. As suggested by Pulic (2004), this monetary measuring system could be useful in providing objective information to stakeholders about company's real value and performance. In addition, it allows comparison and future predictability in respect of the companies' Intellectual Capital performance (Chu, et al., 2011).

#### Firm Performance

Understanding the concept of performance and enhancing it has always been the concern of management practitioners, consultants, scholars, and theorists (Venkatrman and Ramanujam, 1986; Liao and Wu, 2009). Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business to generate revenues. This term is used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Okeke, 2015). Firm performance has been classified into two kinds. Financial performance, which has to do with issues such as profitability, return on investment, asset growth and non -financial performance, which is a concern with measures such as customer satisfaction, employee satisfaction, shareholder wealth maximization, and customer loyalty (Venkatrman & Ramanujam, 1986). However, in this study, return on asset is adopted as a measure of

firm financial performance as proposed by Hamann, Schiemann, Bellora, and Guenther (2013) and also employed by several other scholars such as Umoh and Sylva, (2016).

### **Human Capital Efficiency and Firm Performance**

Human capital focuses on two main components which is individuals and organizations. This concept has further been described by Garavan et al., (2001) that human capitals have four key attributes as follows: (1) flexibility and adaptability (2) enhancement of individual competencies (3) the development of organizational competencies and (4) individual employability. It shows that these attributes in turn generate added values to individual and organizational outcomes. There are various findings that incorporate human capital with higher performance and sustainable competitive advantage (Noudhaug, 1998); higher organizational commitment (Iles et al., 1990); and enhanced organizational retention (Robertson et al., 1991). From the individual level, Collis and Montgomery (1995) point out that the importance of human capital depends on the degree to which it contributes to the creation of a competitive advantage. From an economic point of view, transaction-costs indicate that firm gains a competitive advantage when they own firm-specific resources that cannot be copied by rivals. Thus, as the uniqueness of human capital increases, firm have incentives to invest resources into its management with the aim to reduce risks and capitalize on productive potentials. Hence, individuals need to enhance their competency and skills in order to be competitive in their organizations. Training is an important component of human capital investment. This refers to the knowledge and training required and undergone by a person that increases his or her capabilities in performing activities of economic values. In turn, a greater human capital stock is associated with greater productivity and higher salaries (Mincer, 1997). Likewise, training is linked to the longevity of companies (Bates, 1990) and greater tendency to business and economic growth (Goetz & Hu, 1996). In addition, Doucouliagos (1997) has noted human capital as a source not only to motivate workers and boost up their commitment but also to create expenditure in R&D and eventually pave a way for the generation of new knowledge for the economy and society in general.

### **Theoretical Foundation**

The theory adopted for this study is the Capital Needs Theory. The capital need theory has been used by researchers to explain the reasons behind the disclosure of information made by firms. Gray, Kouhy and Lavers (1995) notes that the theory implies that managers have an incentive to disclose additional information that enables them to raise capital on the best available terms. According to Healy and Palepu (2001) firms' managers who are intending to transact in the capital market have motivations to disclose information voluntarily to decrease the information asymmetry problem and thus decrease the external financing cost. The "Capital Needs Theory" predicts that increased voluntary disclosure of information by the managers will lead to lower company's cost of capital through reducing investor uncertainty (Schuster & O'Connell, 2006). Consequently, more voluntary information disclosure is preferable to less, in order to decrease the uncertainty surrounding a company's future performance and to assist trading in shares (Hassan, Giorgioni, Romilly & Power, 2011).

### **Empirical Review**

Vitalis (2018) assesses the effect of intellectual capital on performance of firms listed on the Nigeria Stock Exchange. The study applied ex-post facto research design and made use of secondary data sourced from annual reports and accounts of sampled firms and Nigeria Stock Exchange Fact Book. Value Added Intellectual Capital Co-efficient (VAIC) model which enable the determination of specific effects of the components of intellectual capital (Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE) and Capital Employed Efficiency (CEE) was adopted and regression analyses was performed to test the hypotheses at 5% level of significance using E-view statistical software. The study analysis shows that Intellectual Capital affects significantly, Company Process measured by ADM/OPA and market to Book



value ratio whereas there is no significant effect of Intellectual Capital on Asset Turnover (ATO). The study conclude that Intellectual capital is considered as the main value driver and plays an important role in enhancing corporate performance.

Mbugua and Rotich (2014) examined the effects of intellectual capital on profitability of listed Kenyan commercial banks. The study focused on four variables; human capital, structural capital, relational capital and innovation capital. Descriptive research design was used to test how intellectual capital variables influences listed banks profitability. The target population is ten commercial banks from 2009-2013. Descriptive statistical tool MS-Excel and SPSS was used to analyze data. The study found that structural capital and innovation capital affects profitability. The study recommends that Kenyan listed banks should continue with strong control over structural and innovation capital, more allocations for intellectual capital investment be made to the two elements of intellectual capital for more growth in profitability.

Chidiebere (2019) examined the relationship between intellectual capital and financial performance in the Nigeria banking sector. The study adopted ex-post facto research design. It was systematically conducted using longitudinal time series data generated from the Nigeria Stock Exchange and from annual reports and accounts of the selected banks in Nigeria spanning from year 2000 to 2011. Regression analysis result revealed a positive significant relationship between components of Value-Added Intellectual Capital and Return on Assets of banks in Nigeria.

Nzewi, Robert, Ifechi, Monen, and Martin (2019) conducted a study on Intellectual Capital and Competitive advantage of selected commercial banks in Anambra State. Survey research design was employed on a population of 100 employees of selected banks. Data were collected through the use of 5-point Likert scale structured questionnaire and Cronbach Alpha reliability test was used to ascertain the level of internal consistency of the instrument. The analysis was done using Ordinary Least Square Method (OLS) at 5% level of significance. The study result revealed that there is a positive relationship between Human Capital and Employee Innovativeness. The study concluded that human capital has a significant relationship with employee innovativeness.

Long, Hung, and Zhang (2020) carried out a study on the impact of Intellectual Capital Efficiency on Corporate sustainable growth in China. The study examines the value-added intellectual coefficient (VAIC) model by constructing a comprehensive financial capital component. Human capital efficiency is subdivided into executive (EHCE) and nonexecutive human capital efficiency (NHCE). The study finding show that capital employed efficiency (CEE) and EHCE have a significant positive effect on corporate sustainable growth (CSG). However, physical capital does not have a significant positive impact on CSG.

Muhammad and Ismail (2009) examined the relationship between intellectual capital and business performance. This study was carried out on the Malaysian financial sector for the period 2002 to 2006. Panel data regression analysis showed that intellectual capital has a positive relationship with firm performance (measured by ROA and profitability).

## METHODOLOGY

In this study, *ex-post facto* research design is employed. The population is made up of all consumer goods firms that are listed on the floor of the Nigerian stock exchange market for the period between 2010 and 2018. As at 31<sup>st</sup> December, 2018 the total number of listed consumer goods were nineteen (19). However, the sample size of this study consists of 17 listed consumer goods firms as two (2) of the firms were deselected due to the fact that they were listed on the stock exchange after the start date of 2010 selected for this study. In examining the effect of off-balance sheet information on financial performance of listed

consumer goods firms in Nigeria, we adopted the ordinary least square regression technique for the analysis. Furthermore, we modified the study of Vitalis (2018) to express the econometric equation as:

$$ROA_{it} = \beta_0 + \beta_1 HCE_{it} + \beta_2 Listage_{it} + \beta_3 Fsize_{it} + e_{it}$$

Where:

ROA	=	Return on Asset
HCE	=	Human Capital Efficiency
Listage	=	Listing Age
Fsize	=	Firm Size
"{i}"	=	Cross Section (Sample Companies)
"t"	=	Time Frame (2010 to 2018)
$e_{it}$	=	Stochastic error Term

### Results and Discussion of Findings

To examine the effect of off-balance sheet information on firm performance, we first conduct some pre-regression statistics such as descriptive statistics. The descriptive statistics gives insight into the nature of the sampled firms in this study. The result is shown below:

**Table 4.1 Descriptive Statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	153	6.383464	9.446482	-44.16	26.52
HCE	151	4.389271	5.007534	-1.09	50.92
ListAge	153	29.29412	14.43446	2	54
Fsize	153	7.468366	.7752295	5.25	8.68

Source: Authors' Computations (2021)

The table above shows that on average, financial performance proxy (return on asset (ROA)) is 6.38 with a standard deviation of 9.44. Similarly, we find that Human Capital Efficiency on average is 4.39 with a standard deviation of 5.01. On average, the listing age of the firms in our sample is observed to be 29 years with the youngest firm been 2 years and the oldest firm been 54 years. In the same vein, in terms of size, the largest firm is observed to be 8.68 with the smallest recording 5.25.

**Table 4.2 Ordinary Least Square Regression Estimates**

Variables	Human Capital Efficiency	Listing Age	Firm Size
<b>Return on Asset Model</b>			
Coefficient	0.592	0.037	2.916
t_Statistics	(3.90)	(0.067)	(2.97)
Probability_t	{0.000}	{0.504}	{0.004}
No. of Obs = 151			
Prob. > F = 0.0001			
R-Square = 0.1326			

Note: t-statistics and respective probabilities are represented in () and {}

Where: \*\* represents 5% & \* represent 1% level of significance

Source: Authors' Computations (2021)

The table above show results obtained from the ordinary least square regression model employed to test the effect of off-balance sheet information on financial performance of listed consumer goods firms in Nigeria. The result above reveals an  $R^2$  value of 0.13 which indicates that about 13% of the variation in the dependent variable is being explained by the independent and control variables in the model. This also means that about 87% of the variation in the dependent variable is left unexplained but have been captured in the error term. The model goodness of fit as captured by the Fisher statistics (7.49) with the corresponding probability value 0.0001 which shows a 5% statistically significant level indicates that the entire model is fit and can be employed for discussion and policy recommendation. The homoscedasticity assumption of the ordinary least square regression is captured by the Breusch-Pagan / Cook-Weisberg test for heteroskedasticity which reveal a p-value of 0.08 suggesting that the model is free from unequal error variances. From the table above, we observed that the effect of off-balance sheet information proxied by human capital efficiency is positive and statistically significant at 1% level. This implies that an increase in human capital efficiency by 1% will bring about an increase in the performance of the firms under consideration by 59%. We opined that human factor in an organization represented by a combination of intelligence, skills, knowledge, aptitudes and expertise gives the organization its distinctive character which contributes to production and profitability, thus improving organizational performance. This finding is in line with prior studies of Yusuf (2013) who argued that the ability of a corporation to successfully implement business strategies solely depends on efficient use of intangible, particularly human capital. The result also validates the opinion of Plink and Barning (2010) who document that human capital positively affects organizational performance because it can generate significant value for companies and provide them with sustainable competitive advantage. However, the findings is in contention with prior studies of Zéghal and Maaloul (2010), Yusuf (2013), Parham and Heling (2015) who concluded that disclosures of off-balance sheet information do not significantly improve performance.

### Conclusion and Recommendation

Corporate reporting includes financial and non-financial information or simply put off-balance sheets information. However, in recent times the need to pay serious attention to non-financial information has risen due to inadequacies of traditional financial information reporting to fulfill the need in assessing organization value. Companies however have moved from passive to active information disclosure, from strict-to-know compliance disclosure to right-to-know complete disclosure and they are aspiring to link corporate strategy with one comprehensive stream of off-balance sheets and balance sheets financial data. In the light of the above, this study explores the effect of non-financial information disclosure on performance of listed consumer goods firms in Nigeria for the period 2010 to 2018. The study employed human capital efficiency as a proxy of non-financial information disclosure and return on total asset as a proxy for firm performance. From the findings, the authors concludes that non-financial information reporting like human capital efficiency has a significant effect on performance of listed consumer goods firms in Nigeria. Succinctly, it is recommended that policies geared towards training, development and overall motivational strategies of employees should be given serious attention.

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