

EARNED STAFF COST AND FINANCIAL PERFORMANCE: A MODERATING ROLE OF FIRM SIZE OF LISTED PHARMACEUTICAL COMPANIES IN NIGERIA

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ABSTRACT

This study examined the relationship between earned staff cost and financial performance of listed pharmaceutical companies in Nigeria. The study employed correlation research design and an ex-post facto research design for the study with population of 14 listed pharmaceutical companies in Nigeria, with a sample size of six (6) listed pharmaceutical firms listed in the Nigerian Stock Exchange. The data were sourced for the period of 2000-2017. Pearson Product Moment Correlation and Linear Regression were used to answer the research questions, while Ordinary Least Square and Two-stage Least Square were used to test the null hypotheses at the 0.05 level of significance. The study found that there is a significant relationship between earned staff cost and net profit in listed pharmaceutical companies in Nigeria. The study concluded that the global demands of information on the financial performance of firms make it imperative for pharmaceutical companies and other corporate bodies to include human capital cost as part of the assets of the organization. Based on the findings of the study, it is recommended among others, that there should be constant training, retraining and development of employees of pharmaceutical companies in Nigeria. Also, Pharmaceutical companies in Nigeria should pay more attention in earned staff cost of their staff to enhance firm's performance, and finally, the management should make policies that will boost return on equity since this will invariably affect investor's interest.

Keywords: Earned, Staff, Financial, Performance, Organization

INTRODUCTION

The importance of human capital to any organization cannot be overemphasized. But human capital cost is ridden with many controversies. It has two equal sides, one for and the other against. For the school of thought against, they hold that intellectual capital does not meet the requirement for it to qualify as assets, which is derived from the definition that assets are resources owned or controlled by an entity as a result of past events from which future benefits will accrue to the entity (Mayo, 2004). In Nigeria, quoted companies that have invested heavily in human capital include Evans Medical Plc, GlaxoSmithKline PLC, Pharmdeko Plc, amongst others. Their statement of financial position reveals that investments by these companies in human capital development usually are not shown but are carried to the expense side in the profit or loss account. However, Okpala and Chidi (2010) stated that the substantial amounts incurred on recruitment, selection, placement, training, and development of personnel were generally treated as revenue expenditures and debited to profit or loss account. In light of the above, many are wondering whether capital markets' obsession with profitability as almost the sole indicator of corporate performance provides corporate decision markers with an incomplete set of management tools. As observed by Kirfi and Abdullahi, (2012), human capital cost practice in Nigerian is more of a mirage than reality since this issue has been skipped in financial statements. They argue that existing cost practices lack regard to recognition of human capital as an asset and have significantly discouraged the use of any or a combination of measurement technique(s) in quantifying human capital, let alone it's reporting. Against this backdrop, this study seeks to

empirically evaluate the relationship between human capital cost and financial performance by employing the variables of training and development cost, employee acquisition cost and Earned staff cost as independent variables, while net profit, return on asset and return on equity is adopted as our dependent variables.

Research Hypothesis

The following null hypotheses were formulated at tested at the 0.05 level of significance.

H₀₁ Firm Size does not significantly moderate the relationship between earned staff cost and financial performance of listed pharmaceutical companies in Nigeria.

Firm Size

Any entity's size deals with the capacity of the company to offer various goods and services. Gupta and Huefner (1989) argue that large business organizations can carry out diversifications that are aimed at the management of risks by reducing the risks associated with business entities. Large companies usually enjoy economies of scale compared to smaller companies since large companies can take advantage of monopoly power. Monopoly power enables large companies to change any price to their customers. Hence they make supernormal profits as a result of monopoly power, consequently improved financial performance. Large companies can employ and remunerate high skilled professionals, unlike the small companies which cannot afford to hire competent and qualified staff. That means the larger companies can remain competitive compared to smaller companies. If the company is competing, it means it is more profitable. Therefore, the larger the company, the more profitable the company is and better the financial performance due to economies of scale (Alfred, 2007).

i. Earned staff Costs

The actual amount paid for all staff which includes the wages, salaries, commissions, and employer-paid insurance premiums and pension deposits as well as the cost of all other fringes. The first thing to remember is that staff cost is not only about salary payment; many other expenses are relevant and must be factored in too. Consider the following: social security payment, pension contributions, travel expenses, training and development cost, human resource expenses, holiday pay, sick pay, and healthcare cost. The full benefits report to every employee or staff should be issued twice a year; this will keep all employees clear that after working for hours, there is a take-home pay. Revenue per employee is a measure of how efficiently a particular company is utilizing its employees. A firm's human resource practices must develop employee's skills, knowledge, and motivation such that employees behave in ways that are instrumental to the implementation of a particular strategy (Ekundayo & Odhigu, 2016). In general, relatively high revenue per employee is a positive sign that suggests the firm is finding ways to squeeze more sales (revenue) out of each of its workers to ensure economic growth and stability in the industry.

Effect of Firm Size on Financial Performance

Discussions of the role of firm size in explaining firm performance have been on-going in the fields of business organization and industrial economics. Early research, notably by Jelic et al. (2001) and Kakani et al. (2001) emphasize the importance of scale economies and other efficiencies in larger firms. On the other hand, the structure-conduct performance paradigm highlights the importance of market concentration and conduct in explaining profitability.

Except for few exceptions, notably Hagedoorn and Cloudt (2003), there is considerable evidence in early empirical studies (e.g. Liargovas & Skandalis, 2008; Merikas et al., 2006) to support a positive relationship between firm size and profitability. However, as Prasetyantoko and Parmono (2008) point out, many of these studies neglect the possible effects of other factors, such as market structure, entry barriers and firm strategies. More recent studies have attempted to control for these market and firm-specific characteristics and found more equivocal support for a relationship between firm size and profitability.

For instance, Tarawneh (2006) find a firm's market share instead of its size plays a significant role in explaining its relative performance. Amato and Amato (2004) find evidence in US retailing industries to support Porter's (2008) conjecture that both small and large firms can effectively capture niche markets, while middle-sized firms are 'stuck in the middle' in the sense that they are less competitive than their counterparts in either end of the firm size distribution.

Organizational size effects have been the focus of many prior studies. The benefits of organizational size may accrue to the financial performance of the organization. Larger organizations seem able to generate stronger competitive capability than their smaller rivals as a result of their superior access to resources, greater market power, and economies of scale and scope. However, organizational size effects are mixed, since some studies confirm them (e.g. Tarawneh, 2006), while others find either mixed effects or no effects at all (e.g. Goddard et al., 2006; Mariuzzo et al., 2003).

Concepts of Financial Performance

Performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage (Chen & Wong, 2004). There are two kinds of performance, financial performance and non-financial performance. Financial performance emphasizes on variables related directly to financial report. Company's performance is evaluated in three dimensions. The first dimension is company's productivity, or processing inputs into outputs efficiently. The second is profitability dimension, or the level of which company's earnings are bigger than its costs.

The third dimension is market premium, or the level of which company's market value is exceeding its book value (Walker, 2001). Performance is a difficult concept, in terms of both definition and measurement. It has been defined as the result of activity, and the appropriate measure selected to assess corporate performance is considered to depend on the type of organization to be evaluated, and the objectives to be achieved through that evaluation.

Financial performance is a slanted gauge of how efficient a corporation can use resources from its prime means of business and spawn revenue. It's also, a gauge of the outcome of a corporation's policies and monetary terms of its operation. There are several ratios how to measure the company performance. Spira (2013) mentioned accounting-based performance using three indicators: return on assets (ROA), the return on total equity (ROE) and return on investment (ROI). These are widely used to assess the performance of firms. Even though more sophisticated methods such as IRR, CFROI and DCF modelling have come along; ROE has proven as a good technique. It focuses on return to the shareholders of the company but on the other hand it can obscure a lot of potential problems. Companies can use financial strategies in order to artificially maintain healthy ROE and thus hide deteriorating performance in business fundamentals. On the other hand, ROA avoids the potential distortions created by misleading financial strategies.

Another ratio used to represent firm financial performance is so called Tobin's Q ratio. It is calculated as a market value of the company divided by the replacement value of the firm's assets. In this study, the relationship between various Audit Committee characteristics and the hospitality industry performance is represented by ROE, and Tobin's Q

Researchers in the economics field have offered a variety of models for analyzing financial performance. However, little consensus has emerged on what constitutes a valid set of performance criteria. For instance, researchers have suggested that studies on financial performance should include multiple criteria analysis. This multidimensional view of performance implies that different models or patterns of relationship between corporate performance and its determinants will emerge to demonstrate the various sets of relationships between dependent and independent variables in the estimated models.

Financial performance have been measured using various standards including gross profit, net profit, return on equity and return on assets among other measures. For the purpose of this study, net profit, Return on Asset and Return on Equity shall form the proxies of the study.

Role Behaviour Theory

Katz and Kahn (1978), defined role behaviours as "the recurring action of an individual, appropriately interrelated with the repetitive activities of others to yield a predictable outcome." Human resource management is the organization's primary means for sending role information through the organization, supporting desired behaviours and evaluating role performances; it is useful, therefore, when it communicates internally consistent expectations and evaluates performances in ways that are congruent with the system's behavioural requirements (Frederickson, 1986). System requirements are, in turn, presumed to depend on contextual factors such as business strategies and the nature of the industry.

The role behaviour theory propounded by Katz and Kahn (1978), focused on roles as the interdependent components that make up an organization system instead of using specific behaviours and job performance as the fundamental components. This perspective shifts the focus from individuals to social systems characterized by multiple roles, multiple role senders, and numerous role evaluators. The role behaviour theory recognizes that the behavioural expectations of all role partners can influence the behaviour of organizational members. By implication, effective HRM helps employees meet the expectations of role partners within the organization (i.e., supervisors, peers subordinates), at organizational boundaries (i.e., customers and clients), and beyond (i.e., family and society). Thus the expectations of these role partners must be incorporated into an understanding of human resource management in context then constitute human capital investments made in anticipation of future returns. Brummet (1970) stated four reasons which contribute to a reluctance to measure human capital. The first reason is cultural constraints and taboos that prevent us from associating the money unit to measure people. He stated that "this is unfounded and surely irrational objectives. It may reflect a fear of behavioural reactions which we do not understand and have not given adequate attention". The second reason is an organization does not own people and, therefore, should not be placed on the balance sheet. But he believes that the accountant should monitor those assets which are most significant to their legal ownership status. Another constraint is the visibility bias when machines are refurbished. The results can be seen in the form of better production and useful longer life. The costs to refurbish the machines are capitalized and looked upon as an investment. Brummet (1970), feels that there is a hung-up on visibility and that any cost relating the improving human resources (training and development program) will result in future pay-off just as in the case of a machine, those costs should be recognized by capitalization and matched against benefit received. The fourth reason is the necessity for an interdisciplinary. He believes that interdisciplinary approaches are necessary for solving problems in human capital, innovative approaches for providing management with reliable information for decision making. In essence, it may be argued that humanity has not been entirely ignored in current accounting theory and practice. On the other hand, it can also be observed that there are numerous limitations imposed by existing conventional accounting practices for not providing an adequate solution toward explicitly recognizing the human assets and their changes in value in accounting reports. In general, considerable recognition has already been given to the importance of human assets with regard to evaluating the performance of the entity. Thus, a case can be made for "employee service resources which have the potential to provide economic benefits to the firm for more than one period can justifiably be treated as assets" within the traditional accounting framework of an asset (Jaggi, & Lau, 1974).

Empirical Review

Kumshe (2012), investigated human resource accounting in Nigeria; an analysis of its practicability which aims at examining and assessing the applicability of Human Resource Accounting (HRA) in

the financial statements of incorporated companies in Nigeria. Utilized views from both administrative and management staff of the sample companies: The study established that there is greater awareness among various categories of staff of HRA concepts but also agreed that Nigeria companies do not practice HRA. The study showed how HRA could enhance the completeness and quality of financial statements; also with HRA, more information is made available to the investor to make more rational investment decisions because HRA provides more information on the real value of companies".

Mohammed and Aminu (2012) in his paper titled "human capital accounting: assessing possibilities for domestication of practice in Nigeria"; concluded that it is possible to domesticate HRA in Nigeria considering that, both professional and accounting standards are capable of accommodating HRA practices especially with the growth of service sector in the Nigeria economy and how convergence and harmonization of accounting practice grow stronger by the day. He argued for the domestication of HRA practice in Nigeria through legislation and ensuring full participation of all stakeholders. He advocated for an expansion of international accounting standards (38) on accounting for intangible assets to cover human resources, or there should be a new standard developed to cater for HRA practice in Nigeria.

Jeroh (2013) did a study to take a closer look at the concept of human capital cost as it affects financial statement analysis and decision making since human capital is the primary driver of the competitive advantage of companies globally and Nigeria in particular. A total of 145 respondents comprising of investors in the Nigerian capital market, practising accountants and academics in tertiary institutions in Nigeria took part in this study. A validated self-structured questionnaire was the instrument used in gathering primary data for this study. Frequency counts, simple percentages, and the chi-square (χ^2) were the descriptive and inferential statistics employed in the analysis of the data obtained at a 0.05 level of significance. This study, however, found amongst others that there is a significant relationship between human capital cost and the comparability of financial statements in Nigeria.

Okpako et al. (2014) did a study to determine the relationship between human resource accounting and firm performance. This paper surveyed seven (7) companies quoted on the Nigeria Stock Exchange. The study used primary data and secondary data. 260 questionnaires were distributed, and 246 questionnaires were retrieved on the companies targeted at the staff of human resource, accounting, and audit/internal control departments, which were considered to be the relevant departments for this study. Following the collection of completed questionnaires, the study adopted the principal component analysis to quantify the responses obtained to obtain a series that captured the composite value of the human resource accounting variable. It also adopted a firm performance indicator (ROE) over the period 2006-2010. The study reveals that human resource accounting variables impacted positively to the level of firm performance.

Edom et al. (2015) did a study was to examine the impact of human resource accounting on the profitability of Access Bank of Nigeria Plc, from 2003 to 2012. Using the ordinary least square analytical technique, secondary data from Access Bank of Nigeria Plc were obtained. Findings revealed that there is a positive relationship between the indicators of human resource cost (training cost, development cost, and the number of staff) and the profit of the organization (Access Bank Plc). It was also discovered that there was a significant relationship between training cost, development cost, and the profit of the bank. However, the number of staff does not have a significant effect on the profit of the bank.

Adebawojo et al. (2015) investigated the likely effect of human asset accounting on the performance of business organizations in Nigeria. The empirical study adopted an Ex-post facto research design, conducted on all 18 publicly quoted banks in Nigeria capital market. The instrument of data collection was a questionnaire designed on a six steps Likert Scale and validated through peer review with the Cronbach Alpha Coefficient of 0.807 and 0.870 for Human Asset and Organization Performance, respectively. The hypothesis was tested using a simple regression model. The result of the analyses confirmed that human asset accounting significantly

affects the banks' performance at F-ratio = 56.280, $P \leq 0.05$, $R^2 = 0.193$. It concluded that capitalizing human assets would positively impact on the performance of organizations and recommended its disclosure as an intangible asset in the balance sheet.

METHODOLOGY

This study employed a correlation research design and an ex-post facto research design to assess the relationship between earned staff cost and financial performance of listed pharmaceutical companies in Nigeria. The population of the study is made up of fourteen (14) listed pharmaceutical companies, listed from the Nigerian Stock Exchange (NSE) and have consistently submitted their annual reports to the NSE from 2000 to 2017. Some of these companies are multinational companies and as such have embraced human capital cost in line with global best practices. They integrate human capital cost in their annual reports. The sample of the study comprised of the six (6) listed pharmaceutical firms as quoted in the Nigeria Stock Exchange (NSE). However, firms that are not in operation throughout the period of 2000-2017 were not part of the sample size and thus, were not considered for the study. Consequently, the selected pharmaceutical firms used for the study were purposively sampled; they include Afrik Pharmaceutical Plc, Evans Medical Plc, Ekocorp Plc, GlaxoSmithKline Plc, Neimeth International Plc, and Pharmadeko Plc. The reason why the six(6) companies were chosen was because, the data sourced for the variables studied were available to-date (2000-2017) as at the time of carrying out the study. Both primary and secondary data were used in this study. The data generated were analyzed in three major sections namely; the demographic, answers to research questions, and test to the hypotheses. The demographic analyses included the use of frequency tables depicting percentages and frequency distributions for the sample characteristics such as educational qualification and organizational status. The study employed Pearson Product Moment Correlation to answer the research questions 1-9, and Linear Regression was used to answer research question 10, while the Ordinary Least Square (OLS) and Two-stage Least Square (TLS) were used to test the hypotheses 1-9 and 10 respectively, at 0.05 level of significance. The descriptive analysis was analysed using the Statistical Package for Social Science (SPSS), while the econometric analysis was analysed using E-views.

RESULTS

Hypothesis 1: Firm size does not significantly moderate the relationship between earned staff cost and financial performance of listed pharmaceutical companies in Nigeria.

Table 1: Two-Stage Least Squares (OLS) regression analysis on the extent to which firm size moderates the relationship between human cost and financial performance of listed pharmaceutical companies in Nigeria

Dependent Variable: FP

Method: Least Squares

Date: 09/08/20 Time: 06:25

Sample: 2000 2017

Included observations: 18

HAC standard errors & covariance (Prewhitening with lags = 1 from SIC

maxlags = 2, Tukey-Hamming kernel, Integer Newey-West fixed

bandwidth = 4.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
HCC	1.492953	2.821945	0.529051	0.6045
C	-3405933.	3052831.	-1.115664	0.2821
FS	15839.34	15300.55	1.035214	0.3170

R-squared	0.677001	Mean dependent var	5740890.
Adjusted R-squared	0.633934	S.D. dependent var	3546396.
S.E. of regression	2145689.	Akaike info criterion	32.14683
Sum squared resid	6.91E+13	Schwarz criterion	32.29523
Log likelihood	-286.3215	Hannan-Quinn criter	32.16729
F-statistic	15.71987	Durbin-Watson stat	0.348580
Prob(F-statistic)	0.000208	Wald F-statistic	33.00922
Prob(Wald F-statistic)	0.000003		

Source: Author's E-views computation

Table 1 shows that HCC has a sign coefficient of 1.49, t-Statistic of 0.53, and significant value of $0.60 > 0.05$, while the moderator variable has significant value of $0.32 > 0.05$. The R-square value of 0.68 indicates roughly 68% contribution to financial performance (FP) of listed pharmaceutical companies in Nigeria by the independent variable earned staff (ESC) as moderated by firm size (FS). Given the above, the null hypothesis ten that, firm size does not significantly moderate the relationship between earned staff cost and financial performance of listed pharmaceutical companies in Nigeria is retained while concluding firm size does not significantly moderate the relationship between earned staff cost and financial performance of listed pharmaceutical companies in Nigeria.

In consideration of the low (< 0.4) Durbin-Watson coefficients- which was caused by the inertia or sluggishness of the economic time series data, the OLS technique was adopted in estimating the parameters, however, due to the existence of a moderator variable in the data set, the data were not transformed, which would have taken care of the autocorrelation problem,

CONCLUSION

Sequel to the above findings, this study concluded that earned staff cost has significantly impacted the financial performance of listed pharmaceutical companies in Nigeria. This is because of the prospect of human capital cost as one of the intellectual assets of an organization. The failure of organizations to recognize and treat earned staff cost as assets like physical and financial assets have a high tendency to lead to the low financial performance, as this study has proved that there exists a positive and significant relationship between earned staff cost and financial performance of listed pharmaceutical companies in Nigeria. Consequently, the global demands of information on the financial performance of firms make it imperative for pharmaceutical companies and other corporate bodies to include human capital cost as part of the assets of the organization.

RECOMMENDATIONS

Considering the findings, discussion and conclusion of this study, the following recommendations were made:

1. Earned Staff cost should be improved as this would, in turn, improve the profitability of their staff thereby leading to improved net profit
2. Earned Staff cost which usually comes in form remunerations and other welfare packages should always be given adequate attention as it boosts the morale of workers towards positive return on asset.
3. The management should put control in staff cost as too much of it may affect the entity if the company experiences a fall in their earnings
4. The size of the pharmaceutical company would in no small measure affect their output, so every pharmaceutical company in Nigeria should be mindful of this fact.

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