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# Effect of Financial Ratios on Operational Performance of Selected Brewery Firms in Nigeria

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## Abstract

The study assessed the effect of some accounting ratios on the financial performance of selected firms on brewery industry in Nigeria. The research adopted ex-post facto research design covering the period of ten years, 2007-2016. Secondary data were collected from annual report and accounts of selected brewery firms quoted in the Nigeria Stock Exchange. The data were analyzed using multiple linear regression technique. Findings indicate that Dividend per Share had positive and significant effect on market value while return on equity has positive and insignificant effect on market value of firms. The implication of the finding is that dividend per share and return on equity can used in predicting the movement of market value of firms in brewery sector in Nigeria. The study hereby recommends that firms should enhance both their Dividend per Share and return on equity to grow the market values \of brewery firms in Nigeria.

Keywords: Financial ratios, Financial Performance, Valuation, Dividend per Share, Return on Assets, Nigeria.

## 1.1 Introduction

Growth is attributable to positive performance. In financial terms, growth is often measured by the returns which the usage or employment of resources attract to an organization. Growth is therefore a reward for the judicious employment of the resources of any organization. Growth can also be induced by internal and external factors internet factors namely the sales volume or average turnover, increase in Number of employee, increase in asset size age of the company, and increase in productivity of the company among other factors. The growth achieved through internal sources of a company is called organic or sustainable growth. There force is that growth which a company can achieve without external financing. External growth on the other hand, can be induced by acquisition or merger. Acquisition or merger is when a company merges with another company in order to enjoy the economies by large scale production and to grow. This type of growth is called acquired growth. This stud shall focus only on sustainable growth.

It is therefore the aggregate of the firms value that garnered by an organization over a period of time that leads to the growth of that organization. objectives of companies and also one of the main subjects of concern in this study. Cooperate business valuation as a process and a set of procedures used to determine what a business or worth. The issue becomes what company financial indicator drives more the financial performance when measured with firm value. The rest of this paper has empirically evaluated the effect of financial factors on financial performance of firms in selected manufacturing firms in Nigeria.

## 1.2 Statement of Problem

The question the financial ratios that seem to drive more of the values attached to firms has been very controversial issues and yet very much unresolved. Many firms derive their market values on what investor consider very key which is the dividend policy of firms and how favorably disposed they are to investors. On the contrary some investors are keen on the returns which each asset has earned over given financial year. To this extent the companies strive to balance their efforts towards earnings, dividends and even returns on assets.

Many brewery depend on measuring annual profit and few other indicators, probably because of the difficulty in measuring firms growth indicators and the influence it exerts on the firm's value. Though using profitability is not out of place but investors are often more interested in the earnings which they can attribute to their specific investments.

It is in the light of this that this paper appraises the effect of financial ratios on the values of firms in the manufacturing sector.

## **1.3 Objectives of the study**

The broad objective of this study is to assess the effect of growth indicators on financial performance of firms in Nigeria. The specific objective of this study are to:

1. Appraise the effect of dividend per share on market value of firms in Nigeria brewery sector.

2. Evaluate the effect of return on equity on market value of brewery firms in Nigeria.

## 1.4 Research Questions

- The following research questions guided this study:
- 1. What is the effect of dividend per share on market value of brewery firms in Nigeria?
- 2. How does return on equity affect market value of firms in brewery sector in Nigeria?

#### **1.5** Statement of Hypotheses

Sequel to the objectives of the study, the following null hypotheses guided the study.

- 1. Dividends per share have no significant effect the Market Value of firms in Nigeria.
- 2. Return on Equity has no significant effect on Market Value of firms in Nigeria

## **Review of Related Literature**

## 2.1.1 Dividend per Share

Dividend could be viewed as the share of profit of a firm by the shareholders on a prorate basis that is determined by number of share held by each shareholder.

In some firms, several statutory deductions are made before the residue of the profit is appropriated to the ordinary members of the company. Declaration of proposed dividend by the directors at the Annual General Meeting is expected to serve as an indication that the firm is health and capable of sustaining and improving upon the current level of financial performance at both short and long run. This viewed is supported by the signaling theory.

Nuredin (2012) stated that firms are faced with dilemma of sharing dividend to stockholders and retaining their earnings with a view to reinvesting it into the business 50 as to promote furthers growth.

## 2.1.2 Return on Equity

Return on equity tells what percentage of profit the company makes for every monetary unit of equity invested in the company. Return on equity doesn't specify how much cash will be return to the shareholders, since that depends the company's decision about dividend payments and how much the stock price appreciates. However, it's a good indication of whether the company is even capable of generating a return that is worth whatever risk the investment may entail Beman, Knight and Case (2013) as cited in Irina (2014). In order word's it is used to measure the ability of a firm to generate profit from its shareholders investment in the company. Return on equity can be calculated by dividing net income by shareholders equity.

## 2.1.5 Market Value of firms

Market value is the total value of all a company's shares of stock. It is calculated by multiplying the price of a stock by its total number of outstanding shared. Barberis (2003). The market value of a firm's shares remains the most acceptable measure of the shareholder's wealth.

#### 2.2 Theoretical Framework

These theories are reviewed in the course of this study:

## 2.2.1 Agency Theory

This theory has to do which the effect of the principal (shareholders) and the agents (company's managers). As agency relationship exist when one or more individuals called principles hire one or more individuals known as agents to perform some services and then delegate decision making authority to agents (LawalKiyanjul and Kayode, 2014). They argue that ownership and control are more separated to a continuous interference of equity ownership of large organizations.

This theory of capital structure stats that an optimal capital structure will be determined by minimizing the costs arising from conflicts between the parties involved. Jensen and Neckling (1976) argue that agency cost play an important in financing decisions due to the conflict that may exist between shareholder's if companies are approaching financial distress shareholder can encourage management to take decisions, which in effect, expropriate funds from the holders to equity holders. Sophisticated debt holders will then requires a higher return for their fund if there is potential for this transfer of payments, however, may reduce the agency conflict between shareholders and managers.

Debt holders have legal redress if management fails to make interest payments when they are due, hence manager concerned about potential loss by job, will be more Italy to operate the firm as efficiently as possible in order to meet the interest payments. Thus, aligning their behavior closer to shareholder wealth maximization. Jensen and Melding (1976) see agency costs as the sum of the monitoring expenditure by the principal, bonding cost by the agent, and a residual loss. Jensen and Meckling (1976) argued that the use of secured debt might reduce the agency cost of debt. UN (2001). However, suggest that if a firm's level of tangible assets is low, the management for monitoring cost reasons may choose a high level of debt to mitigate equity agency costs.

## 2.3 Previous Studies

## 2.3.1 Dividend per Share on Market Value of Firms

Barman (2007) used survey to solve the problem of the study which is, which of the dividend theories, relevant or irrelevant, are applied by the majority of the firms in the sample and as a consequence of the theory being applied and whether a managed dividend policy does influence firm value or whether a dividend policy is irrelevant. A total of 42 completely questionnaire were received from different companies, both listed and private throughout this republic of South Africa. The results indicated that the dividend decision is an important as the company's investment and funding decision in determining firm value I dividend payments affect a firm cash flows causing an increase in the firms cost of capital, an increase in dividend payout results in an decrease in share price and dividend payment should satisfy shareholders preference for dividend.

Bougatef (2011) examined the impact of dividend payment on the stock price in Tunis stock price. The example covered 24 publicly tradoc Tunisian firms. Data were collected from Tunis stock exchange and completed from firm's web sites during the period 2000 - 2008 by using panel Darka regression, fixed effort model, Random Effect and Ols model. The result indicated that cash dividend have positive impact on stock prices of Tunisan firms. In addition, Tunisan investors reward firms paying cash dividend. Inflation has negative impact on stock price but profitability positive impact on stock price.

Murekefu and Duma (2012) studied the effect of dividend payout and firm performance of NSE listed companies and established a strong positive effect of dividend payout and stock performance. They concluded that dividend policy is relevant and that managers should devote adequate time and effort to determine a dividend policy that can enhance firm performance and shareholder value.

Mokaya, Nyangara and James (2013) conducted whose purpose was to determine the effects of dividend policy on the market share value in the banking industry in Kenya, using a case study of National Bank of Kenya. The study adopted on explanatory research design. This study covered a sample of 100 respondents selected through proportionate stratified sampling from a total population of 47,000 general public shareholders. A structure, self administered questionnaire was used to collect data from the respondents. Market share value was designated as the dependent variable and dividend policy is the independent variable. Descriptive and inferential statistics were used to determined and explain variable's relationships. The study concluded them National Bank of Kenya had a dividend policy and this dividend policy is the major factor driving NBL share value. The study revealed that the dividend policy has been and continue to be an important factor driving share value as supported by 80% of the respondent. 90% of the respondents pointed out that they considered payment of dividends a major-element in the value of shares, meaning than an increase in a dividend payout causes an increase in share price as supported by 88% of the respondents.

## 2.3.2 Return on Equity on Market Values

Nwidobie (2013) applied the multiple regression equation models to identify dividend policy determinants of quoted firm in Nigeria and found that solutions to agency problems past dissatisfactory behavours of shareholders is not a determinant of current and future dividend decisions. The study reveals that there exist an inverse effect of the needs and desire of shareholders and the naira dividend paid by the firms, implying that dividend polices of quoted firm in Nigeria are not aimed at solving the existing agency problems in these firms.

Moscu (2010) carried out a study to determine the dividend policies for 209 companies listed on London stock exchange and Panis stock exchange (2010) and to explain their dividend payment behaviour. He estimated some model to examine the impact of firm profitability, return on assets, firm size previous years dividend, corporate tax, dividend yield and ownership structure on dividend payout ratios. The results show that UK companies pay high dividends if ownership is a more dispersed one and cash from basic activity (Free cash flow) is enough to be allocated to equity holders.

Tobit models, Al-Kuwan (2009) studied the determinant of dividend policies. Impact of government ownership, free cash flow, firm size, grow rate, growth opportunity, business risk, and firm profitability or dividend payout ratios were among the factors is considered. It was revealed that the main characteristics of firm dividend payout policy were that dividend payments related strongly and directly to government ownership, form size and firm profitability, but negatively to the leverage ratio. This implies that firms pay dividends with the intension of reducing the agency problem and maintaining firm computation, since the legal protection for outside shareholders was limited.

An exploration of the determinant of the dividend policy of firms in Japanese electrical appliances industry was conducted by Jsuji (2010). The research outcome reveals that corporate managers do not cater for investor's demands in both their dividend initiation and continuation decisions. The determinants of firms dividend initiation and continuation decision.

The determinants of firms dividend policies in the Japanese electrical appliances industry are value weighted dividend yields, value weighted non-payout's size and value-weighted after the earnings to total asset ratio. It further reveals that dividend payment tend to decrease company earning in the Japanese electrical appliance. Industry in contravention of the traditional signaling hypothesis.

Muisega, Alala, Musiaga, Maokomba and Egessa (2013) examined the determinants among dividend payout of non-financial firms listed on Nairobi securities exchange which included profitability, growth current earnings liquidity, size and business risk. Using purposive sampling technique for sample selection of 30 non-financial companies and descriptive and multiple regressions for analysis, it was found that return on equity, current earnings and firm's growth activities were positively correlated to dividend payout. Business risk and size were found to be among the major determinants of dividend payout.

## 3.1 Research Design/ Sources of Data

The study is an *ex post facto* research design.

Time series data (2007-2016) was extracted from the annual reports and account(s) of the selected listed brewery firms. Data with particular importance to review of related literature were gathered from academic journals, libraries, website and internets.

## 3.2 Population of the Study and Sample Size and Selection Technique

The Nigeria brewery industry has a population of 9 firm listed under the Nigeria stock exchange market as December 2016. All these companies form the population the study. Availability of data and sufficiency of observation are important factor of consideration in a study. Hence the study domically selected 4 firms from brewery was guided by the size, market values of selected firm.

## 3.3 Analytical Technique

The analytical involve the graphical presentation of the movement in dependent and independent variable descriptive staffs in terms of measures of central tendency distribution the predictable power of each to evaluate the predictable power of each independent variable on the dependent coefficient of multiple determinations.

## 3.4 Model Specification

The model is specified in line with previous related literature in the area of the study. Koutsoyiannis (2003) states that model specification involves the determination of the dependent and explanatory variable, which will be included in the model, the theoretical expectations about the sign and the size of the parameters of the function the models are specified as follows.

## 3.4.1 Hypothesis One

Hypothesis do not states that dividend per share do not significantly affect brewery sector. Thus:

MKTValue	=	$Bo + B_1DPst + Et$ (1)
Where:		
MKTValue	=	Market Values
DPs	=	Dividend per share
E	=	error term
Bo	=	coefficient (constant) to be estimated
B1	=	parameter of the independent variable to be estimated
Т	=	time

## 3.4.2 Hypothesis Two

Hypothesis Two states that return on equity of firms do not significantly affect market values of firms in Nigeria brewery sector Thus:

us:			
	MKTValue	=	$Bo + B1ROEt + Et \dots (3)$
	Where:		
	MKTValue	=	Market Values
	DPs	=	dividend per share

MKTValue	=	Market Values
DPs	=	dividend per share
E	=	error term
Bo	=	coefficient (constant) to be estimated
$B_1$	=	parameter of the independent variable to be estimated
Т	=	time

The composite multiple regression (predication model is statistically formulated as:

MKTCAPt, $I = Bo + B$	$_{1} + B_{2}D$	$PSt + B_3 RoE + Et \dots (3)$	
ΜΚΤΓΔΡ	=	Market capitalization	

MKICAP	=	Market capitalization
DPs	=	dividend per share
ROE	=	Return on equity
E	=	error term
Bo	=	coefficient (constant) to be estimated

Bi – B6 =	parameter of the independent variable to be estimated
Т	= current period

current period

#### **Presentation and Analysis of Data** 4.1 **Data Presentation** Table 4.1 Raw Data obtained from Firms

		Р	0	0	L DATA		
	D		Р	S	EQUITY	ROE	MARKET Value
Nigerian Breweries Plc.		4	. (	6 2	18.92697874	0.17	13.97543994
				4.7	18.92632623	0.229	13.89095007
		5	. ′	75	18.96220799	0.247	14.03874611
	3				18.53721131	0.383	14.05435264
	3				18.35291453	0.0407	13.92141712
		1		2 5	18.16938086	0.494	13.47871807
		3		5 4	17.73097089	0.604	13.27606939
		1		8 2	17.69851855	0.574	12.90169177
		4		8 5	17.28838284	0.797	12.64299443
		1		59	17.58095843	0.438	12.84000047
Guinness Nigeria Plc.		1	3	. 2	17.54506652	0.0483	20.52751229
				3.2	17.6937984	0.161	20.92685368
	7				17.62353603	0.212	21.13264859
	8				17.6235436	0.257	21.35978417
		8		2 5	17.64500183	1.467	21.23409129
		2	•	7 3	17.46906108	1.792	21.3148145
		8		2 5	17.34771044	1.534	20.87931088
		1	2	. 8	17.26628196	0.429	20.67559565
	4			5	17.42270688	0.0129	20.63383786
		3	. '	4 6	17.2698961	0.0114	20.6537986

## Source: Firms Financial Statement

## **Reinstatement of Hypotheses**

**Hypotheses One** 

Ho: Dividend per share has no significant effect on their Market Value of selected brewery firms in Nigeria Hi: Dividend per share has a significant effect on their Market Values of selected brewery firms in Nigeria. Decision Rule: Accept Ho if insignificant at 5% level of significance otherwise reject.

## Table 4.2 Regression Results of the effect of Dividend per share on their Market Value of firms

R 2	R <sup>2</sup> Adjusted	Standard Error	Coefficient	Probability
0.174600884	0.137082742	4.730858711	0.641100682	0.042173121

Source: Researcher's Computations, 2018

Table 4.3 shows the effect of the selected companies Dividend per share on their Market Values. The results in Table 4.1 indicate  $R^2$  as 0.174600884. This means that 17% of the variations in the selected companies Dividend per share was caused by changes which produced their Market Values. This means that the remaining 83% can be caused by other variables that are not discussed in this study. Analysis also shows that Beta coefficient of 0.641100682. This means that a naira increase in the budget will cause a decrease of 0.641100682 in the selected companies Market Values. The study also shows a p-value of 0.042173121. This means that the change in the selected companies Dividend per share has positive and significant effect on its Market Valuation. Decision: Accept Hi and reject Ho. This means that the selected companies Dividend per share has positive and significant effect on its Market Valuesat 5% at level of significance.

## **Hypotheses** Two

Ho: Return on Equity has no significant effect on their Market Values.

Hi: Return on Equity has a significant effect on their Market Values.

Decision Rule: Accept Ho if insignificant at 5% level of significance otherwise reject.

Table 4.2 Regression Results of the effect of the selected companies Return on Equity on their Market value.

R 2	R <sup>2</sup> Adjusted	Standard Error	Coefficient	Probability			
0.000771581	- 0 . 0 4 4 6 4 7 8 9 2	5.205235303	0.19981647	0.897483756			
Source: Researcher's Computations 2018							

: Researcher's Computations, 2018

Table 4.2 shows the effect of the selected companies Return on Equity on their Market Values The results

in Table 4.12 indicate  $R^2$  as 0.000771581. This means that 77% of the variations in the selected companies return on Equity was caused by changes which produced their Market Values. This means that the remaining 23% can be caused by other variables that are not discussed in this study. Analysis also shows that Beta coefficient of 0.19981647. This means that a naira increase in the budget will cause a decrease of 0.19981647 in the selected companies Market Values. The study also shows a p-value of 0.897483756. This means that the change in the selected companies Return on Equity has positive and insignificant effect on its Market Values

**Decision:** Accept Ho and reject Hi. This means that the selected companies return on Equity has positive and insignificant effect on its Market Valuesat 5% at level of significance.

## **Summary of Findings**

At the end of this research work on the effect growth indicators on performance of firms in Nigeria Breweries sector, the researcher found out the following;

- 1. Dividend per share has positive and significant effect on Market Valuesof Nigerian breweries sector.
- 2. Return on Equity of Nigeria breweries firms has positive and insignificant effect on their Market Values.

## 5.2 Conclusions

The study concludes that the dividend is a major challenge faced by firms because of the alternative uses of such earnings. Return on equity is one of the all-time favourites and perhaps most widely used overall measure of co-operate financial performance while return on equity is perhaps the most important ratio an investor should consider.

## 5.3 Recommendations

Sequel to the findings of this study, it recommends that manager's compensation should be tied to stock, it is an incentive that will align the interest of principal (owner) and Agent (Manager) there by spacing efficient resource allocation and economic growth. The Nigerian stock market should create innovation through information technology that will help to make the market more efficient and transparent in information disclosure. The breweries firms should be strengthened to serve the interest of corporate entity and the three tiers of government, they should be encouraged to fund their developmental programme through the stock market

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