

## Effect of Dividend Payout on Market Value of Selected Brewery Firms in Nigeria

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### Abstract

*The objective of this study is to evaluate the effect of dividend payout on the market value of selected brewery firms in Nigeria. The ex post facto research design was adopted. Annual time series Secondary time series data is obtained from the annual reports of three selected companies for the period 2013-2017. Panel data and regression analysis were employed. The Tobin's Q measure of market value is specified in the model as a function of dividend payout ratio. The panel regression result shows that dividend payout ratio is positively related to firms' market value, but it is not statistically significant in determining firms' market value. It is therefore recommended that management of these firms should be encouraged to pay dividend annually so as to increase the market value of their firms.*

**Keywords:** dividend payout, market value, shareholders, Tobins Q,

### Introduction

The brewery industry in Nigeria is one of the oldest economic institutions. They contribute greatly to economic growth by attracting huge foreign direct investment, providing direct and indirect employment opportunities and increasing national output. One thing about the brewery industry is the absence of pure monopoly by the firms involved in Nigeria. Some many brands of brewery products in the industry command tangible shares of the market. Among firms in these industries include Nigeria Breweries Pls, Guinness Nigeria Plc, International Breweries Plc, etc. The success of the brewery industry in Nigeria could be attributed to the success in financial performance of the participating firms over the years.

Dividend could be seen as the share of profit of a firm by a shareholder on a pro rata basis that is determined by number of shares held by a shareholder. In some firms, several statutory deductions are made before the residue of the profit is appropriated to the ordinary members of the company. The Signaling theory emphasizes that when dividend are declared during the Annual General meeting, it is an indication that the firm is healthy and capable of sustaining and improving upon the current level of financial performance in the short and long run. To the shareholders, dividend is a source of income and to the managers, an evidence of good performance of the firm. In today's business world, investors are always concerned on what they stand to gain from the firm as cash or income over a period of time. The amount of dividend paid to the shareholders relative to the firms' retained earnings is what is known in literature as dividend payout ratio.

Payout ratio is the ratio of ordinary dividends to retained earnings. The payout ratio is a function of the dividend policy which an organization adopts in order to favor its shareholders. Dividend policy is a deliberate set of rules and guidelines that guide the management of a company as to what proportion of income/earning that should be distributed

to shareholders in form of dividend and the proportion that should be ploughed back into business. In essence, dividend policy entails decisions as to whether to pay dividend now or retain it (plough earnings back) for future purposes (capital gain). Dividend policy of an organization is believed to have an effect on the prices/values of its shares. There has been an ongoing argument on this which has led to several researches with varying results (Nwaobia, Alu & Olurin, 2017).

A company's value can also be described as all the values of all its monetary rights. Pandey (2005) sees the value of the company as the total values of all its monetary securities. Value can be predicated on the dividends streams that the stockholder will receive during the firm's life, discounted back to the current (Parkinson & Waweru, 2010). Oladele, (2013) sees the creation of value as the upsurge in the monetary worth of stockholders, as measured by proportion of marketplace value of stocks to the book value of stocks, produced by the presentation of a company. Creation of value takes place if the company produces more affluence for their bondholders that it could have not been easy to produce for themselves.

There are many ways of measuring the value of a firm: return on assets, returns on earnings, price earnings ratio, net sales, paid-up-capital, total assets, capital employed and so on. One thing is clear from all these, the value of a firm reflects the value of both tangible assets and intangible assets. The common tool which is usually used in measuring the firm's value is Tobin's Q. Tobin Q is usually a percentage of a market value of a firm to a firm's assets replacement cost (Taslim, 2013). Tobin Q measures firm value based on book vis-a-vis market based measures. Under Q proposition, a firm is said to create more value if investment returns are greater than investment cost (Taslim, 2013).

The payment of dividend to shareholders depends on the financial performance of companies. Current dividend payment reduces investors to discount the firm earnings at lower rate of return while dividend reduction increases investors' uncertainty, raising the required rate of return. Theories discussions on dividend suggest relevance on dividend policy as far as dividend payout ratio is concerned. However, no model or theory has been developed to show how a particular dividend payout policy affects market value of brewery firms, specifically. Result from empirical studies on the relationship between dividend payout ratio and market value or financial performances of brewery firms are diverse and inconclusive. As a departure from previous studies, this study uses Tobin's Q measure of market value in tracing the effect of dividend payout on market value of brewery firms in Nigeria.

In addition, managers are always in dilemma on how profit should be distributed, whether to pay it out as dividend or to it for the purpose of future investment. They are also faced with the problem of which method of dividend payout to be chosen. Those who are in support of dividend relevance and those who support dividend irrelevance. What an ideal firm should do it to attempt to resolve the conflict by striking a balance between the two extreme views. This study, therefore, sets out to investigate the effect of dividend payout on the market value of brewery firms in Nigeria.

## **Literature Review**

### **The Relevant theorists**

The proponents of the dividend relevance school called the traditionalist or bird-in-hand propositions or rightists offered the first explanation for the relevance of dividend payment. This theory, propounded by Williams (1938), Gordon (1959) and Walter (1963) posits that dividend payments are relevant and will affect share prices of companies/firm value. This

assertion is based on the fundamental theory of share price (Akinsulire 2005; 2014) which assumes that:

- i. The market value of a company's shares is a function of the size of dividend paid, the growth rate in dividends and the shareholders' required rate of return;
- ii. The growth rate in dividends is a function of the extent to which money is re-invested in the company and so, on the rate of earnings retained;
- iii. The owners of the firm will want their company to pursue a retention policy that maximizes the value of their shares.

### **Dividend Irrelevant Theory**

This theory propounded by Miller and Modigliani (1961) believes that payment of dividends and the amount paid are not relevant to or do not affect or determine the prices of shares. They argued that in tax-free world, shareholders are indifferent between dividends and capital gains, and the value of a company is determined solely by the earning power of its assets and investments (Akinsulire 2014). Simply put, they believe that the dividend policy of a firm does not determine the value of the firm rather, the earning ability of the firm and its investment policy, which are mostly considered for stock valuation.

### **Empirical Studies**

The study by Kajola, Adewumi & Oworu (2015) seek to examine the relationship between dividend pay-out policy and financial performance of 25 non-financial firms listed on the Nigerian Stock Exchange between 2004-2013. Panel data methodology was employed and pooled Ordinary Least Squares (OLS) was used to estimate the coefficients of explanatory and control variables. The Return on Assets (ROA) served as surrogate for the dependent variable, profitability, while Dividend Pay-out ratio proxied for dividend policy and was the only explanatory variable. Regression result reveals a positive and significant relationship between dividend pay-out policy (DPO) and firm performance (ROA).

Okoro, Ezeabasili & Alajekwu (2018) examine the determinants of dividend payout of 28 consumer goods companies listed on the Nigerian Stock Exchange. Purposive sampling technique was used and a sample of nine consumer goods companies for a duration of ten years from 2006 to 2015 was selected. Secondary data were collected from audited financial statements of the companies from the websites of the selected companies. Dividend payout ratio was the dependent variable while the independent variables were market value, profitability, financial leverage, company size and previous year dividend payout. Descriptive statistics and multiple regressions were used. Results showed that company market value has significant positive effect on dividend payout; company profitability has positive, but insignificant effect on dividend payout; company leverage has negative and insignificant effect on dividend payout; company size has negative and insignificant effect on dividend payout; and previous year's dividend has significant positive effect on dividend payout. The study thus concluded that market value and previous year's dividend are the major determinants of dividend payout in consumer goods sector in Nigeria. Inyama, Okwo & Inyama (2015) examine the effects, causalities, cointegration, magnitude and strength of the relationships between dividend pay-out policies and other performance indicators in the Nigeria brewery sector. The research made use of secondary data obtained from annual report and accounts of the two market leaders in the sector, Nigeria Breweries Plc and Guinness Nigeria Plc, from year 2000 to 2013. Retained Earnings (RETN) has a positive but insignificant effect on DPS. There is a strong relationship between DPS and EPS (68.4%), MPS (73.3%) and NAVPS (70%). There is a unidirectional granger causality running from NAVPS to DPS and also from DPS to MPS.

Olaoye & Owoniya (2015) examine the impact of dividend policy on market price of shares on sampled quoted companies in Nigeria. Secondary data were sourced from the audited annual reports of ten selected companies, the prices from Central Security Clearing System's portal (CSCS) and annual returns on Nigeria Stock Exchange All Share Index-NSEASI from Proshareng.com for the period of 2011 to 2015. The data were analysed by the use of OLS regression technique to find the level of significance of the variables: dividend payout ratio earnings per share and economy status on share price of sampled companies in Nigeria. The findings revealed that dividend payout ratio and earnings per share have significant effects on share price of equity while the economy status has insignificant effect on the share price of equity. The study also showed that earnings per share has a higher effect than dividend payout ratio and economy status of the country on market price of share of sampled companies in Nigeria during the period under review. Enekwe, Nweze & Agu (2015) investigate the effect of dividend payout on performance evaluation of quoted cement companies in Nigeria over the past twelve (12) years period from 2003 to 2014. The researcher employed four (4) variables for the analyses such as: Dividend Payout Ratio (DPR); Return on Capital Employed (ROCE); Return on Assets (ROA) and Return on Equity (ROE). Performance evaluation as dependent variable is represented by Return on Capital Employed (ROCE); Return on Assets (ROA) and Return on Equity (ROE) while Dividend Payout stands as Dividend Payout Ratio (DPR) for independent variable. The model specification for the analysis of data is ordinary least squares techniques applied as panel estimation while descriptive research method and simple linear regression for the analyses. The researchers' empirical results suggest that dividend payout ratio (DPR) has positive relationship with all the dependent variables (ROCE, ROA and ROE) used for this study; that dividend payout ratio (DPR) has statistically significant with Return on Capital Employed (ROCE) and Return on Asset (ROA) while DPR has statistically insignificant with Return on Equity (ROE) of quoted cement companies in Nigeria and that  $R^2$  of all the dependent variables (Return on Capital Employed; Return on Assets and Return on Equity) used for this study were affected by other variables outside our model. It further revealed that dividend payout ratio (DPR) has statistically effect on Return on Capital Employed (ROCE) and Return on Assets (ROA) of quoted cement companies in Nigeria while DPR has no statistically effect on Return on Equity (ROE) of quoted cement companies in Nigeria.

Musa (2015) utilizes the parsimonious multiple regression model to investigate the dividend policy of a cross-section of 53 firms quoted on the Nigerian Stock Exchange (NSE) during the period 1993 to 2002. The model employs five metric variables-previous dividend, current earnings, cash flow, investment and net current assets, and three non-metric variables-growth, firm size and industry classification, in order to explain as well as predict the dividend policy of quoted firms in Nigeria. The empirical results reveal that the five metric variables have significant aggregate impact on the dividend policy of the quoted firms. However, three of the variables- current earnings (E), previous dividend [DIV<sub>i</sub> (t-1)] and cash flow (CF), have been found to be robust in the model. Finally, the tests find that none of the three non-metric variables provides a statistically significant improvement to the base model. Nwaobia, Alu & Olurin, (2017) evaluating the payout ratios of companies and the extent of their effects/relationship on the share price of Nigerian quoted manufacturing companies using five (5) of such companies for a ten years period, making a fifty (50) firm-year-observation. Ex-post facto design was adopted in the study and the data estimated using Ordinary Least Square method. The findings show that Payout Ratio (POR) has a positive insignificant effect on the share price (SHP) of quoted manufacturing companies while Earnings per Share (EPS) and Price Earnings ratio (PER) have a positive significant effect on the share price (SHP). However, considering the main model, EPS and PER still exert a

positive significant influence on SHP while POR inversely influenced SHP. Hence, the overall/ combined influence of the independent variable (POR) and the control variables (EPS and PER) on the dependent variable (SHP) is positively and statistically significant which is in consonance with the a-priori expectation.

A look at the reviewed literature shows that studies on the effect of dividend payout ratio on market values of brewery firms in Nigeria are very scarce and few. It is seen that Enekwe, Nweze & Agu (2015) carried out similar studies, however they used returns on assets (ROA), returns on capital employed (ROCE) and returns on equity (ROE) as proxy for market share. This present study uses Tobin's Q measure of market value as the dependent variable. Tobin's Q. is the ratio of the market value of a firm's assets (as measured by the market value of its outstanding stock and debt) to the replacement cost of the firm's assets (Tobin 1969).

## Methodology

### Research Design

The ex post factor design was chosen for this study.

### Sources of Data

Data are derived from secondary sources. A Pool of data is extracted from Annual reports of three brewery firms used in the study: Nigerian Breweries Plc., International Breweries Plc. and Guinness Breweries Plc. for the period 2013-2017.

### Model Specification

The Market Value of firms (MPS) used in the study as the dependent variable ( $TBQ$ ) and Dividend per Share ( $DPR$ ) as the independent variable. The regression equation below follows the work of Nwaobia, Alu & Olurin (2017) which shows the relationship between the dependent and independent variable in a linear form as follows:

$$TBQ_{it} = \alpha + \beta DPR_{it} + \epsilon \quad (3.1)$$

Where:

$TBQ$  – Market value of firms proxied by Tobin's Q ratio (dependent variable)

$DPR$  - dividend Payout Ratio proxied by the ratio of dividend per share to earnings per share (independent variable)

$\alpha$  - the intercept

$\beta$  - the coefficient of independent variable

$\epsilon$  - error term

$it$  =for individual  $i$  at time  $t$

*A priori expectations*

$\beta > 0$ .

## Presentation of Results

### 4.1: Descriptive Statistics

The description of the panel or longitudinal data is based on mean, maximum, minimum and standard deviation of the variables. The descriptive statistics of the panel data obtained are illustrated in Table 1.

**Table 4.1: Descriptive Statistics**

	TBQ	DPR
Mean	0.185487	0.419107
Median	0.205200	0.526300
Maximum	0.320500	1.284900
Minimum	0.040400	-2.388100
Std. Dev.	0.085030	0.880154
Skewness	-0.014674	-2.239268
Kurtosis	1.865425	8.078260
Jarque-Bera	0.805076	28.65376
Probability	0.668621	0.000001
Sum	2.782300	6.286600
Sum Sq. Dev.	0.101222	10.84539
Observations	15	15

*Source: Eviews Computations by the Author*

Table 4.1 presents the result of the descriptive statistics of the time series data. TBQ has a lower mean (0.19) when compared with DPR (0.42). The figure for the minimum value for TBQ (0.04) is greater than that of DPR (-2.39). Both variables are skewed negatively to the left. The probability value of 0.67 for TBQ indicates that we do not reject the null hypothesis at 5%, while the value of 0.000 for DPR is rejected for 1% and 5%. The result of the model estimation is presented in Table 2 below.

#### 4.2: Model Estimation

**Table 2 Result of Panel Regression Analysis**

Dependent Variable: TBQ				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.181302	0.018277	9.919732	0.0000
DPR	0.009986	0.020892	0.477972	0.6420
R-squared	0.580454	Mean dependent var		0.185487
Adjusted squared	R- 0.466032	S.D. dependent var		0.085030
F-statistic	5.072937			
Prob(F-statistic)	0.019066			

*Source: Eviews Computations by the Author*

The coefficient of determination ( $R^2$ ), with a value of 0.58 indicates that 58 per cent of changes in the market value of firms are attributable to changes in dividend payout ratio. The model is of good fit in measuring the relationship between market value of firms and dividend payout ratio. The F-statistics is also statistically significant, thereby, reinforcing the result of the  $R^2$ . The positive relationship between the two variables indicate that as dividend payout ratio increases, the firm's market value increases. Individually, the probability of the coefficient for the DPR (0.6420) indicates that DPR is not statistically significant in determining the market value of firms. On the average, ceteris paribus, a one percent change in dividend payout ratio leads to about 0.01 per cent change in the market value of firms. This finding seems to agree with the result of Nwaobia, Alu & Olurin (2017) whoc claims that that Payout Ratio (POR) has a positive insignificant effect on the share price (SHP) of quoted manufacturing companies. However, the result of Enekwe, Nweze & Agu (2015) conflicts

with the claim that dividend payout ratio (DPR) has statistically significant with Return on Capital Employed (ROCE) and Return on Asset (ROA) while DPR has statistically insignificant with Return on Equity (ROE) of quoted cement companies in Nigeria. This difference with the present study could be attributed to the nature of the different proxies used in the two studies.

### Conclusion and Recommendations

This objective of this study is to evaluate the effect of dividend payout ratio on the market value of brewery firms in Nigeria. The brewery industry has been identified as one of the industries that has passed through periods of booms and depressions in Nigeria and still remained in business. After an extensive review of related literature, the *ex post facto* research design was adopted for the methodology. Three brewery firms were selected from the many listed ones because of paucity of data needed for data. Time series panel data was analysis. The Tobin's Q measure of market value is specified in a model as a function of dividend payout ratio. The panel regression result shows that dividend payout ratio is positive related to firms market value, but it is no statistically significant in determining firms market value over the period 2013-2017. One limitation of this study is the absence of control variables in the model. However, the value of the F-statistic and R<sup>2</sup> shows indicates that the model is adequate in explaining the relationship between TBQ and DPR. This presence of additional time series data and control variables might improve the quality of the result. Having found a positive relationship between the two variables in the study, management of these firms should be encouraged to pay dividend always so as to increase the market value of their firms.

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