

Dividend Payment and its Impact on the Value of Firms Listed on Nigerian Stock Market

¹Maxwell K. Agboufa & ²Abeki Sunny Okoro

¹Department of Banking and Finance

²Department of Public Administration

University of Africa, Toru-Orua, Bayelsa State

Article DOI: 10.48028/iiprds/ijdshtmss.v13.i1.11

Abstract

The study demonstrates statistical evidence tested by scholars to affirm that dividend as a tool of finance affect the value of the firms operating in a regulated market in Nigeria. Walter model theory of dividend as core theoretical framework. The study investigative period ranges from 2012 to the year 2021. The study used secondary data of firms' financial statement. Four objectives were tested in the study and variables were used to proxy dividend payments and the value of the firm as used in other literatures. The study contributes to literature in terms of the model and methodology adopted in the study. The researcher ensures that the regression focused on fixed and random effects results gives an optimal output from the Generalized Linear Model used. Histogram was used to while the t-statistics was used to test the statistical relevance of dividend payment and its corresponding effect on the value of the firm based on a standard z-score value of 1.96. It was seen from the analysis that the study support literature that dividend payment affects the value of the firm. The study recommends that priority be given to selected variables such as dividend per share as their impact are seen on the value of the firm.

Keywords: *Tobin Q, Dividend, Value of firm, Regression, Nigerian exchange limited.*

Corresponding Author: Maxwell K. Agboufa

Background to the Study

It is essential to have detailed knowledge about the trend pattern of the stock market to guide in profiting from the market. Some activities of the stock market include the buying and selling of shares but not limited to dividend payments arrangement of firms, the dividend policy adopted and the value of the firm. Investors are particularly interested in knowing the future trend of the dividend payment irrespective of the current value of the stock price. This information enables investors to map out appropriate strategy. Researchers and investment analyst have created various mathematical models to predict stock price, dividend payment and the value of the firm patterns. Some of the tools noted in researcher that has been used to value dividend payment and the value of the firm are Fundamental Analysis, Technical Analysis and Efficient Market Hypothesis. However, before the financial depression of 2008 and the COVID-19 of 2019/2022 efforts from financial analyst in finance and economics focused in developing robust models to capture dividend payment and the value of the firm.

Dividend generally is regarded as distribution of profit by listed corporate firms. The distribution of profit as a form of dividend by firms in Nigeria nosedives as result of unpalatable financial and economic activities caused by COVID-19 (Chartered Institute of Stockbrokers (CIS) 2022). As listed firms in Nigeria began to recover from the shock of COVID-19 from the year 2021, the issue of paying dividend and the declining of net income of firms has been regarded as an attention for firms and its shareholders to examine ways to maximize wealth. However, the significance of dividend payment and its policies in firms cannot be over emphasized in this period of financial recession and the issues of Russia and Ukraine war that have affected economic activities in the world today. A number of stakeholders such as investor, managers, lender, financial consultant and analysts use dividend payment to make informed decision and to value the financial potency of a firm.

To examining empirically the significance of firms using dividend policy and payments to generate revenues for shareholders maximization in terms of making policies of paying less dividend or no dividend at all. From some investment point of view, most researchers do seems to align with the assumptions that dividend is a basis of revenue rather they assume it to be a parameter to evaluate the growth of a firm. M & M have stated that the value of a firm is not solemnly dependent on internal factors but on the ability of shareholders through their managers or agent to sway a large variance between purchasing power and the total consumption pattern of the shareholders where the latter is favorable than the former (Deakin, 2018). Budagaga (2017) stated that it is only when large sum of money are paid as dividend that the effect is felt on the value of firms. Most time it affects only listed firms because of the parameters factors that affected listed firms in most stock market like that of the Istanbul Stock Exchange market. Kim and Kim (2020) states that dividend if paid for some years by firms that are not consistent with it, there is a negative impact recalling the issue of the COVID-19 period in selected countries where firms inconsistent among countries in the pattern of dividend payment.

The corporate decision to pay a cash dividend to shareholders and the further decision to upsurge the dividend or keep it at same naira amount signifies one of the maximum stimulating and controversial spaces in the field of corporate analysis and policies in finance.

Dividend is simply regarded as that part of revenue to the tune of profits after tax (PAT) that firms may be mandated to distribute according to some internal policies that guide the operations of firms. That is the financial benefits accrued to shareholders for their financial commitment in the. The implication is that the company is mandated to share income in two ways that is, apportion a proportion to the shareholders and retain the rest as an avenue to escalation the relative value of the business at any point in time. However, there may be a factor of challenges that may react to either an increase or decline on the premise that firms are rational in dividend payment and the value of the firm as both variables are vital for business valuation. The investors are interested in receiving the all-out returns on their investments and to make the most of their wealth. Thus, dividend payment and the policy adopted for dividend payment affects all levels of growth the firm may want to adopt in the future based on the wealth conception of the shareholders. Therefore, the firms are in a position to take a decision on either to pay dividends in an equitably proportion or retained the total earnings. Scholars in finance are of the opinion that firms distribute a reasonable proportion and retained reasonable earnings as well (Pradhan, 2003) by also making plan for unpredictable risk.

In most companies' perspective, payment of dividend is dependent on selecting a appropriate dividend policy is significant decision for most firms operating in the stock market or in services business because of the flexibility of investors coming with suggestions for firms to invest in projects with potential cash flows. This is because the dividend received by shareholders are dependents on cash flows and profit made by the firm. (Khan 2012) Ling, Matalip, Sharin and Ethman (2008) stated the features of firms that pays dividend in the Malaysia dividend streams and found out that even firms that pay dividend are not strong in profitability generations, but they are less risky due to economic stability and government supports for business growth. These factors make firms in Malaysia survive as compared to other firms in other less development countries that does not pay dividend paying.

Dividend policy emphasis two things as stated by some scholar, the first is the amount paid and the second is the amount retained but most scholars only looked at the amount paid as dividend. Justifiable reasons irrespective of the amount retained or paid is that the total funds still belong to the shareholders (Chidi Agu and Ade, (2013), Altroudi and Michemi, (2013). In spite of ever-increasing focus on the dividend policy, as at present, no definition can be pick-pointed as universally accepted conclusion as regard dividend policy and payment because of the enormous discussions of mixed results that expresses various views concerning dividend policy. This has made it difficult and brings a conclusion that the harder we look, the difficulty we see to conclude because it is like a puzzle with piece that don't fit together". Brealy and Myers (2005) describe the research on dividend as research rated as one of the top ten difficult area of research in finance because it provided an unsolved solution for decades.

A major conflict is to appropriately answer the question on dividend policy influence on the market price of firm. To question extend the question of dividend payment and the value of the firm as most times in finance, the value of a firm is measured by the price of the firm. However, two school of thoughts debates this question and they include the school of thought that represents the view that dividend policy affects the value of the firm through the share price (Salih,2010 Petto, 1972, Gordon 1963 etc.) while the second school of thought are

holistically stated that the history of dividend policy and its future debates would bears no relevance as far as the business firm market value is put into consideration (Deakin, 2018). These two schools of thought have been in existence for long and researchers align themselves to any of the school of thought with support focusing on the linear link that was noted to exist in connection with dividend policy and share price is just an attempt made to corroborates the disapproval of the stated hypothesis.

Most times the firm value is represented by the share value or by the report as stated on the market capitalization of the firm. It has been proven that the only benefits of the company as regard dividend is that all decisions are point down to the firm firm's investment decision made at any point in time. (Crapp, Faff, Garry and Twite 2000) stated that managers are expected to incorporate the issue of the amount needed as earnings and also the amount needed as share price when taking decisions as both factors are significance in the growth of the firm. Kapoor (2009) stated that the study of share price fall is absolutely in line with the decline in the payment of dividend while an announcement of dividend increases the perception of increase in the price of stock. In Nigeria, severe expansion was experienced in the era of indigenization, COVID-19 and in the storm of global crisis that affected the country. Such negative effects brought about a nosedive in the market value of the equity shares of listed firms listed in the capital market. (Adefila, Oladipo and Adeoti 2013, Uwuigbe, Olowe and Godswill 2012). This project examined data from pre and post COVID-19 era on dividend and stock price on firms listed on the capital market in Nigeria.

Statement of the Problem

The value of the firm is regarded as the problem variable in this study because it is assumed to be affected by various factors such as economic uncertainty, the share price, the COVID-19 period and most importantly the decision of the boards of managers. The managers make policy that administer the effective operations of the firm and most times to positively affect their production capacity and returns. The shareholders on the other hands close monitor the activities of the agents or managers as their interest on wealth maximization should be the primary goal of the managers. Manager decision to pay dividend and retained a proportion for as earns foster a debate by scholars in academic on which proportion is right to be retained or distributes. However, scholars have looked into so many industries such, but this study focused on listed firms in the Nigeria and the extent in which the value of firms are affected by decisions such as the decision of dividend payment by taking data in panel form. Juma'h and Pacheco (2018) stated that managers that pay dividend as regarded as strong while weak mangers don't pay dividend. This is an interesting problem because shareholders considered the payment of dividend as a parameter for return of investment, hard work of managers and the progress of the firm because investors gain confidence on firms that pay dividend. Researchers such as Glen, Karmokolias, Miller, and Pandey (2001) and Adaoglu (2000) are of the opinion that the financial strength of a firm is not measured by the amount of profit generated or the amount paid by dividend as it assumes by others. Therefore, the study objectives include to examine the various needs of shareholders through proxied of variables, to examine the effect of dividend on value of firm that uses policy to pays dividend and firms that uses policy not to pay dividend.

Literature Review

Traditional School: Dividends Relevance

This school was regarded or popularly called the rightist. This means that researchers in this school were the first to discuss the issue of dividend relevance payment to shareholders. The originator of the school is known as Graham and Dodd. Their first articles were written in the year 1934. They stated that the measurement of the impact of dividend on stock price was seen to be for time stronger than the impact on the amount retained by firms. The implication is that dividend is more affected the share price than the retained earnings hence attention should be given to dividend payment. This assertion was later discussed by Linter (1956) and Gordon (1959). Also, Walter gave an expressive and detained explanation to support the relevance of dividend payment in its articles published in the year 1956 and 1963.

Dividend relevance: Walter's Model

The Walter's model may not be regarded as the optimal model but a model classified as a model that is link to the theoretical development of the payment of dividend and that its indicates that appropriate dividend policy affects the position of corporate firms in the industry. Walter (1961) studied the influence that corporate firms internal return, r and the cost of capital, k_e would have on the decision made by managers on dividend policy and how the policy decided upon would aid the maximization shareholders wealth.

Walter model is absolutely based on the following premises:

- i. The firm finances: the use of retained earnings and the initiation of new equity is not an avenue to raise funds but for the entire investments process that benefits the shareholders.
- ii. The Internal rate of return (r) and the cost of capital (k_e) are expected to stay constant over time.
- iii. The firm's decision should either be to share profit in terms of dividend payment or reinvested internally in the business for upwards growth.
- iv. The position taken for sharing earnings and payment of dividends remain constant over time.
- v. It is assumed that the firm is a going concern and thus have a long life to exist.

Walter (1961) defines the formula below by emphasis on the market price per share is given.

$$P = \frac{D+r/R(E-D)}{K_e}$$

Where,

P = Market price per share

D = Dividend per share

E = Earnings per share

R = Internal rate of return

K_e = Cost of capital

Walter stated that the application of dividend policy is dependent on the linear relationship that may exist between the between internal rate of return (r) and the cost of capital (k) in the form corporate finance analysis. To further explain the analysis in mathematical form. The following assumptions were considered.

- a) **Growth Firms:** this means that firms that are classified to fall in this category would experience their internal rate of return to be higher than their normal rate. Meaning that $r > k$. Therefore, the implication is that if r/k factor will be greater than a unit, then such firms classified would need to ensure that their low return align with their reinvest earnings since existing alternative investments offers lower return that the firm is able to secure. Since the Walter model uses weight, it means that the larger the firm's returns, the higher the value of the firm while the optimum dividend pay-out ratio would be approximately close to zero.
- b) **Normal Firms:** This comprises of firms that are regarded as firm that their internal rate of return equate the market rate of return in which the firm operates. The implication of this is that dividend policy will have no effect on the market price of the company's share selling in the market.
- c) **Declining Firms:** These are firms which their return does not meet the minimum requirement of the valued expected in the market. Meaning that ($r < k$). It means that declining firms may have opportunity that is classified in the firm portfolio as opportunity that generates investment returns. Also means that the firm would not take any investment but would distribute all earnings as to maximize market price per share and attained shareholders wealth maximization opportunity.

Empirical Review

Budagaga (2017) concluded that despite the papers that have supported dividend and the value of the firm, the Istanbul Stock Exchange analysis also support the study of dividend and the value of the firm. The researcher concluded that there is a positive substantial connection that exist between dividend payments and the value of the firms. The results support the agency cost theory than the signaling theory. Also, Kim and Kim (2020) states that the payment of dividend for years by firms is inconsistent from country to country and thus the impact of COVID-19 does not change the inconsistent among countries in the pattern of dividend payment.

Tinungki, Robiyanto and Hartono (2022) studied the extent in which the COVID-19 Pandemic had gone to show negative influences on corporate dividend policy in some firms operating in Indonesia. The researchers use the signaling theory to conclude that the pandemic affects both dividend and the overall value of the firm. Eryomin, Likhacheva, and Chernikova (2021) support the influence of dividend and the market value of the firms operating in the Russia stock market. The Bird in Hand theory was tested, and the study concluded that if residual principle was adopted, the effect of dividends on the value of the firm would be seen if the value of the market is proxy with market capitalization variable.

Nympha, Egolum, and Chukwuani (2021) examined the dividend policy causes of firm's value in Nigeria. The study focused on the extent in which dividend upset the value of the firm. The study tested the signaling theory and the finding reveals that dividend per share is a

significant determinant of firm value while the work of Hansda, Sinha and Bandopadhyay (2020) investigate if the existence of the financial crisis was an attempt to restructure the financial system or an attempt to devalue the transaction system in the financial market. However, they concluded that dividend is rich in analyzing the value of the firm and the substantial proportion of the value of the firm. However, the result also shows that financial crisis affects the relationship between dividend behaviour and firm value. Meaning that higher dividend yield in the period of financial ups and downs may affirmed substantial evidence of the presence of signaling hypothesis.

Anh Huu, Pham, Doan, Trang, Hieu and Tu Van (2021) support other research on dividend and firms' financial performance using Tobin's Q as method of data analysis on 450 firms in Vietnam between 2008 to 2019. Dividend data and result were used as independent variable and ROA and ROE was used as the dependent variable respectively. The study found out that the decision of dividend payment made the 450 firms in Vietnam affect financial performance negatively but the action of dividend payment rises the share price as well as the future market expectation of the firms.

Adebayo (2019) used six firms in the conglomerates to examine dividend policy and share prices in the financial market regulated by the government. The type of the proportion of panel data used in the study were all dated as at 31/12/2018. Regression analysis was adopted as the study technique of analysis. The study result support the evidence on ground that dividend yield has a positive and substantial effect on share prices. Also, earnings yield and dividend payout ratio were accounted to negatively affect share prices. The study concluded that a regulated market creates the avenue for persons to examine and contributes to the positive or negative contribution to the market. Chinedu (2020) support the findings of Adebayo (2019) on a research work where the aim involved the result of dividend policy on shareholders wealth creation and firm performance. Ten firms selected from the deposit money banks industry that are listed on the stock exchange were used. The data were extracted from the financial statements of the banks and a panel data were formed. Descriptive statistic and multiple regresses were the first stages of statistical analysis done. However, the result signifies a positive link between the dividend payout and shareholders wealth creation among the firms used in the study.

Anthony et'al (2018) supported the assertion that dividend policy affects the value of the firm by assessing effects earnings on stock price. Firms from the banking sector were selected and grouped based on behaviour of the share prices using a range span of 2000 to 2014 data. The data were comprising of stock prices, dividend, the retained earnings and general earning after tax to the dividend paid per share. Pooled least square regression model and both fixed and random effect analysis was used. The Hausman test was also adopted, and the general findings shows that current dividend has a significant positive effect on the stock prices. Also, earnings and recoded previous dividend were regarded as payment that insignificant affect banks' stock prices. The work of Lucky (2019) looks deeply on testing the application of the Miller and Modigliani dividend policy irrelevant hypothesis in Nigeria stock market. The validity was tested with the Tobin Q hypothesis to checkmates the occurrence of dividend irrelevant among businesses. Variables used by the researcher include dividend payout ratio, retention ratio, per

share of dividend paid and the dividend yield. 20 firms were used, and the information obtained were selected based on criteria needed to obtain a valid answer to the research questions. The study was set to be for 10 years with the period of 2008-2017. The study finding shows that dividend affects the value of the market based on some premise that the trade-off between dividend payout and retain earnings are effectively managed. Also, the proportion of retained earnings and dividend paid support the knowledge that investor has on dividend policy.

Robert (2017) stated that dichotomy between the dividend importance as noted by some scholars and the dividend irrelevance schools as noted by other scholars. All affirmed that the result of the number of persons that support the schools. If the proportion of persons are equal, the argument continues but if the support tends towards the right or left, one of the schools would have seize to exist. However, Robert (2017) concluded that dividend is more relevant when the market is slows than when the market is fast as investors have information in the market to take any decision that best suit them. Taofeek (2019) looked at intelligent view in the short and long run analysis of investment stuck return and concluded that the market is dynamic and thus react to the forces and demand across industry. He concluded that dividend policy affecting the value of the firm is based on information obtained by managers prior to the knowledge of shareholders as regard market operations.

Vincent (2019) was on the opinion that dividend affect price in a regulated market. If a market is regulated, the dividend yield (DY) that firms are entitled to, which in other words called dividend pay-out ratio, and earnings per share as support variables to examine dividend policy and net asset per share (NAPS). It was observed that the dependent variables were noted to be market price share while others were regarded as independent variables. The information used are all collected from the financial statements of 10 firms operating in consumer goods and are quoted in Nigerian stock market within the period of 2011 to 2015. The study findings support the claims that dividend affect the value of firms in as much as the market in which the firm operates is regulated. The research of Farrukh, Irshad, Khakwani, Ishaque and Ansari (2017) established that dividend policy affect the value of the firm by using Pakistan between the year 2006-2015. A total of 51 firms were used in the study to examine dividend policy and share prices in the Pakistan stock market. Secondary data are stationed for time series and corroborates with the study objectives. Auto distributive lad and the birds in hand theory were used in the study. The result of the study shows that dividend yield has a positive and substantial effect on share prices. Also, earnings yield and dividend payout ratio were accounted to negatively affect share prices. It was noted that the analysis and review done corroborates that the use of dividend in corporate business align with the important of dividend and share price increase. Zayol, Mya and Muolozie (2017) supported the findings of Farrukh et al (2017). The focus of the study was on determinants of dividend policy of petroleum firms in Nigeria. The period under investigation was within the year 2011-2014. 15 oil and gas firms were selected from the oil and gas sector in Nigeria as they are listed. The data were extracted from the financial statements and a panel data were formed. Simple statistic and cointegration methods and test of stationarity were used as methods of analysis. The result signifies that there is a positive link between the dividend payout and shareholders wealth creation among the firms in the oil sector. Umar and Saidu (2016) measured the link

among dividend policy and financial performance of oil and gas companies in Nigeria using data extracted from the year 2005 and 2014. The results corroborate with the results of Farrukh et al (2017).

Rachid and Wiame (2016) supported the assertion that dividend policy affects the value of the firm by assessing effects earnings on stock price in Morocco. Firms financial statement were used and grouped based on behaviour of the share prices using a range of firms paying high or low dividend across a particular period. The data were comprising of stock prices, dividend, the retained earnings and general earning after tax to the dividend paid per share. Pooled least square regression model and both fixed and random effect analysis was used. The Hausman test was also adopted, and the general findings shows that current dividend has a significant positive effect on the stock prices. Also, earnings and recoded previous dividend were regarded as payment that insignificant affect banks' stock prices. Eniola and Akinselure (2016) look deeply on testing the application of the Miller and Modigliani dividend policy irrelevant hypothesis in Nigeria stock market. The validity was tested with the Tobin Q hypothesis to checkmates the occurrence of dividend irrelevant among businesses. Variables used by the researcher include dividend payout ratio, retention ratio, per share of dividend paid and the dividend yield. 20 firms were used, and the information obtained were selected based on criteria needed to obtain a valid answer to the research questions. The study was set to be for 10 years with the period of 2008-2017. The study finding shows that dividend affects the value of the market based on some premise that the trade-off between dividend payout and retain earnings are effectively managed. Also, the proportion of retained earnings and dividend paid support the knowledge that investor has on dividend policy.

Ehikioya (2015) stated that dichotomy between the dividend relevance and the dividend irrelevance schools is as a result of the number of persons that support the schools. If the proportion of persons are equal, the argument continues but if the support tends towards the right or left, one of the schools would have seize to exist. Ehikioya (2015) concluded that dividend is more relevant when the market is slows than when the market is fast as investors have information in the market to take any decision that best suit them. Kajola et al. (2015) looked at intelligent view in the short and long run analysis of investment stuck return and concluded that the market is dynamic and thus react to the forces and demand across industry. He concluded that dividend policy affecting the value of the firm is based on information obtained by managers prior to the knowledge of shareholders as regard market operations.

Shisia, Sang, Sirma and Maundu (2014), was on the opinion that dividend affect stock price and the value of the firm. He used dividend yield (DY), dividend pay-out ratio, and earnings per share as support variables to examine dividend policy and net asset per share (NAPS). It was observed that the dependent variables were noted to be market price share while others were regarded as independent variables. All data were sourced from the financial statements of 10 firms operating in consumer goods and are quoted in Nigerian stock market within the period of 2011 to 2015. The study findings support the claims that dividend affect the value of firms.

Topal (2014) stated that dividend would be relevant when tied to policies regulated by government in his analysis of 172 that are not in financing business. Gittman (2014) stated that the common stock is more preferred than the other stock because the returns ranges over a long period and thus profitable for dividend payment. Merritt (2014) submits that if earnings are retained, it represents the value "locked up" in the firm for further sharing. Friend and Puckett (1964) stated that the effect of dividends and retained earnings on stock prices is complex while the work of Harkavy (1953) stated that the propensity for stock price ranges from time to time based on market analysis. Wright (2014) also support the proposition that dividend policy is relevant irrespective of the sector the firm operates.

While Adediran and Alade (2015), support other literature that investigate the effect of dividend policies and cooperate performance using firms listed in the Nigeria market and concluded that dividend affect profit. Chenchehene and Mensah (2015) also supported that dividend affects profit through their analysis carried in the United Kingdom (UK) using retail industries from 2004 - 2008. Ojeme, Mamidu and Ojo (2015) were of the opinion that states that payment of dividend by the quoted banks is relevant to their market value.

Akit Hamzah and Ahmad (2015) stated that the use of the Generalised Least Squares (GLS) method corroborates that dividend and share prices follow a linear relationship while the work of Emeni and Ogbolu (2015) stated that following the trend of report of firms listed on Nigerian stock exchange concerning dividend payment is a valid source to practically analyze if dividend payment is relevant or not across firms.

Methodology

The study employed research survey method and the population for this research was forty (40) listed firms. These firms comprise of both financial and non-financial firms. The rationale for choosing these firms as population was based on the availability of their financial statement up to the year 2021. Mbokane (2009) stated that all totality of an object that a researcher need for analysis is regarded as the set of population. Therefore a population in this study are firms listed in the stock market that possess certain features that is required in this study analysis and objectives. The sample size is the appropriate fraction from the population that the researcher used to generalize (Sudman, 1976: II). The population of this study is forty (40). Therefore, this study aims to cover the key players in the Nigeria Exchange limited whose stocks are actively traded. The sampling technique used was the stratified sampling techniques as samples were selected across key sectors of the Nigerian economy. Each of the strata sample is a simple random sample used to select a representative sample representing each strata.

Sample size and Sampling Techniques

A convenience research sampling was adopted as sampling technique. For reliability and justification of the population of this study, access to information within the scope of the study was used as the selection criteria to select samples from the population of 40 listed firms for the study. Also, the financial statement that are in public domain by the listed firms from 2012 to 2021 are regarded as consideration factors.

Computation of the Study Sample Size

Formula from the various formulas to derive the sample size of the study.

$$n = \frac{N}{1 + N(e)^2}$$

Where n is equal to Sample size

N = The Population of the study =40

e =the study Sample error (5%)

The computation of the sample size using the formula above is = 36

It was on the sample size of 36 that the mathematical models were formulated.

Based on the convenience sampling techniques, the researcher focused on 15 firms due to the availability of data on public domain. Therefore, from the sample size of 36 that firms were selected. To ensure that data are accurate, the researcher expand the periods to 10 years study. Hence the total observations expected in the study is 150 observations.

Method of Data Collection

This research is based on secondary sources and obtained information from audited financial statement of the selected firms and from the archives of the Cash Craft Asset Management Limited, Mecharatios limited and Sigma Securities.

Method of Data Analysis

Generalized Linear Model (GLM) is adopted as the technique of data analysis for the study. Also the Descriptive statistics and Correlation are used as estimation techniques.

The General Model for the Study Objectives

The models specifications are modeled in line with the study focus and the work of Badagaga (2017).

$$TQ_{it} = \beta_0 + \beta_1DPS_{it} + \beta_2DY_{it} + \beta_3RE_{it} + \beta_1EPS_{it} + \mu_{it} \dots \dots \dots \text{General Model}$$

Where:

- TQ - The Value of the Firm
- EPS - The Earnings Per Share
- DPS - The Dividend Per Share
- RE - The Retained Earnings Ratio
- DY - The Dividend Yield
- β_0 - The Slope of the regression
- $\beta_{1,2,3}$ - Coefficient of the variables
- μ - Error term

The Specific Models are stated below

$$TQ = f(DY) \dots \dots \dots \text{obj.1}$$

Rewriting the Model in Linear form

$$TQ_t = \beta_0 + \beta_1 DY_{it} + \mu_{it} \dots \dots \dots \text{eq1}$$

TQ =f (RE)..... ..obj.2

Rewriting the Model in Linear form

$$TQ_t = \beta_0 + \beta_1 RE_{it} + \mu_{it} \dots \dots \dots \text{eq2}$$

TQ =f (DPS)..... ..obj.3

Rewriting the Model in Linear form

$$TQ_t = \beta_0 + \beta_1 DPS_{it} + \mu_{it} \dots \dots \dots \text{eq3}$$

TQ =f (EPS)..... ..obj.4

Rewriting the Model in Linear form

$$TQ_t = \beta_0 + \beta_1 EPS_{it} + \mu_{it} \dots \dots \dots \text{eq4}$$

Panel Data, Fixed and Random Effect

Based on the direction of the data results, the researcher decided that the both the fixed and random effect can be applied to examine the effect of dividend on the value of the firm as both are expected to give the same results. The researcher also considered the pool panel effect as alternative for the fixed as random effect.

The General Linear Model

This method of analysis is similar to that of regression analysis but is regarded to be stronger than simple regression model. This model shows the effect of all the independents variables stated on the dependent variable. The t-statistics are tools used to test the hypothesis.

Mathematical Models in Linear Form

The study models:

$$TQ_t = \beta_0 + \beta_1 DPS_{it} + \beta_2 DY_{it} + \beta_3 RE_{it} + \beta_4 EPS_{it} + \mu_{it} \dots \dots \dots \text{General Model}$$

Results and Discussions

Table 1: Descriptive statistics

| | TQ | RE | EPS | DY | DPS |
|--------------|-----------|-----------|------------|-----------|------------|
| Mean | 40.50000 | 0.389000 | 0.634851 | 0.229000 | 0.229000 |
| Median | 42.02000 | 0.360000 | 0.032648 | 0.761900 | 0.761900 |
| Maximum | 42.30000 | 0.790000 | 0.025363 | 0.512010 | 0.512010 |
| Minimum | 37.90000 | 0.120000 | 0.020682 | 0.460000 | 0.460000 |
| Std. Dev. | 0.614403 | 0.193491 | 0.076540 | 0.108121 | 0.108121 |
| Skewness | 0.582634 | 0.474898 | 0.006101 | 0.137128 | 0.137128 |
| Kurtosis | 3.193537 | 2.592497 | 0.224853 | 1.326497 | 1.326497 |
| Jarque-Bera | 2.334441 | 1.126781 | 0.045611 | 0.136711 | 0.136711 |
| Probability | 0.000000 | 0.003836 | 0.038913 | 0.440172 | 0.440172 |
| Sum | 58.72500 | 97.25000 | 0.011182 | 13.63100 | 13.63100 |
| Sum Sq. Dev. | 13.19525 | 9.322250 | 0.023111 | 7.012034 | 7.012034 |
| Observations | 200 | 200 | 200 | 200 | 200 |

Source: author's computation 2023

Table 2: Correlation Results

| | TQ | RE | EPS | DY | DPS |
|------------|-----------|-----------|------------|-----------|------------|
| TQ | 1.000000 | -0.002566 | 0.373258 | 0.356044 | -0.005687 |
| RE | -0.002566 | 1.000000 | -0.134430 | 0.089620 | -0.437558 |
| EPS | 0.373258 | -0.134430 | 1.000000 | 0.007127 | 0.069248 |
| DY | 0.356044 | 0.089620 | 0.007127 | 1.000000 | -0.456643 |
| DPS | -0.005687 | -0.437558 | 0.069248 | -0.456643 | 1.000000 |

Source: author's computation 2023

From table above 1, we could see that both positive and negative correlation among the variables proxy for firm values and dividend payments.

Table 3 shows all the variables that is comprised of 200 observations which are 20 firms with financial data for 10 years 2012-2021. The dependent variable of the study changes from TQ to EPS. The average value estimated for TQ was valued to be 40.5. The highest and lowest point

in which TQ value can range is 42.3 and 39.7 respectively. The result shows that the market value increase to 42.3 and fall to 39.7 on the average.

The model independent variables which are noted to be the variable affecting TQ are classified as the measure used in this study to proxies the data obtained from the regulated market or exchange. The independent variables names are specified as EPS, DPS, DY and RE in the model. The average value for all the variables names were obtained from the descriptive results and it shows that EPS is 6.344. Statistical interpretation is that the average earnings per share (EPS) earned by investors in a regulated market is 6.344. The highest and lowest values of EPS are 4.70 and 8.30 respectively. Meaning that in a regulated market, investor's earnings per share ranges between 4.70 and 8.30 respectively within 2012 and 2021. Dividend yield (DY) was noted to be the complex variables among others as its argument from related literature gives a mixed result. The average of the dividend yield of this study is 0.056. Comparing the value of the dividend yield in the firms used in this study with another sector in Nigeria indicate that the dividend yield of quoted firms is higher than any other non-regulated market. The highest and lowest values ascribed to dividend yield is 0.0728 and 0.0415 respectively. The descriptive statistical results support absolutely the work of Benjamin (2015) that in as much as dividend issue is complex, many studies support the relevance of dividend. Also, the study shows that the average value of retained earnings amount to 0.389000, indicate the proportion of earnings retained by quoted firms in the market.

The Regression Results

The regression results are presented for interpretation alongside other literature to support the findings of the effect of divided payment and the value of the firms in Nigeria. The Generalized Linear regression model (GLM) was used to run the analysis.

General Model

$$TQ_t = \beta_0 + \beta_1 DPS_{it} + \beta_2 DY_{it} + \beta_3 RE_{it} + \beta_4 EPS_{it} + \mu_{it}$$

Table 3.

| Dependent Variable: TQ | | | | |
|---|-------------|--------------------|-------------|-----------|
| Method: Generalized Linear Model (Newton-Raphson / Marquardt steps) | | | | |
| Date: 05/26/22 Time: 18:52 | | | | |
| Sample: 2012 2021 | | | | |
| Included observations: 200 | | | | |
| Family: Normal | | | | |
| Link: Identity | | | | |
| Dispersion computed using Pearson Chi-Square | | | | |
| Convergence achieved after 1 iteration | | | | |
| Coefficient covariance computed using observed Hessian | | | | |
| | | | | |
| | | | | |
| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
| C | -0.156618 | 0.070010 | -2.237091 | 0.0253 |
| DPS | 0.134530 | 0.013573 | 9.911750 | 0.0000 |
| DY | 0.017517 | 0.005851 | 2.993638 | 0.0028 |
| RE | 0.134228 | 0.019577 | 6.856502 | 0.0000 |
| EPS | -0.513813 | 0.039845 | -12.89535 | 0.0000 |
| | | | | |
| Mean dependent var | 0.362727 | S.D. dependent var | | 0.202609 |
| Sum squared resid | 2.211750 | Log likelihood | | 121.5520 |
| Akaike info criterion | -1.388510 | Schwarz criterion | | -1.256742 |
| Hannan-Quinn criter. | -1.335021 | Deviance | | 2.211750 |
| Deviance statistic | 0.013998 | Restr. Deviance | | 6.732273 |
| LR statistic | 322.9309 | Prob(LR statistic) | | 0.000000 |
| Pearson SSR | 2.211750 | Pearson statistic | | 0.013998 |
| Dispersion | 0.013998 | | | |
| | | | | |
| | | | | |

Source: Eview 9

Representation of the Models

$$TQ_t = \beta_0 + \beta_1 DY_{it} + \mu_{it} \quad (1)$$

$$TQ_t = \beta_0 + \beta_1 RE_{it} + \mu_{it} \quad (2)$$

$$TQ_t = \beta_0 + \beta_1 DPS_{it} + \mu_{it} \quad (3)$$

$$TQ_t = \beta_0 + \beta_1 EPS_{it} + \mu_{it} \quad (4)$$

Table 4: Regression Analysis

| Dependent Variable: TQ | | | | |
|---|-------------|-------------------------|-------------|--------|
| Method: Panel Least Squares | | | | |
| Date: 06/03/22 Time: 16:54 | | | | |
| Sample: 2012 2021 | | | | |
| Periods included: 10 | | | | |
| Cross-sections included: 20 | | | | |
| Total panel (balanced) observations: 200 | | | | |
| White cross-section standard errors & covariance (d.f. corrected) | | | | |
| <hr/> | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 1.832601 | 0.292926 | 6.256191 | 0.0000 |
| DPS | -0.011761 | 0.499281 | -0.023556 | 0.9812 |
| RE | -1.908643 | 0.166340 | -11.47438 | 0.0000 |
| DY | -0.166626 | 0.072775 | -2.289591 | 0.0235 |
| EPS | -0.971997 | 0.099460 | -9.772721 | 0.0000 |
| <hr/> | | | | |
| Effects Specification | | | | |
| <hr/> | | | | |
| Cross-section fixed (dummy variables) | | | | |
| <hr/> | | | | |
| R-squared | 0.750000 | Mean dependent var | 1.828000 | |
| Adjusted R-squared | 0.741655 | S.D. dependent var | 0.334301 | |
| S.E. of regression | 0.374007 | Akaike info criterion | 1.051913 | |
| Sum squared resid | 20.00299 | Schwarz criterion | 1.708243 | |
| Log likelihood | -57.67216 | Hannan-Quinn criter. | 1.318026 | |
| F-statistic | 0.000297 | Durbin-Watson stat | 4.157120 | |

Source: Eview

Table 3: Confidence Interval Table

Coefficient Confidence Intervals

Date: 06/03/22 Time: 17:02

Sample: 2012 2021

Included observations: 200

| Variable | Coefficient | 90% CI | | 95% CI | | 99% CI | |
|----------|-------------|-----------|----------|-----------|----------|-----------|----------|
| | | Low | High | Low | High | Low | High |
| C | 1.832601 | 1.347639 | 2.317563 | 1.253576 | 2.411625 | 1.067875 | 2.597327 |
| TQ | -0.011761 | -0.838361 | 0.814839 | -0.998687 | 0.975165 | -1.315209 | 1.291687 |

Source: Eview**Table 4: Residual Table**

| Residual Cross-Section Dependence Test | | | |
|---|-----------|-----|--------|
| Null hypothesis: No cross-section dependence (correlation) in residuals | | | |
| Equation: Untitled | | | |
| Periods included: 10 | | | |
| Cross-sections included: 20 | | | |
| Total panel observations: 200 | | | |
| Cross-section effects were removed during estimation | | | |
| | | | |
| Test | Statistic | df. | Prob. |
| Breusch-Pagan LM | 3150.000 | 630 | 0.0000 |
| Pesaran scaled LM | 69.97877 | | 0.0000 |
| Bias-corrected scaled LM | 65.47877 | | 0.0000 |
| Pesaran CD | 56.12486 | | 0.0000 |

Source: Eview

H₀: Dividend per share does not affect the value of the firm listed in the Nigeria exchange limited.

Table 5.

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| DPS | -0.011761 | 0.499281 | -0.023556 | 0.9812 |

Source: Extracted from table 3

The t-calculated value can be derived from fixed effect regression result shows -0.023556. This means that $-0.023556 < 1.96$. Therefore, the H_0 is rejected and accept the alternative hypothesis that dividend per share affects the value of a firm in Nigeria.

Hypothesis II

H₀₂: Dividend yield does not affect the value of firms listed on the Nigeria exchange limited.

Table 6.

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| DY | -0.166626 | 0.072775 | -2.289591 | 0.0235 |

Source: Extracted

The t-calculated value for dividend yield (DY) is -2.289591. This means that $-2.289591 < 1.96$. Therefore, the H_0 is rejected and H1 is accepted that DY affects the value of the firm.

Hypothesis III

H₀₃: There is no significant relationship between retained earnings ratio on the value of firms listed on the Nigeria exchange limited.

Table 7.

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| RE | -1.908643 | 0.166340 | -11.47438 | 0.0000 |

Source: Extracted

The t-calculated value for retained earnings (RE) is -11.47438. This means that $-11.47438 < 1.96$. Therefore, the H_0 is rejected and H1 is accepted that RE affects the value of the firm.

Hypothesis IV

H₀₄: There is no significant relationship between earnings per share and the value of firms listed on the Nigeria exchange limited.

Table 8.

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| EPS | -0.971997 | 0.099460 | -9.772721 | 0.0000 |

Source: Extracted

The t-calculated value for earnings per share (EPS) is -9.772721. This means that $-9.772721 < 1.96$. Therefore, the H_0 is rejected and H_1 is accepted that EPS affects the value of the firm.

This study corroborates with the work of Badagaga (2017) that dividend yield (DY) nosedives the market share price of firms that operates in a regulated market. The mathematical value links of MPS is -0.01176. This represents a negative link coupled with a coefficient of determination of 75%. The hypothesis of model one confirms that dividend yield of quoted firms does not affects the share prices. However, the work of Menike and Prabath (2014) and Sharma (2011) justify that the use of dividend yield may not affects shares prices of firms. Nazir et al (2010) affirmed the reasons behind the needs for yield to have a strong effect on stock price volatility by using 73 selected firms that are traded in a regulated market channel by Karachi Stock Exchange (KSE-100). This analysis was put together and they affirmed that the slight difference why yield is regarded as proportionately important is that there is a negate variance on dividend yield. This study also support the work of Rashid and Rahman (2008) as regard the effect of dividend yield on share price.

Retained earnings ratio value was noted in the study result to be -1.908643. This indicates a nosedive of value on market shares. The prices of quoted firms and the statistical test affirmed that in as much as there exist a nosedive in the value of the quoted firms, the retained earnings is considered as a values that does not proportionately significant in affecting the market prices of the quoted firms' shares. Hussainey et al. (2011) supported others results regarding retained earnings ratio on firms' value. They stated that if there exist a high retained earnings ratio proportionately higher than expected, there is tendency for prices of shares to perform well in crisis period. It was observed that the earnings per share (EPS) nosedive in value and does not support positive effect on the value of firm. This is because the values that links EPS was derived to be -0.971997. The implication of the value is that it connotes a decline. The R^2 shows that 47% of market price shares of quoted firms are captured by earnings per share (EPS). Natasha et al (2017) stated the up and down movement of the stock price path posit strong evidence that earnings and dividend per share would be affected by the fluctuations in stock price. Their explanation was that most times, the payment of earnings is dependent on the value of the firm. They further explained that earnings can be classified into three degrees. However, Vaidya (2014) supported the work of Natasha et al (2017) by concluding that earnings per share are calculated for the aim of distributing profit for investors hence earnings per share is a quantum of the share price. Noting the implication of earnings per share on market price per share studies like Almumani, (2014), Haque and Faruquee (2013) Menaje (2012), Chang et al (2008), Menike and Prabath (2014) and Sharma (2011) defend the significant effect of earnings per share on the market price per share as well as the overall value

of the firm. To generalize this connection, this study therefore shows empirically that the link between EPS and SP is negative in quoted firms in the Nigeria stock exchange market. Also, the relationship between dividend yield (DY) and earnings per share (EPS) in this study is negative and DY does not affect EPS.

The coefficient of determination was recorded to be above an average score, and it displays that a substantial proportion of the dependent is apprehended by the dependent variables in the four models used in this study. The F-statistic at 5 percent indicate a critical level that is significant to the study. It indicates that the joint variations of the model are significant. Among the variables used in the study, dividend yield and earnings per share were regarded as the variables that affect share prices the most. Some investors compare the strength of organizations based on dividend yield of firms quoted in the capital market overtime. This is because dividend yield tends to grow steadily over time. It is also based on the assumption that most firm are subjected to developed models that would assist the business in forecasting the proportion expected cash flows in the long run or in total assist firms to maximized models that are efficient in capturing effective cash flows. This free cash flow helps shareholder in wealth maximization (SWM) as maximum return to shareholders is and ought to be the focal aim of all corporate business in corporate activity. Furthermore, economist opined that if the financial ratios are effectively used, it could assist firms in speculating the extent in which prices of common stock could be projected and all common stock value maximized. The implication is that the use of dividend paying stock could create an avenue for improvement in terms of holistically overhauling the financial system that brings both good and bad financial projections. Once a company declare dividend, the market automatically captured the actions of market dealers towards that stock. There is high actions taken to increase the volume of shares traded in favour of the stock affirming the action of the dividend announcement. This action also embraces the stock as a stock of attractiveness as most dealers' advice prospective clients to purchase such stock. All actions that are in favour of the stock stands as an avenue to increase the firm value in a regulated market.

Conclusion and Recommendations

This study has examined the impact of dividend payment and the value of firms in Nigeria. It was found out that dividend payment affects the value of the firm. In conclusion, the study support other literature that underpinned the significance of paying dividend by firms in operating in a regulated market. The negative relationship that exists between Dividend Yield (DY) and TQ was pointed to the statistical interpretation of a negative coefficient attached to DY that would necessitate a fall in TQ. It was observed that in as much as the payment of dividend is regarded as vital in today's economy, there is positive link that also exist between earnings per share and the value of the firm operating in a regulated market in Nigeria.

In line with the objectives, the recommendations are stated below.

- i. Firstly, since dividend payment affect the values of the firm, it is therefore recommended that listed firms managed the policy in which they pay dividend as long as there is constant cash flows or revenue that creates returns for the firm.
- ii. Secondly, it will be good for firms to show the proportion that is reserved and shared publicly or on the financial records of firms operating under a regulated market. This

- would enable users of accounting and affirm the authenticity of the claims of dividends and the firms' value in Nigeria rather than analyst doing computation to compute earnings verify claims.
- iii. Dividend yield have been supported to have mixed effect on the value of the firm. However, many literatures affirmed that it moves in line with interest rate fluctuations. Therefore, it will note that any action concerning the effect of dividend yield would align with an inverse effect based on the fluctuation of interest rate. The implication is that the fluctuation would find the equilibrium in a regulated market.
 - iv. Political instability in any nations that have experience both the military and civilian rule inconsistently have a fair share of the effect on the capital market. Nigeria being a fair share of military rule that undermine rules of law would be affected by policy of dividend and the value of the firm. This is because unstable government contributes to unstable policy. A macroeconomic policy that is not stable affect all financial activities. Therefore, it noted that stable government would necessitates stable policy and a stable policy will positively increase both the value of the firm as well as the regulations within the regulated market.
 - v. Finally, whatever policy the government via the Nigeria exchange limited in protecting the value of the firm. Meaning that, policy should not be erratic but absolutely relevant to the specific directions for economic improvement for firms.

References

- Abu, S. , & Adebayo, E. , (2019). Effect of dividend policy on share price of Listed Conglomerate Firms in Nigeria, Published, business, economics, *Journal of Management and Research*. Corpus ID: 216786668
- Adefila, J. J., Oladipo, J. A., Adeoti, J. O., (2004). The Effect of Dividend Policy on the Market Price of Shares in Nigeria:Case Study of Fifteen Quoted Companies”, University of Ado-Ekiti, *International Journal of Accounting*, 2(1), 1-10, 2004
- Adefila, J. J., Oladipo, J. A. & Adeoti, J. O. (2013). *The effect of dividend policy on the market price of Shares in Nigeria: Case Study of Fifteen Quoted Companies*. Available: online at: <http://unilorin.edu.ng/publications/adeotijo/the%20effect%20of%20dividend%20policy.pdf>and<http://www.scribd.com/doc/132398617/14-the-Effect-of-Dividend-Policy-1>
- Adaoglu, C. (2000). *Instability in the dividend policy of the Istanbul stock exchange (ISE) Corporations: Evidence from an emerging market*, SSRN eLibrary. doi: 10.2139/ssrn.248488
- Akram, B. (2017). Dividend Payment and its impact on the value of firms listed on Istanbul stock exchange: A Residual income approach, *International Journal of Economics and Financial Issues, Eco Journals*, 7(2), pages 370-376.

- Anh H. N., Cuon, D. P. & Nga, T. D., (2021). The Effect of dividend payment on firm's financial performance: An Empirical Study of Vietnam, *JRFM, MDPI, vol. 14(8)*, pages 1-11, August.
- Alfred. C. O., Vincent, N. E. & Jessie, I. C. (2019). Effect of dividend policy on stock prices: Evidence from Nigeria, *International Journal of Economics and Financial Management*, 4(3).
- AlTroudi, W. & Milhem, M. (2013). Cash dividends retained earnings and stock prices: Evidence from Jordan, *Interdisciplinary Journal of Contemporary Research in Business*, 4(12), 585-599.
- Brealey, R., & Myers, S. (2005). *Principles of corporate finance (8th ed.)*. McGraw-Hill.
- Bishop, R., Harvey, R. C, Robert, W. F. & Garry J. T. (2000). *Corporate Finance*, (Prentice Hall Inc., Sydney)
- Chidi, S. I., Agu, D. O. & Ande, H. (2013). To what extent did changes in stock prices influence Investors' confidence on the Nigerian Stock Exchange?, *Research Journal of Finance and Accounting*, 4(19), 1-11. Available online at <http://www.iiste.org>
- Deakin, H. (2018). Dividend policy and share price volatility, *Invest. Manage. Finmane Innovation* 12(1), 226–234 (2018)
- Eryomin, L. C. (2021). *Impact of dividend policy on the market value of the company*, Volume 91, 2021 Innovative Economic Symposium 2020 – Stable Development in Unstable World (IES2020), article No. 01013, pg 13.
- Friend, M. P. (1964). Dividends and stock prices: Blackwell publishing for the American Finance association, *American Economic Review*, 54(5), 656-682, 1964.
- Hansda, S. Sinha, A. & Bandopadhyay, K. (2020), Impact of dividend policy on firm value with Special Reference to Financial Crisis, *SIT Journal of Management*, 10(2), 158-175
- Harkavy, O. (1953). The relation *between retained earnings and common stock prices for large Listed corporations*, *Journal of Finance*, 8(3), 283-297.
- John, L. (1956). Distribution of incomes of corporations among Dividends, Retained Earnings, and Taxes", Blackwell Publishing for the American Finance Association, *American Economic Review*, 46(2), 97-113, 1956.
- Juma'h, A. H., & Pacheco, C. J. O. (2008). The financial factors influencing cash dividend, *Business Journal*, 4(2), 23–43.

- Kanwal, I. K. (2012). Effect of dividends on stock prices– A Case of chemical and Pharmaceutical Industry of Pakista, *Management 2012*, 2(5), 141-148
DOI: 10.5923/j.mm.20120205.02
- Kapoor, S. (2009). *Impact of dividend policy on shareholders' value* (Synopsis of thesis to be submitted in partial fulfillment of the requirement of the degree of doctor of philosophy). Jaypee Institute of Information technology, Noida
- Lucky, L , & Uzokwe,G. O. (2019). Published 5 October, Business, *Australian Finance & Banking Review*
- Nympha, E C. (2021), Dividend policy determinants of firm value: Empirical evidence from listed Non-Financial Companies in Nigeria, *International Journal of Research and Innovation in Social Science (IJRISS) | Volume V, Issue VII, July 2021 | ISSN 2454-6186*
- Pradhan, R. S. (2003). Effects of dividends on common stock prices: The Nepalese evidence, *Research in Nepalese Finance*, 1-13. Available at SSRN: <http://ssrn.com/abstract=1403725>
- Radhe, S. P. (2009). *Effects of dividends on common stock prices: The Nepalese Evidence Research in Nepalese Finance*, Kathmandu: Buddha Academics, 2003 Pages: 16 Posted: 13 May
- Salih, A. A. (2010). The effect of dividend policy on market value: UK Empirical Study”. Doctoral Thesis, Durham University. Available at Durham e-theses online: <http://etheses.dur.ac.uk/556/>
- Taofeek, O., Kajola, S. O., & Akinbola, O. A. (2019). Influence of dividend policy on stock price volatility of non-financial firms Listed Nigerian Stock Exchange. *Journal of Varna University of Economics*, 63(1), 35-49.
- Tinungki, R. H. (2022), The effect of COVID-19 pandemic o corporate dividend policy in Indonesia: The Static and dynamic panel data approaches, *Economies*2022, 10(1), 11; <https://doi.org/10.3390/economies10010011>
- Uwuigbe1, U., Olowe, O. & Godswill, A. (2012). *An assessment of the determinants of share price in Nigeria: A study of selected listed firms”* .
- Walter, J. E., (1963). Dividend Policy: Its influence on the value of enterprise, *Journal of Finance*, Issue 18, 280-291

Appendix

| FIRMS | YEAR | DPS | EPS | DY | RE | TQ |
|------------|------|------|------|-------|------|-------|
| Wapco | 2012 | 0.26 | 0.14 | 5.54 | 0.34 | 15.3 |
| | 2013 | 0.12 | 0.55 | 0.56 | 0.23 | 10.23 |
| | 2014 | 1.09 | 0.52 | 0.89 | 0.63 | 11.56 |
| | 2015 | 1.83 | 0.50 | 0.55 | 0.78 | 11.22 |
| | 2016 | 0.33 | 0.15 | 0.97 | 0.51 | 10.22 |
| | 2017 | 0.12 | 0.87 | 0.45 | 0.87 | 10.12 |
| | 2018 | 0.45 | 0.74 | 0.35 | 0.64 | 10.14 |
| | 2019 | 1.98 | 0.57 | 9.73 | 2.57 | 51.4 |
| | 2020 | 1.66 | 0.83 | 7.27 | 1.83 | 36.6 |
| | 2021 | 2.1 | 0.27 | 6.74 | 2.27 | 45.4 |
| Cutix | 2012 | 1.12 | 0.41 | 7.94 | 1.41 | 28.2 |
| | 2013 | 1.33 | 0.45 | 7.88 | 1.38 | 27.6 |
| | 2014 | 0.12 | 0.55 | 0.56 | 0.23 | 4.6 |
| | 2015 | 1.09 | 0.52 | 0.89 | 0.63 | 12.6 |
| | 2016 | 1.83 | 0.50 | 0.55 | 0.78 | 15.6 |
| | 2017 | 0.33 | 0.15 | 0.97 | 0.51 | 10.2 |
| | 2018 | 1.12 | 0.41 | 7.94 | 1.41 | 28.2 |
| | 2019 | 1.33 | 0.45 | 7.88 | 1.38 | 27.6 |
| | 2020 | 3.98 | 0.26 | 8.93 | 5.26 | 15.2 |
| | 2021 | 3.86 | 0.49 | 8.55 | 4.49 | 19.8 |
| Buacement | 2012 | 2.98 | 0.14 | 8.13 | 4.14 | 12.8 |
| | 2013 | 2.69 | 0.85 | 8.6 | 4.85 | 97 |
| | 2014 | 4.06 | 0.88 | 8.7 | 4.44 | 18.8 |
| | 2015 | 2.01 | 0.36 | 0.75 | 0.93 | 18.6 |
| | 2016 | 0.04 | 0.36 | 10.18 | 0.36 | 7.2 |
| | 2017 | 1.68 | 0.44 | 5.07 | 1.98 | 19.6 |
| | 2018 | 1.09 | 0.52 | 0.89 | 0.63 | 12.6 |
| | 2019 | 1.83 | 0.50 | 0.55 | 0.78 | 15.6 |
| | 2020 | 1.93 | 0.51 | 0.22 | 0.99 | 19.8 |
| | 2021 | 1.98 | 0.45 | 4.59 | 2.45 | 17.21 |
| Cap | 2012 | 1.66 | 0.71 | 3.97 | 1.71 | 14.12 |
| | 2013 | 1.98 | 0.15 | 4.97 | 2.15 | 14.65 |
| | 2014 | 1.8 | 0.87 | 5.04 | 1.87 | 17.14 |
| | 2015 | 1.72 | 0.85 | 5.22 | 1.85 | 17.34 |
| | 2016 | 1.88 | 0.34 | 4.73 | 2.44 | 18.18 |
| | 2017 | 0.04 | 0.36 | 10.18 | 0.36 | 7.2 |
| | 2018 | 1.68 | 0.44 | 5.07 | 1.98 | 16.6 |
| | 2019 | 0.56 | 0.62 | 5.9 | 0.62 | 12.4 |
| | 2020 | 0.52 | 0.59 | 5.12 | 0.59 | 11.8 |
| | 2021 | 0.48 | 0.62 | 5.11 | 0.62 | 12.4 |
| UNION BANK | 2012 | 0.06 | 0.58 | 9.01 | 0.58 | 11.6 |
| | 2013 | 1.34 | 0.22 | 8.05 | 2.22 | 12.4 |
| | 2014 | 1.2 | 0.81 | 8.05 | 1.8 | 16.23 |
| | 2015 | 1.01 | 0.41 | 8.66 | 1.41 | 18.2 |
| | 2016 | 0.99 | 0.38 | 8.25 | 1.35 | 17.34 |
| | 2017 | 0.12 | 0.55 | 0.56 | 0.23 | 4.6 |
| | 2018 | 0.04 | 0.36 | 10.18 | 0.36 | 7.2 |
| | 2019 | 1.68 | 0.44 | 5.07 | 1.98 | 11.6 |
| | 2020 | 0.33 | 0.15 | 0.97 | 0.51 | 10.2 |
| | 2021 | 0.12 | 0.87 | 0.45 | 0.87 | 17.4 |
| UBA | 2012 | 0 | 0.75 | 6.36 | 2.01 | 21.08 |
| | 2013 | 0.22 | 0.48 | 5.04 | 0.48 | 9.6 |
| | 2014 | 0.56 | 0.62 | 5.9 | 0.62 | 12.4 |
| | 2015 | 0.52 | 0.59 | 5.12 | 0.59 | 11.8 |
| | 2016 | 0.48 | 0.62 | 5.11 | 0.62 | 12.4 |

| | | | | | | |
|------------------------|------|-------|------|-------|-------|--------|
| | 2017 | 0.66 | 0.66 | 5.07 | 0.74 | 14.8 |
| | 2018 | 0.06 | 0.58 | 9.01 | 0.58 | 11.6 |
| | 2019 | 1.55 | 0.88 | 3.26 | 2.55 | 14.23 |
| | 2020 | 1.02 | 0.55 | 2.1 | 1.45 | 15.21 |
| | 2021 | 1.01 | 0.41 | 8.66 | 1.41 | 18.4 |
| ACCESS | 2012 | 0.04 | 0.36 | 10.18 | 0.36 | 7.2 |
| | 2013 | 2.08 | 0.93 | 6.75 | 3.93 | 18.6 |
| | 2014 | 2.02 | 0.91 | 6.9 | 2.9 | 18.34 |
| | 2015 | 2.18 | 0.73 | 6.16 | 2.7 | 15.18 |
| | 2016 | 1.98 | 0.63 | 5.89 | 2.63 | 17.17 |
| | 2017 | 1.06 | 0.78 | 5.55 | 2.78 | 18.53 |
| | 2018 | 1.96 | 0.80 | 5.88 | 2.98 | 19.86 |
| | 2019 | 0.22 | 0.48 | 5.04 | 0.48 | 9.6 |
| | 2020 | 1.55 | 0.88 | 3.26 | 2.55 | 17.1 |
| | 2021 | 1.02 | 0.55 | 2.1 | 1.45 | 9.67 |
| ETERNAL PLC | 2012 | 0.1 | 0.12 | 6.51 | 0.12 | 2.4 |
| | 2013 | 0.12 | 0.87 | 0.45 | 0.87 | 17.4 |
| | 2014 | 1.43 | 0.42 | 5.12 | 2.14 | 14.26 |
| | 2015 | 1.68 | 0.44 | 5.07 | 1.98 | 13.2 |
| | 2016 | 1.84 | 0.42 | 4.64 | 2.65 | 17.66 |
| | 2017 | 1.67 | 0.48 | 5.55 | 2.88 | 19.2 |
| | 2018 | 1.88 | 0.46 | 5.03 | 2.56 | 17.06 |
| | 2019 | 1.98 | 0.55 | 5.34 | 2.52 | 16.8 |
| | 2020 | 1.98 | 0.57 | 9.73 | 2.57 | 17.133 |
| | 2021 | 1.55 | 0.88 | 3.26 | 2.55 | 17 |
| FIDELITY | 2012 | 0 | 0.15 | 7.03 | 0 | 0 |
| | 2013 | 1.12 | 0.41 | 7.94 | 1.41 | 9.4 |
| | 2014 | 1.33 | 0.45 | 7.88 | 1.38 | 9.2 |
| | 2015 | 2.01 | 0.36 | 0.75 | 0.93 | 18.6 |
| | 2016 | 1.84 | 0.42 | 0.9 | 0.9 | 18 |
| | 2017 | 1.66 | 0.42 | 0.16 | 0.7 | 14 |
| | 2018 | 1.09 | 0.52 | 0.89 | 0.63 | 12.6 |
| | 2019 | 1.83 | 0.50 | 0.55 | 0.78 | 15.6 |
| | 2020 | 1.93 | 0.51 | 0.22 | 0.99 | 19.8 |
| | 2021 | 1.98 | 0.57 | 9.73 | 2.57 | 17.13 |
| STANBIC | 2012 | 1.02 | 0.55 | 2.1 | 1.45 | 9.66 |
| | 2013 | 0 | 0.15 | 7.03 | 0 | 0 |
| | 2014 | 1.12 | 0.41 | 7.94 | 1.41 | 9.4 |
| | 2015 | 1.33 | 0.45 | 7.88 | 1.38 | 9.2 |
| | 2016 | 0.04 | 0.36 | 10.18 | 0.36 | 7.2 |
| | 2017 | 1.68 | 0.44 | 5.07 | 1.98 | 13.2 |
| | 2018 | 1.84 | 0.42 | 4.64 | 2.65 | 17.66 |
| | 2019 | 1.67 | 0.48 | 5.55 | 2.88 | 19.2 |
| | 2020 | 1.88 | 0.46 | 5.03 | 2.56 | 17.06 |
| | 2021 | 1.98 | 0.55 | 5.34 | 2.52 | 16.8 |
| Berger | 2012 | 0.143 | 0.75 | 4.19 | 0.328 | 6.56 |
| | 2013 | 0.112 | 0.13 | 4.14 | 0.219 | 4.38 |
| | 2014 | 0.168 | 0.26 | 4.85 | 0.815 | 16.3 |
| | 2015 | 0.111 | 0.97 | 0.15 | 0.134 | 2.68 |
| | 2016 | 0.123 | 0.47 | 0.99 | 0.101 | 2.02 |
| | 2017 | 0.148 | 0.59 | 2.45 | 0.112 | 2.24 |
| | 2018 | 0.179 | 0.02 | 2.41 | 0.258 | 5.16 |
| | 2019 | 0.181 | 0.97 | 1.71 | 0.156 | 3.12 |
| | 2020 | 0.172 | 0.97 | 2.15 | 0.119 | 2.38 |
| | 2021 | 0.162 | 0.04 | 1.87 | 0.115 | 2.3 |

| | | | | | | |
|------------|------|-------|------|-------|-------|-------|
| Betglas | 2012 | 0.401 | 0.52 | 0.01 | 0.211 | 4.22 |
| | 2013 | 0.485 | 0.18 | 0.36 | 0.612 | 12.24 |
| | 2014 | 0.483 | 0.01 | 0.58 | 0.013 | 0.26 |
| | 2015 | 0.525 | 0.05 | 2.22 | 0.614 | 12.28 |
| | 2016 | 0.58 | 0.05 | 1.8 | 0.179 | 3.58 |
| | 2017 | 0.638 | 0.66 | 1.41 | 0.515 | 10.3 |
| | 2018 | 0.124 | 0.79 | 7.99 | 0.437 | 8.74 |
| | 2019 | 0.15 | 0.48 | 3.65 | 0.108 | 2.16 |
| | 2020 | 0.175 | 0.36 | 2.05 | 0.412 | 8.24 |
| | 2021 | 0.221 | 0.04 | 0.48 | 0.348 | 6.96 |
| Meyer | 2012 | 0.284 | 0.12 | 0.59 | 0.569 | 11.38 |
| | 2013 | 0.32 | 0.11 | 0.62 | 0.115 | 2.3 |
| | 2014 | 0.129 | 0.37 | 1.81 | 0.347 | 6.94 |
| | 2015 | 0.157 | 0.57 | 1.91 | 0.108 | 2.16 |
| | 2016 | 0.18 | 0.75 | 3.93 | 0.312 | 6.24 |
| | 2017 | 0.207 | 0.91 | 2.9 | 0.128 | 2.56 |
| | 2018 | 0.226 | 0.16 | 2.7 | 0.678 | 13.56 |
| | 2019 | 0.233 | 0.89 | 2.63 | 0.129 | 2.58 |
| | 2020 | 0.255 | 0.55 | 2.78 | 0.215 | 4.3 |
| | 2021 | 0.618 | 0.31 | 1.34 | 0.381 | 7.62 |
| Austinlaz | 2012 | 0.824 | 0.78 | 3.53 | 0.216 | 4.32 |
| | 2013 | 0.966 | 0.58 | 2.68 | 0.401 | 8.02 |
| | 2014 | 0.938 | 0.71 | 1.86 | 0.691 | 13.82 |
| | 2015 | 0.865 | 0.63 | 2.21 | 0.499 | 9.98 |
| | 2016 | 0.712 | 0.69 | 2.85 | 0.38 | 7.6 |
| | 2017 | 0.842 | 0.58 | 3.62 | 0.21 | 4.2 |
| | 2018 | 0.521 | 0.48 | 2.83 | 0.19 | 3.8 |
| | 2019 | 0.245 | 0.03 | 1.3 | 0.219 | 4.38 |
| | 2020 | 0.253 | 0.94 | 1.41 | 0.415 | 8.3 |
| | 2021 | 0.716 | 0.74 | 3.42 | 0.137 | 2.74 |
| First Bank | 2012 | 2.08 | 0.93 | 6.75 | 3.93 | 15.4 |
| | 2013 | 1.55 | 0.88 | 3.26 | 2.55 | 14.2 |
| | 2014 | 1.02 | 0.55 | 2.1 | 1.45 | 18.2 |
| | 2015 | 1.98 | 0.63 | 5.89 | 2.63 | 16.8 |
| | 2016 | 1.06 | 0.78 | 5.55 | 2.78 | 15.6 |
| | 2017 | 1.96 | 0.80 | 5.88 | 2.98 | 17.4 |
| | 2018 | 1.49 | 0.18 | 10.43 | 2.18 | 16.2 |
| | 2019 | 1.86 | 0.2 | 8.83 | 2.2 | 16.56 |
| | 2020 | 0.86 | 0.26 | 6.99 | 1.26 | 16.23 |
| | 2021 | 0.22 | 0.25 | 6.52 | 0.25 | 16.05 |
| | | | | | | |