

Original Article

The Impact of Dividend Policy on the Share Price of Quoted Companies in Nigerian Stock Exchange

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Abstract -

The study examines the effect of dividend policy on the share prices of Nigerian quoted companies in Nigeria between 2009 and 2017 across ten companies. A secondary method of data collection was used to generate data for this study and the source of the data was from the annual report of all the sampled companies. Multiple panel least square estimation, through the Housman's test, was used to analyze the data in this study. In the econometric model, market share price (dependent variable) was regressed on dividend yield, earning per share, dividend per share, profit after tax, and retention rate. The study revealed that there exists a joint significant relationship between dividend yields, earning per share, dividend per share, profit after tax, retention rate, and market share prices. The study, therefore, recommends that; Nigerian firms should try to maintain a regular and consistent dividend policy so that prospective investors could know beforehand whether or not a firm's dividend policy tallies with their own expectation (client effect). The government should assist in improving the quality and availability of secondary data banks relating to making an informed decision on share prices and dividends in Nigeria.

Keywords - Dividend policy, Share price, Dividend yield, Corporate earning

I. INTRODUCTION

A. Background to the Study

The finance profession has long struggled to develop a simple satisfactory model of dividend determination without much success. Modigliani and Miller (1961) show that in a perfect capital market with no information asymmetry and predetermined investment decisions, the value of the firms is independent of the financing decisions. Hence, a firm's financing decision including dividends has no effect on the value of the firm, nor the distribution of wealth

between classes of security holders. However, in some imperfect settings, the dividend can influence shareholders' wealth by providing information to investors or through wealth redistribution. With information asymmetry, Bhattacharya (1979) demonstrates that dividends provide information about the firm's future cash flow and thus the dividend decision can change a firm value. Adesola and Okwong (2011) reported that another potential real impact of financial decision transfer of wealth between classes of claimants can occur in the absence of imperfect priority rules. The payment of dividends conveys to shareholders that the company is profitable and financially strong. An increase in payment ratio signals to shareholders a permanent or long-term increase in firm expected earnings. Accordingly, the price of a share may be affected by changes in dividend policy. The dividend may offer tangible evidence of the firm's ability to generate cash, and as a result, the dividend policy of the firm affects the share price (Solomon, 1963). The market value of a share is affected not because of the change in dividend but because of the information about changes in the future expected earnings conveyed through the payment (as reported by Adesola and Okwong, 2011).

The dividend relevance theorists are of the view that dividend policy remains one of the most important financial policies not only from the viewpoint of the company but also from that of the shareholders, the consumers, employees, regulatory bodies, and the Government. For a company, it is a pivotal policy around which other financial policies rotate (Alii, Khan, & Ramirez, 1993). The dividend policy decisions of firms are the primary element of corporate policy. Dividend, which is basically the benefit of shareholders in return for their risk and investment, is determined by different factors in an organization. Basically, these factors include financing limitations, investment chances and choices, firm size, pressure from shareholders, and regulatory regimes.



From in company's perspective, selecting a suitable dividend policy is an important decision for the company because the flexibility to invest in future projects depends on the number of dividends that they pay to their shareholders. As such, certain important factors like managerial and behavioral environment, firm's profitability ratios, the willingness of the company, etc. are considered by companies in designing their dividend policies (Khan, 2012). Hence, dividend policy is considered as a hinge around which other financial policies rotate. For this reason, it is central to the performance and valuation of listed firms. Consequently, there has been an unresolved problem on dividend relevance and/or irrelevance in the determination of firms' performance and value. The question of whether the manager should pay out more dividends to owners or retain more of the profit as an internal source of financing has also remained unanswered (as reported by Zhou & Ruland, 2012).

Managers are saddled with the responsibility of making optimum investment decisions on behalf of the firm and ensuring the maximization of shareholders' wealth. This can be achieved when firms generate sufficient profits and strategically decide the amount to be reinvested into the firm and/or distributed to shareholders. The distributed funds to shareholders are known as dividends. According to Mukora (2014), dividends are the distribution of cash to shareholders in proportion to their equity holding. He further explained that no company is compelled to declare a dividend and those that do may vary the amount. On the other hand, Zayol, Mya, and Muolozie (2017) defined a dividend policy as a firm's dividend payout policy that managers follow in deciding the pattern and size of cash distribution to shareholders in the form of a dividend. They further explained that it is the decision of management about the portion of income that is given to shareholders in the form of a dividend. Dividend policy decisions regarding the distribution of profits in the form of dividends and the retention of profits for further use in the business could be in form of cash or share. Oliver and Ugah (2015) noted that dividend payment by corporate organizations is a fundamental expectation to shareholders and therefore ranks as one of the most important corporate decisions. A company's ability to consistently pay out increased levels of dividend over time conveys information about the management's assessment of the firm's performance as well as its future prospects.

Investors take up investment in stock and they do expect a return on their investment that either comes in form of cash dividend or capital gain arising from the sales of their stock. Investment in stock is with a great expectation of stock return on the part of the investor and meeting this expectation always requires on the part of the management of corporations efficient and

effective managerial skills, appropriate investment decision and financial plan, deployment, and control of resources to generate future cash flow. When a company makes a profit the management is usually faced with the choice of either distributing the profit as a cash dividend or plowing back for reinvestment and future growth. The motive for retention most often varies among firms ranging from maintenance, investment opportunities, and growth expansion to asset investment to enhance smooth operation. In taking investment, investors allocate their capital to different investments including equity and debt securities, and for each allocation; investors have one specific objective of maximizing their returns and this objective remains a corporate target. Achieving this target has always been hinged on the responsibility of the management to establish corporate policies for effective and efficient internal control, performance evaluation, and reserve management. The intention of most firms to fulfill the expectations of the investors and financial markets increasingly dominate reserve accumulation motives and this is common among firms in both developed and developing economies (as reported by Akinkoye and Akinadewo (2018).

In sizing up a company's fundamentals, investors mostly look at how much profit is paid to shareholders in terms of dividends and how much capital is kept from shareholders. This is because retained earnings is a financial value that is very important to investors of a company and basically, investors tend to pay most attention to reported profits as well, attaching importance to what the company does with that money. The concern of the equity investor has always been on the ability of the firms to generate future cash flows and improve on the wealth of the shareholders. In practice, firms distribute portions of the profits to shareholders in the form of dividends and what is left (retained earnings or retained capital) is reinvested in the business and the concerns of savvy investors have been to look closely at how a company puts retained capital to use and generates a return on it (as reported by Akinkoye and Akinadewo (2018).

B. Statement of the Problem

Dividend policy has been identified by financial analysts as an important decision for the company to survive in the global competitive environment because investors consider payment of dividends as a source of income and the way of assessing whether the company is liquid or not. However, some scholars argue that dividends have no explanatory power to predict share prices (Ogolo, 2012). Besides, there has been an unresolved problem on dividend relevance and/or irrelevance in the determination of firms' performance and value. The

question of whether the manager should pay out more dividends to owners or retain more of the profit as an internal source of financing has also remained unanswered (Zhou & Ruland, 2006). The implication of the aforementioned issues manifested in Nigeria during the crash of the Nigeria Stock Exchange (NSE) Market in 2008 when it was difficult for managers to make a decision based on their dividend payout policy. This difficulty is due to the fact that the confidence of investors in the capital market deteriorated as a result of the crash, which by implication deterred the ability of managers to relate the success or market value of the organization to their dividend payout ratio (Olamide and Sajuyigbe, 2011). Despite these challenges, various researchers like Modigliani & Miller (1958), and Adefila, Oladipo & Adeoti (2000) have proffered arguments and solutions but there has not been any consensus. The contradictory and conflicting response to the question on the relevance of dividend policy on the share prices of companies in Nigeria informed the need for this study. This study, therefore, intends to investigate whether dividend policy is a predictor of the share prices of companies in Nigeria.

C. Research Objectives

The main objective of this study is to examine the effect of dividend policy on the share prices of Nigerian quoted companies in Nigeria. Specifically, the study seeks to examine the impact of dividend yield (DY) and dividend per share on the share prices of quoted companies in Nigeria. Hence the propping questions for this study include the degree of significance that investors can be placed on dividend yield and earnings yield impacts on the price of shares of quoted companies in Nigeria.

Based on the stated objectives, study hypotheses to be tested are hereby as stated below

D. Research Hypotheses

In order to achieve the set objectives, the following

Hypothesis I

H₀: Dividend yield has no significant impact on the price of shares.

H₁: Dividend yield has a significant impact on the price of shares.

Hypothesis II

H₀: Earnings per share has no significant impact on the price of shares

H₁: Earnings per share have a significant impact on the price of shares.

Hypothesis III

H₀: Dividend per share has no significant impact on the price of shares.

H₁: Dividend per share has a significant impact on the price of shares

This study is therefore relevant and significant because it deals with a contemporary issue and is build-ups on the previous investigation by various scholars and researchers on the impact of dividend policy on share prices of quoted companies in Nigeria. The study is expected to contribute to the existing literature on dividend policy in Nigeria, and the result of this research work will serve as input for other researchers who are interested in research on dividend policy.

II. LITERATURE REVIEW

A. Conceptual Framework:

The term dividend refers to that part of profits of a company that is distributed by the company among its shareholders as a reward to the shareholders for investments made by them in the shares of the company (Nazir, Nawaz, Anwa & Ahmed, 2018).

Pandy (2011) defines a dividend as that portion of a company's net earnings which the directors recommend to be paid to the shareholders in proportion to their shareholdings in the company. It is usually expressed as a percentage of the nominal value of the company's ordinary share capital or as a fixed amount per share. According to William and Scott (2006), the dividend is referred to as a periodic cash payment that firms make to investors who hold the firms' preferred or common stock.

In developed countries, the decision between paying a dividend and retained earnings have been taken seriously by both investors and management, thus forming the subject of considerable researches by economists in the last four decades (Adelegan, 2011). According to Van Horne (1971), dividend policy entails the division of earnings between shareholders and reinvestment in the firm. Retained earnings are a significant source of funds for financing corporate growth, while dividend constitutes the cash flows that accrue to shareholders.

There exist two divergent schools of thought with regard to these, the dividend policy and the retained earning policy. Dividend policy suggests a positive attitude, for it is a deliberate policy to maintain the dividend at a certain level or increase it, with the ultimate aim of sustaining the price of the ordinary shares on the stock exchange. This is because capital markets are not perfect, and although shareholders are indifferent to the ratio between dividend and retained earnings due to market imperfections and uncertainty, they give a higher value to the current year dividend than the future dividend and capital gains. Thus the payment of a dividend has a strong influence on the

market price of the shares. Management might maintain a dividend level even at the expense of liquidity or be forced into borrowing to do so. Within this approach, dividends are thought to be desirable from the shareholders' point of view, as increasing their current wealth and dividend level determines share price as well as indicates the prospect of profitability of the firm.

The second school of thought which promotes the profit retention policy tends to suggest a more passive residual attitude towards dividends as dividend payout reduces the number of earnings to be retained in the firm and affects the total amount of internal financing. When dividends are treated as a financing decision, the net earnings of the firm may be viewed as a significant source of financing the growth of the firm. Dividends paid to shareholders represent a distribution of earnings that cannot be profitably reinvested by the firm. The approach to dividend is viewed merely as a residual decision. This theory is known as the residual theory of dividend and was first proposed by Miller and Modigliani in 1961. Investors prefer to have the firm retain and reinvest earnings rather than pay them out in dividends if the return on the investment earnings exceeds the rate of return the investors could themselves obtain on other comparative investments. Otherwise, the investors prefer dividends.

a) What is a Dividend Policy?

The term dividend refers to that part of the profits of a company that is distributed by the company among its shareholders. It is the reward of the shareholders for investments made by them in the shares of the company (Nazir, Nawaz, Anwa& Ahmed, 2018). Dividend policy, therefore, is the set of guidelines a company uses to decide how much of its earnings it will payout to shareholders. Some evidence suggests that investors are not concerned with a company's dividend policy since they can sell a portion of their portfolio of equities if they want cash.

Investors are interested in earning the maximum return on their investments and maximizing their wealth. A company, on the other hand, needs to provide funds to finance its long-term growth (Pandy, 2001) Since the dividend is a right of shareholders to participate in the profits and surplus of the company for their investment in the share capital of the company, they should receive a fair amount of the profits. The company should, therefore, distribute a reasonable amount as dividends to its members and retain the rest for its growth and survival (Olamide and Sajuyigbe, 2011)

According to Olamide and Sajuyigbe (2011), dividend decisions are one of the three basic decisions which a financial manager may be required to take, the other two being the investment decisions and the financing decisions. In each period any earning that

remains after satisfying obligations to the creditors, the government, and the preference shareholders can either be retained or paid out as dividends or bifurcated between retained earnings and dividends (Uwuigbe, 2012).

b) Forms of dividend policy

Uwuigbe (2012) Identify the following various types of dividend policies:

1. Regular dividend Policy: Payment of dividends at the usual rate is termed a regular dividend. The investors such as retired persons, widows, and other economically weaker persons prefer to get regular dividends.
2. Stable dividend policy: The term 'stability of dividends' means consistency or lack of variability in the stream of dividend payments. In more precise terms, it means payment of the certain minimum amount of dividend regularly.
3. Stable rupee dividend plus extra dividend: Some companies follow a policy of paying a constant low dividend per share plus an extra dividend in the years of high profits. Such a policy is most suitable to the firm having fluctuating earnings from year to year
- 4.

c) Dividend and Stock Prices

Dividend payment is such an important factor in the performance of a firm that its effect on the price of the firm's shares has generated much controversy. The controversy in the main centers on the relevance or irrelevance of dividend policy as regards share valuation. From a theoretical viewpoint, the importance of dividends in determining stock price is obvious. The stock price should equal the present value of all future expected dividends of the stock. We would in this study measure the effect of dividend payment on share prices of various quoted firms. Various schools of thought have emerged on the issue of dividend and stock valuation. One school argues that the current value of a firm is independent of its dividend decisions, rather than the value a firm derives from its investment policy. They believe that whatever gains that would be derived from dividend payments would be offset exactly by the cost of external financing Miller et. al. (1961). The underlying assumptions for this school are a frictionless market, rational investors, and perfect certainty about the future earnings of the firm. This view is further enhanced by the notion of a preference for capital gains over dividend payments due to tax considerations. Some people value capital gains higher because it attracts less tax relative to each dividend. The other school contends that dividend policy should and in fact, does affect the value of a firm. Dividend policy can only be irrelevant when the rate of return on investment

equates to the cost of financing the investment Gordon (1963). Stock is what one can get out of it, hence, it derives its value from dividends and not earnings. Earnings represent only a means to an end and the means must not be confused with the end William (1938).

B. a) Theoretical Framework

There are several theories that have been identified in dividend policy and firm performance studies. However, they are viewed from different perspectives in relation to the context of their work. The following are the related theories;

b) Agency Theory

The agency theory was propounded by Jensen and Mackling (1976). The theory is based on the assumption that the firm is a collection of groups of individuals with conflicting interests and self-seeking motives. They posit that an agency relationship is a contract under which one or more persons referred to as the principal engages another person referred to as the agent to perform some service on their behalf which involves delegating some decision-making authority to the agent. The management may conduct actions that are not in the best interest of the shareholders. Such conflicts lead to increased agency costs. In such cases, firms will prefer to increase their dividends and reduce agency costs by distributing free cash flow.

c) Signaling Theory

The theory was propounded by Modigliani and Miller (1961) who argued that dividends may have a signaling effect. Proponents of this theory posit that dividends have a signaling effect and investors or potential investors forecast the profit of the company, which in fact is influenced by the rate of dividend. Firms have to distribute dividends among shareholders and high dividend payments are considered a positive sign of profitability by shareholders. The payment of dividends has a signaling effect as dividend payment gives information about the company to the market. On the basis of dividend announcements, investors, shareholders, and potential investors predict the position of the company in the context of profitability and when there is an increase in dividend payments, it is a good sign for the firm, it increases its goodwill and its reputation in the mind of customers and share price increases.

d) Dividend Relevance Theories

The dividend relevance theory was propounded by Walter (1963). He argued that the choice of dividend policies almost always affects the value of the firm. His model shows the importance of

the relationship between the firm's rate of return and its cost of capital in determining the dividend policy that will maximize the wealth of shareholders. Walter's model is based on the following assumptions: First, the firm finances all investment through retained earnings; that is, debt or new equity is not issued. Secondly, the firm's rate of return and its cost of capital is constant. Thirdly, all earnings are either distributed as dividends or re-invested internally immediately. Fourthly, the values of earnings per share and dividend remain constant. Lastly, the firm has a very long or infinite life. It is believed that this model is quite useful to show the effects of dividend policy on an all-equity firm under different assumptions about the rate of return.

C. a) Empirical framework:

Farrukh, Irshad, Khakwani, Ishaque, and Ansari (2017) established the impact of dividend policy on shareholders' wealth and firm performance in Pakistan between 2006-2015. A sample of 51 firms was drawn and the regression result found out that dividend policy proxied by dividend per share and dividend yield had a positively significant impact on shareholders' wealth and firm performance. This study supported dividend relevance theory, signaling effect theory, bird in hand theory, and clientele-effect theory.

Zayol, Mya, and Muolozie (2017) evaluated the determinants of dividend policy of petroleum firms in Nigeria from 2011-2014. Secondary data were analyzed using correlations and regression analysis. Findings from the study revealed that firm size, liquidity, and leverage does not affect the dividend policy of petroleum firms in Nigeria, while profitability was found to affect the dividend policy of petroleum firms in Nigeria. The study concludes that profitability is one of the most considered determinants of dividend policy by listed petroleum firms in Nigeria. Umar and Saidu (2016) assessed the relationship between dividend policy and financial performance of oil and gas companies in Nigeria from 2005 and 2014. Pearson correlation and multiple regressions were used for the data analysis. The study found out that dividend payout has a significant positive relationship with the financial performance of the oil and gas companies. Also, dividend payout squared has a significant negative relationship with the financial performance of the companies. The study concluded that the dividend payout of oil and gas companies has an optimal level beyond which the relationship tends to be negative.

Rachid and Wiame (2016) examined the relationship between dividend policies and the financial performance of selected listed firms in Morocco. Secondary data were analyzed using a panel data regression model. The findings indicated that dividend payment and total assets had a significant and positive

relationship with firm performance. The study, therefore, concluded that dividend policy was relevant.

Eniola and Akinselure (2016) examined the impact of dividend policy and earnings on selected quoted companies in Nigeria and spanned from 2004 - 2013. The study used a stratified sampling technique in selecting the 25 companies considered in this research work which cut across seven sectors of the companies listed on the Nigeria Stock Exchange. The study used multiple regression and the findings revealed that there exists a relationship between earning per share and dividend yield. Also, the findings showed that the dividend payout ratio does not affect earnings per share.

Ehikioya (2015) investigated the impact of dividend policy on the value and performance of firms in developing economies using 81 firms listed on the Nigeria Stock Exchange between 2001 and 2010. The study employed a panel regression model and the findings revealed a significant positive impact of dividend payout on the performance of firms, measured as return on assets and return on equity thereby confirming the proposition that dividend policy is an important determinant of firm performance.

Kajola et al. (2015) examined the relationship between dividend payout policy and financial performance of 25 non-financial firms listed on the Nigerian Stock Exchange between 2004 and 2013 using panel data analysis method and pooled Ordinary Least Squares (OLS) The Regression result revealed a positive and significant relationship between dividend pay-out policy and firm performance.

Shisia, Sang, Sirma, and Maundu (2014) examined the effect of dividend policy on the financial performance of companies quoted at the Nairobi Securities Exchange (NSE) employing regression analysis and secondary data sources from the sample of 30 listed companies on the NSE. The study concluded that there is a significant but negative relationship between dividend payout ratio and firm performance.

Adelegan et al. (2015) identified the determinants of dividend policy of firms in Nigeria from 2009 to 2013. The study analyzed data of 48 manufacturing firms listed on the Nigerian stock exchange. The pooled regression result shows that total distributable earnings determine the dividend payout of corporate firms in general in Nigeria. Results showed that the dividend policy of manufacturing firms depends on profit after tax and earnings. The result also shows that the manufacturing firms' ability to pay dividends depends more on profit after tax. The study, therefore, concludes that profit after tax and total distributable earnings are key determinants of firm dividend payment in Nigeria.

Topal (2014) analyzed the relationship between dividend policies and the financial performances of the companies operating on the Istanbul Stock Exchange. The study used data from 172

companies outside of the financial sector from 2008-2011. Multiple regression was employed to analyze the data. The results of the analysis showed that dividend payments there were a positive and statistically meaningful relationship between the dividend per share rate within groups and market-based performance indicator and a statistically insignificant relationship between accounting-based performance indicators (ROA & ROE) and dividend per share rate.

Gittman (2014) divided stock into two types, common stock and preferred stock. He also showed that dividends are the outcome of an investment. So, common stocks are an ownership claim against a primarily real or productive asset (Higgins, 1995), but he also said that if the company prospers, stockholders are the chief beneficiaries, if it falters, they are the chief losers. Stockholders expect dividends but it is not promised (Gittman, 2014).

Horkan (2014) in his study explained that retained earnings are retained capital, which is the portion of net income that management keeps to fund future growth and to pay down company debt. In the same vein, Merritt (2014) submits that retained earnings represent value "locked up" in the company, which does not represent cash on hand but could be theoretically released to the owners of the company was liquidated. Efforts were also made to compare and bring out the significant effects of the component of dividend policy.

Friend and Puckett (1964) distinguished between the effect of dividends and retained earnings on stock prices. The results show that the effect of dividends on stock prices is greater than the effect of retained earnings several times for three industries, which is in contrast with Harkavy (1953) who did a similar investigation and found that there is a propensity for the stock price to differ with the ratio of distributed earnings.

Wright (2014) pointed out that retained earnings of companies become equity and consequently appear on the balance sheet as a component of owners' equity which also includes initial investment capital and additional paid-in capital. In other words, a company should make use of available opportunities to create reserves through retained earnings to boost investments and grow corporate earnings.

Power and MacDonald (1995) investigated the effect of dividends and retained earnings on the prices of shares. They found that there is a relationship amongst the prices of shares; dividend and retained earnings.

III. METHODOLOGY

A. *Research Design*

This study fundamentally falls under the ex-post factor design type because there is no experiment involved, but rather is designed to test an event that has

already taken place. The importance of Ex-Post Facto research is that it is a realistic approach to solving business and social science problems which involves gathering records of past events (Oyedele and Adeleke, 2017). Therefore, it deals with historical facts about dividend payout and its relationship with the share prices of quoted companies in Nigeria.

B. Population and sample of the study

The population of this study consists of all the 200 companies listed on the Nigerian Stock Exchange (NSE) as of 2017 (Nigerian Stock Exchange, 2017). The sample of the study includes AIICO, AXA Mansard, Zenith Bank, GT Bank, UBA, Access Bank, Dangote Group, and Nestle Plc.

4.3 Sample Size and Sampling Technique

The sampled companies and their respective sectors are shown below:

S/N	COMPANY	SECTOR
1.	ACCESS BANK	BANKING
2.	NESTLE	MANUFACTURING
3.	DANGOTE	MANUFACTURING
4.	UBA	BANKING
5.	GTBANK	BANKING
6.	ZENITH BANK	BANKING
7.	AXA MANSARD	INSURANCE
8.	AIICO	INSURANCE
9.	OKOMU	OIL & GAS
10.	UNILEVER	MANUFACTURING

The sampling technique adopted is judgmental sampling techniques. The sample of the study includes ten (10) quoted companies in Nigeria selected on data availability and their performance ranking in terms of profit declared and asset base. The basis of selecting these companies was to ensure that all industries are covered and the availability of their annual financial report within the research period. The sample size used as observation is a total of 90 (ninety), arrived at by selecting 10 (ten) companies from five sectorial indices across 9 (nine) years i.e. 2009-2017.

D. Sources of Data

The data for the study was obtained from secondary sources; using the published annual reports and statements of accounts of the selected firms and other information from Nigeria Stock Exchange Fact Book (various issues) as they are believed to constitute the most authoritative and accessible documents for accessing information regarding the historical performance of the public-owned firms.

Scope and limitation of the Study

This study looks at the patterns of some shares before dividends are declared and the behavior of such shares to the public and investors as a whole. While

amongst many factors that affect this research process are time, monetary constraints, and inadequate data (2009-2017) which did not lessen the credibility and quality of the research.

E. Model Specification

The Panel Least Square technique in line with the recommendation by Koutsoyianis (2003) was used to determine the relationship between the dependent variable (Y) and the independent variables.

The model adopted for this study is in line with the model used by Oyedele and Adeleke (2018) in their study “Dividend Policy and Share Price: Empirical Investigation of Zenith Bank Plc., Nigeria” stated as:

Market Price = f(Dividend Yield, Earnings Yield, Payout Ratio)

$$\text{Market Price} = \beta_0 + \beta_1\text{Dividend Yield} + \beta_2\text{Earning Yield} + \beta_3\text{Payout Ratio} + e$$

This research, therefore, went further by incorporating other dividend policy-related variables as shown in the econometric model:

$$SP = \beta_0 + \beta_1DPS + \beta_2DY + \beta_3EPS + \beta_4PAT + \beta_5RR \quad (3.2)$$

Where;

Dependent Variable = Stock Price (SP)

β_0 = Constant of the regression equation/Intercept

β_{1-5} = Regression Coefficient/Slope/Gradient

Independent Variables = Dividend per Share (DPS), Dividend Yield (DY), Earnings per Share (EPS), Profit after Tax (PAT), Retention Ratio (RR), DY= Dividend Yield.

e = Error Term/Random Variable/Stochastic Variable.

F. Model Estimation Procedure

In this study, the measurements are Dividend per Share, earnings per share, retention ratio, profit after tax, dividend yield of the selected firms, and the corresponding share prices. The estimation procedures used are as follows:

1. Least Square Regression

Panel Least Square Multiple Regression technique was used to examine the influence of the independent variables on dependent variables and to know the effect of the independent variables on the dependent variable.

2. Hausman’s Test/Fixed & Random Effect

The fixed and random effect of Hausman’s test was also carried out for consistency in establishing a coherent conclusion. The reason for the use of the panel least square is based on its Best Linear Unbiased Estimator (BLUE) when compared with other estimators.

However, the research will not test Stationary, co-integration tests, and Multicollinearity as they are necessary when the data is strictly time-series data as against panel data.

G. A priori Expectation

A priori expectation examines the economic relationship and size between the dependent variable and the independent variables.

Table 3. 2

The economic relationship between each of the independent variables and the study's dependent variable

S/N	Independent Variables	Expected Sign
1.	Dividend per Share	+/-
2.	Retention rate	+/-
3.	Profit After Tax	+/-
4.	Dividend Yield	+
5.	Earnings per share	+

Reliability and Validity

Secondary data for the study shall be drawn from the annual report of the selected quoted companies as fairly accurate and reliable. Necessary checking and cross-checking will be done by the researchers. These efforts shall be made to generate validity of the data for the present study.

H. Description of Research Variables

a) Share Price (SP): This is the price at which buyers and sellers agree to trade in an open market at a particular time. The market price is measured by summing up all the stock prices for each month for a year and dividing by twelve months or the use of Gordon's constant growth model. **Gordon Constant Growth Model (1963)**

$$\frac{D_0(1+g)}{K_e-g} \quad (3.3)$$

b) Dividend yield: The dividend yield of stock signifies how much a company pays a dividend about its stock price. The dividend yield was used to calculate the earnings on investment (shares) considering only the returns in the form of total dividends declared by the company during the year.

$$\frac{\text{Dividend per share (D1)}}{\text{Current price (P0)}} \quad (3.4)$$

c) Dividend per Share (DPS): Dividend per share is the ratio of dividends declared to numbers of outstanding shares. The higher the dividend per share, the more attractive the stock is to the stockholders.

$$\frac{\text{Dividend paid}}{\text{Outstanding Ordinary Shares}} \quad (3.5)$$

d) Earnings per Share (EPS): This is the total profit available to ordinary shareholders divided by the outstanding number of shares.

$$\frac{\text{Profit After Tax}}{\text{Outstanding Ordinary Shares}}$$

e) Retention Rate: This is the ratio of that part of earnings per share that is not distributed to shareholders to total earnings per share. It is calculated as:

$$\frac{1 - \text{Dividend per share (DPS)}}{\text{Earnings Per Share (EPS)}} \quad (3.7) \text{Source: Olowe (2011).}$$

IV. DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

A. Introduction

This chapter covers the data analysis and presentation. The study covers the presentation of data, dividend per share, earnings per share, profit after-tax dividend yield, and retention rate, used as a measure of dividend policy. The section also covers an analysis of data, results of the panel regression analysis, interpretation of A prior criteria, and the result of Hausman's test. Test of hypothesis and discussion of findings also came under this section of the research.

Table 4.1 Descriptive Statistics

	SP	RR	PAT	EPS	DY	DPS
Mean	11.03606	0.488888	51402755	6.431333	0.301476	2.906333
Median	3.447368	0.501802	20708608	1.750000	0.317834	1.010000
Maximum	76.40428	0.983711	5.98E+08	122.7800	0.459144	27.50000
Minimum	0.046964	0.666667	425092.0	0.030000	0.099707	0.020000
Std. Dev.	17.33487	0.278204	81516141	14.77497	0.122626	5.196274
Skewness	2.062786	0.769936	3.801255	5.834120	-0.191226	2.802101
Kurtosis	6.578762	4.789893	23.90679	44.36422	1.721507	11.12591
Jarque-Bera	111.8545	20.90597	1855.845	6926.799	6.678047	365.3907
Probability	0.000000	0.000029	0.000000	0.000000	0.035472	0.000000
Sum	993.2457	43.99992	4.63E+09	578.8200	27.13280	261.5700
Sum Sq. Dev.	26744.31	6.888385	5.91E+17	19428.68	1.338308	2403.112
Observations	90	90	90	90	90	90

Source: Authors Work 2019

Table 4.1, the mean value of the dependent variable for the entire model given as share price (SP) is N11.03606, the median value of N3.447368, and a standard deviation of N17.33487. The maximum and minimum values are N76.40428 and N0.046964 respectively. The maximum value for retention ratio (RR) was 0.983711% while its minimum value (0.666667%). The mean, median, and standard deviation values of the retention rate (RR) are 0.488888%, 0.501802%, and 0.278204% respectively. The Jarque-Bera statistic value was 20.90597 and a p-value of 0.00000 confirms the non-normality of the data and also indicates the presence of outliers in the data.

The average value of profit after tax (PAT) for the period was N5140275Billion while the standard deviation is N81516141Billions. The maximum and minimum values are N20708608Billion and

N425092.0Billions respectively for the period under review. The Jarque-Bera statistic value was N1855.845Billions and a p-value of 0.00000 confirms the non-normality of the data and also indicates the presence of outliers in the data.

The average value of earnings per share (EPS) for the period was N6.431333 while the standard deviation is N14.77497. The maximum and minimum values are N122.7800 and N0.03 respectively for the period under review. The Jarque-Bera statistic value was N6926.799 and a p-value of 0.00000 confirms the non-normality of the data and also indicates the presence of outliers in the data. The mean value of dividend yield (DY) for the period was N0.301476; the median is N0.317834 while the standard deviation is N0.122626. The maximum and minimum values are N0.45914 and 0.099707 respectively for the period under review. The Jarque-Bera statistic value was N6.678047 and the p-value of 0.035472 confirms the non-normality of the data and also indicates the presence of outliers in the data.

Furthermore, the average value of Dividend per share (DPS) for the period under review stood at N2.906333, while the standard deviation was N5.196274. The maximum and minimum values for the period were N27.5 and N0.02 respectively. The Jarque-Bera statistic value was 365.3907 and the p-value of 0.000000 indicates the non-normality of the data because the p-value is less than 0.05 and this shows the presence of outliers in the data. In terms of skewness, all the variables were shown to be positively skewed except for retention rate and dividend yield which is shown to be negatively skewed away from the normal distribution point.

Table 4.2 Summary of A Priori Expectation

TABLE 4.2 shows the a priori expectation for all focus variables.

Independent Variables	Expected Signs	Observed Signs	Remarks
Retention rate	+/-	-	Confirm
Profit after tax	+/-	+	Confirm
Earnings per share	+/-	+	Confirm
Dividend yield	+	+	Confirm
Dividend per share	+	+	Confirm

Table 4.3

4.3 Panel Least Square Regression Result (Fixed-Hausman Test)

Cross-section random effects test equation:				
Dependent Variable: SP				
Method: Panel Least Squares				
Date: 04/22/19 Time: 21:36				
Sample: 2009 2017				
Periods included: 9				
Cross-sections included: 10				
Total panel (balanced) observations: 90				
WARNING: estimated coefficient covariance matrix is of reduced rank				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.251987	2.364585	0.106567	0.9154
RR	-0.938245	3.294869	-0.284759	0.7767
PAT	8.37E-10	1.18E-08	0.071016	0.9436
EPS	0.021011	0.052930	0.396959	0.6926
DY	0.023214	0.045670	0.235674	0.0234
DPS	3.807071	0.290096	13.12347	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
The period fixed (dummy variables)				
R-squared	0.925596	Mean dependent var	11.03606	
Adjusted R-squared	0.902618	S.D. dependent var	17.33487	
S.E. of regression	5.409544	Akaike criterion	6.422794	
Sum squared resid	1989.895	Schwarz criterion	7.033858	
Log-likelihood	-267.0257	Hannan-Quinn criter.	6.669211	
F-statistic	40.28209	Durbin-Watson stat	1.658658	
Prob(F-statistic)	0.000000			

Source: Authors work2019

The F-statistic is used to test the joint impact of the independent variables on the dependent variable. It tests the hypothesis that;

$H_0: \beta_1 = 0, \beta_2 = 0, \beta_3 = 0, \beta_4 = 0, \beta_5 = 0$ (there is no joint impact)

$H_1: \beta_1 \neq 0, \beta_2 \neq 0, \beta_3 \neq 0, \beta_4 \neq 0, \beta_5 \neq 0$ (there is joint impact)

Decision rule: if the prob(F-statistic) is less than the significance level of 0.05, reject the null hypothesis that all parameters equal to zero.

Conclusion: The prob(F-statistic) from the result is 0.00000, so the null hypothesis that all parameters equal to zero are was rejected. This means that all the variables used are jointly significant.

The coefficient of determination as depicted by the R-squared measures how the variation in the dependent variable (ROA) is being accounted for by the variation

in the independent variables. From the result, the R^2 is 0.925596. This implies that 92.56% variation in share price (SP) is being explained by variation in retention rate, profit after tax, earnings per share, dividend yield, and dividend per share.

The value of the intercept which is 0.251987 shows that share price will experience 0.251987 increases when all other variables are held constant.

A negative relationship is observed to exist between Retention Ratio (RR) and share price (SP) given its coefficient of -0.938245. The relationship is also observed to be statistically insignificant as the p-value of 0.7767 is greater than 0.05 which is the level of significance.

The relationship between profit after tax (PAT) and share price (SP) is observed to be positive given its coefficient of 8.37E-10. The relationship is also observed to be statistically insignificant given its p-value of 0.9436 which is greater than the 0.05 level of significance.

The relationship between Earnings per Share (EPS) and Share price (SP) is found to be positive considering the coefficient of 0.021011, the relationship is also observed to be statistically insignificant considering its p-value of 0.6926 is greater than the level of significance of 0.05.

Dividend Yield (DY) and share price was found to have a positive relationship with a coefficient of 0.023214. The relationship is also found to be statistically significant as its p-value of 0.0234 is less than 0.05 which is the level of significance.

Finally, the relationship between dividend per share (DPS) and share price was also observed to be positive with a coefficient of 3.807071. The p-value of 0.0000 indicates a statistically significant relationship because it is less than the 5% level of significance.

D. Test of Hypotheses

Hypothesis I

H_0 : Dividend yield has no significant impact on the price of shares.

H_1 : Dividend yield has a significant impact on the price of shares.

Decision rule: Reject H_0 when the p-value is less than 5% level of significance otherwise fail to reject H_0 .

Conclusion: The null hypothesis was rejected from **Table: 4.4** based on the fact that the p-value of 0.0234 is less than 0.05. Therefore, we conclude that dividend yield has a significant impact on the price of shares.

Hypothesis II

H_0 : Earnings per share have no significant impact on the price of shares.

H_1 : Earnings per share have a significant impact on the price of shares.

Decision rule: Reject H_0 when the p-value is less than 5% level of significance otherwise fail to reject H_0 .

Conclusion: The null hypothesis was not rejected from **Table: 4.4** based on the fact that the p-value of 0.6926 is greater than 0.05. Therefore, we conclude that Earnings per share has no significant impact on the price of shares

Hypothesis III

H_0 : Dividend per share has no significant impact on the price of shares.

H_1 : Dividend per share has a significant impact on the price of shares.

Decision rule: Reject H_0 when the p-value is less than 5% level of significance otherwise fail to reject H_0 .

Conclusion: The null hypothesis was rejected from **Table: 4.3** based on the fact that the p-value of 0.0000 is less than 0.05. Therefore, we conclude that dividend per share has a significant impact on the price of shares. Therefore, companies should endeavor to pay a dividend as this information would have a significant impact on the market value of the shares.

E. Discussion of Findings

The study seeks to examine the effect of dividend policy on the share prices of Nigerian quoted companies in Nigeria, based on the results of the panel least squares regression of the Hausman test, it can be deduced that retention rate, profit after tax, earnings per share, dividend yield, and dividend per share of major Nigerian quoted companies like access bank, zenith bank, Axa Mansard, Dangote amongst others have significant impact dividend payment policy.

This finding is in line with the view of Farrukh, Irshad, Khakwani, Ishaque, and Ansari (2017) as they established the impact of dividend policy on shareholders' wealth and firm performance in Pakistan between 2006-2015. A sample of 51 firms was drawn and the regression result found out that dividend policy proxied by dividend per share and dividend yield had a positively significant impact on shareholders' wealth and firm performance. This study supported dividend relevance theory, signaling effect theory, bird in hand theory, and clientele-effect theory.

In line with the finding of the study, Eniola and Akinselure (2016) supported the findings in their examination of the impact of dividend policy and earnings on selected quoted companies in Nigeria and spanned from 2004 - 2013. The study used a stratified sampling technique in selecting the 25 companies considered in this research work which cut across seven sectors of the companies listed on the Nigeria Stock Exchange. The study used multiple regression and the findings revealed that there exists a relationship between earning per share and dividend yield.

Therefore, an adequate and sufficient conclusion can be made that information of dividend payment would significantly affect companies' share prices as buttressed by Gordon (1963) and Walter (1980) in traditional dividend theory.

V. FINDINGS, CONCLUSION, AND RECOMMENDATIONS

A. Summary of Findings

The study examined the effect of dividend policy on the share prices of Nigerian quoted companies in Nigeria covering the period 2009-2017. The study adopted the share prices of quoted companies as the dependent variable while the explanatory variables used in the study are dividend yield, earnings per share, dividend payout ratio, retention ratio, and profit after tax. The objective of the study was to discover, evaluate and determine the impact of dividend yield, earnings per share, and dividend per share on the share prices of quoted companies in Nigeria. Using the regression result obtained in the study, we observed that dividend yield and dividend per share had a significant impact on the price of shares. However, Earnings per share had no significant impact on the price of shares.

Furthermore, from the analysis carried out, dividend yield (DY) has a positive relationship with the share price (SP) of quoted companies and is statistically significant. Also, the result obtained from the research shows that retention rate (RR) has a negative relationship with share price (SP). However, the relationship between RR and SPP was found to be statistically insignificant. Dividend per share (DPS) was found to have a positive relationship with share price (SP). The relationship was also found to be statistically significant.

B. Conclusion

The study examined the effect of dividend policy on the share prices of Nigerian quoted companies in Nigeria covering the period 2009-2017. The study seems to be a confirmatory test of dividend relevance or irrelevance as propounded by the various schools of thought.

The researcher used a sample of 10 quoted companies between 2009 to 2017; the study first provided both empirical and statistical evidence on the relationship between dividend policy and firms' collective share prices. The result showed that there is a positive relationship between dividend payment and share prices of quoted firms.

Secondly, the study provides evidence of the aggregate effect of dividend payment on share prices. The result confirms that the impact of dividend payment on share prices is significant which is in line with the relevance theory of Gordon (1963).

Thirdly, the result confirms that there are other exogenous and endogenous variables other than the dividend per share that are responsible for the movement of share prices of quoted companies in Nigeria.

C. Recommendations

Based on the result of this research, the following recommendations are made:

1. Nigerian firms should try to maintain a regular and consistent dividend policy so that prospective investors could know beforehand whether or not a firm's dividend policy tallies with their own expectations (client effect).
2. Nigerian firms should consider all the factors that affect dividend policy when formulating one, in order to have an optimal policy that satisfies its stakeholders, e shareholders, creditors, etc.
3. The government should assist in improving the quality and availability of secondary data banks relating to making an informed decision on share prices and dividends in Nigeria.
4. That the result of the positive relationship between dividend payment and price of shares indicates that dividend payment (no matter how insignificant) is still one of the determining variables of the price of shares. Firms should not overlook the effect of dividend payout.

D. Suggestions for Further Studies

Although the findings of this study could be generalized given the procedures adopted, it was limited to just Nigeria, some major sectors, and the period of 2009-2017; a study of this nature to cover beyond the scope of this project and not only Nigeria but Africa as a whole could be undertaken. Since this research investigates only a few variables and their impact on the share prices of quoted companies, further studies specifying more variables are also suggested.

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