

Effect of Dividend Payment on the Market Price of Shares: A Study of Quoted Firms in Nigeria.

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Abstract: *This paper is the effect of dividend payment on the market prices of shares in Nigeria: A study of 17 quoted firms using time series on dividend per share, dividend yield and dividend payout ratio that ranges between 2000 and 2011. The model specification for the analysis of data is ordinary least squares techniques applied as panel estimation. The researchers empirical results arising from the panel least squares suggests a positive effect between market price per share and dividend per share confirming that a rise in dividend per share brings about an increase in the market price per share of quoted firms; that dividend yield does not have a significant positive effect on the market prices of shares of quoted firms in Nigeria; that there exists a direct relationship between market prices per share and dividend payout ratio of selected firms on the NSE. Further, the study revealed that significant variations exist in the movement of the share prices of the selected firms which in theory could be attributed to the forces of demand and supply while in practice could be attributed to some other exogenous and endogenous variables such as economic policies, corporate managerial decisions, psycho-social variables, political situations and institutional parameters. Thus it was concluded and recommended that, earnings remain the most significant determinant of dividend payment averagely, hence it has significant influences on the market value of public owned firms in Nigeria and the world all over. The dividend payment, dividend per share, dividend yield, dividend payout ratio and earning per share are significant in explaining the observed differences in share market prices of quoted firms in Nigeria. The government must contribute by relaxing laws that spell threat to the objectives of firms i.e. maximization of shareholders' wealth.*

Keywords: *Market Price Per Share (MPS), Dividend Per Share (DPS), Dividend Yield, Earnings Per Share (EPS), Listing Securities, Securities and Exchange Commission, Stock Exchange, Regression, Payout Ratio.*

I. Introduction

Persistent crash in the market price of shares has become a major concern to investors and financial analysts all over the country and the world in general. Some Financial analysts attribute the crash to the firms' non-payment of dividends which according to them made investors lose interest in trading on stocks. According to them, the objective of a firm is the maximization of shareholders wealth and once investors could not get the value of their investment, they tend to divert their funds to other investment opportunities that could yield them immediate returns. Others are of the opinion that payment of dividend has no significant influence in the determination of market prices of shares.

Extensive theoretical and empirical literatures have been developed to ascertain the effect as well as the relationship between the variables of dividend payment and the market prices of shares. Recently empirical literatures of various writers has adduced the movement of stock prices on the stock exchange to earnings, trading volume, dividend or general economic conditions, et cetera. The question now is which of these factors has the greatest impact or relevance to share price movement? For quite sometimes, this question has generated a lot of controversy amongst financial theorists like Gordon, Walter, Modigliani and Miller etc. This led to the emergence of two distinctive groups: dividend relevance and dividend irrelevance groups. Hence the issue of dividend policy is a very crucial one in the area of corporate finance.

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, K.L., Khan, A.Q. & Ramirez, G.G, 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. Graham and Dodd (1951) believed that a dollar of dividends has four times

the average impact on share price as a dollar of retained earnings. But Modigliani and Miller (1961) in their dividend irrelevant theory challenged that view and argued that dividend policy has no effect on the price of shares and that it has no impact on shareholders' wealth under the Perfect Capital Market (PCM) which assumes rational investors. This controversy has affected the decision of managers in the allocation of earnings between payment of dividend to shareholders and retained earnings, and as such their decisions affect the market value of a firm. Since the year 2000, business trend have been moving towards globalization and the number of multinational corporations continues to grow. Newly developed information technology allows investors around the world to trade stocks in other countries without physically crossing borders. Cross-national investors become cross-national shareholders through the help of the internet. Their decisions to trade depend merely on information announced to the public by the managers of the firms. Dividend puzzle, both as a share value-enhancing feature and as a matter of policy is one of the most challenging topics of modern financial economics (Frankfurter and McGoun, 2000). Despite the numerous studies (Black 1976; DeAngelo 1996; Farsio et al 2004; Amidu 2007; Howatt et al 2009; Adefila 2012; etc) done on dividend and its policy, there has not been a universal agreement and as such the issue remains unresolved in corporate finance. In Nigeria, few empirical studies have been done to establish the relationship between dividend policy and market prices of shares. This study therefore comes to fill the void by establishing the effect of dividend payment on market price of shares among some selected quoted firms in Nigeria especially this period that the capital market has been experiencing crash in the market price of shares.

The ultimate objectives of the management of a firm are to maximize the shareholders' wealth as well as the stakeholders' wealth. To maximize the shareholders' wealth, dividend payments are perceived to be the constitutional rights of the shareholders. On the contrary, dividend payments drain away retained profits and reserves in a way which affects the level of equity retained. Dividend payments also jeopardize the positions of creditors and bondholders, who are stakeholders of the firm. In addition, dividend payments have an effect on investment policy since retained profits are perceived as the cheapest cost of capital. Vasuthep (2007)

Bhattacharya (1979) argues that firms pay dividend because dividends signal the private information of managers and thus helps market participants' value the firms. Ambarish et al (1987) suggests that high-value firms chose investment and dividend jointly to separate themselves from low-value firms. In other words, dividends are not residual payments as implied by the classical finance theory. John and Williams (1985) and Ambarish et al (1987) predict a positive association between dividends and stock prices.

Empirical evidence supports the signaling function of dividends. Asquith and Mullins (1983) posited that the initiation of dividends has a significant positive impact on the firm's stock price. They interpret their evidence as consistent with the signaling hypothesis in that managers use dividends to communicate private information to investors, the investors react favorably. Richardson et al (1986) and Jais et al (2009) concurred to this assertion and added that dividend changes and stock market reaction have a positive correlation. Dividend increase is considered good news while dividend decreases as bad news.

Emekkwue (2008:393) defines dividend as that portion of after tax profit that is shared out to the shareholders as reward for investment. According to him, dividend puts disposable income in the hands of shareholders. He therefore classified dividend into three main types: Cash dividend, Stock dividend and Stock splits. Similarly, Pandey (2005) defines dividend as that portion of a company's net earnings which the directors recommend to be distributed to shareholders in proportion to their shareholdings in the company. The dilemma is whether the management of a firm should distribute cash to shareholders or reserves the cash to finance new investments. Dividends represent a direct payment to shareholders. Earnings that are retained by the firms increase the value of the firm in that they can either be invested in projects within the firm that will enhance future earnings or be invested elsewhere at the market interest rate and be paid out as dividend in the future (Baye and Jansen, 2006).

Enhancing shareholders' wealth and profit making are among the major objectives of a firm (Pandey, 2005). Shareholders' wealth is mainly influenced by growth in sales, improvement in profit margin, capital structure decisions (Azhagaiah and Priya, 2008). Firm's performance in this case can be viewed as how well a firm enhances its shareholders. Dividend policy can affect the value of a firm and in turn, the wealth of shareholders (Baker et al, 2001).

Dividend policy is therefore, considered to be one of the most important financial decisions that corporate managers encounter (Baker and Powell, 1999). It has potential implications for share prices and hence returns to investors, the financing of internal growth and equity base through retentions together with its gearing and leverage (Omran and Pointon, 2004). Hence a firm ought to pay dividends to shareholders if it cannot identify suitable investments which would bring higher returns than those expected by the shareholders.

The "Bird in hand" theory proposes that a relationship exists between firm value and dividend payout. It states that dividends are less risky than capital gains since they are more than certain. Investors would therefore prefer dividends to capital gains (Amidu, 2007). Since dividends are supposedly less risky than capital gains, firms should set a high dividend payout ratio and offer a high dividend yield to maximize stock price.

Researchers have different views about whether dividend payment materially affects the long term share prices. Dhanani (2005) who used a survey approach to capture managerial views and attitudes of corporate managers regarding dividend policy found that dividend policy serves to enhance corporate market value. However, Farsio et al (2004) argues that empirical studies that conclude a causal relationship existing between earnings and dividends are based on short periods of time and are therefore misleading to potential investors. Therefore, dividends have no explanatory power to predict future earnings. This research therefore tries to ascertain whether a relationship exists between dividend payment and share prices.

II. Objectives of the Study

- i. To ascertain whether dividend payment has any significant influence on the movement of the market prices of shares.
- ii. To ascertain the effect of dividend yield on the market prices of shares of quoted firms.
- iii. To determine the relationship between dividend payout ratio and the market prices of shares of quoted firms.

III. Research Hypotheses

In order to achieve the set objectives, the following research hypotheses are formulated.

- i. H_{01} : Dividend payment has no significant influence on share prices of quoted firms in Nigeria.
- ii. H_{02} : Dividend yield does not have a significant and positive effect on the market prices of shares of quoted firms.
- iii. H_{03} : Dividend payout ratio does not have a positive and significant relationship with market price per share of firms quoted on the Nigerian Stock Exchange.

IV. Theoretical Framework

Dividend policy has been a strong bone of contention in the area of finance, this is evidenced by numerous studies ranging from Linter (1956) to Modigliani and Miller (1961) to Bhattacharya (1979) and more recently DeAngelo et al (1996), Fama and French (2001), Al-Malkawi (2007) and Al-Najjar and Hussainey (2008). Some of the theories of dividend policy include:

4.1 Dividend Irrelevance Theory

Modigliani and Miller (1961:412-415) observed that “the dividend policy is irrelevant”. The dividend policy has no effect on the price of shares and it has no impact on a shareholder’s wealth under the Perfect Capital Market (PCM) which assumes rational investors. They therefore concluded that dividend policy has no impact on shareholder’s wealth and that all dividend policies are equivalent. As a matter of fact, firms are continuing to pay dividend to their shareholders. According to them, the shareholder’s wealth is affected by the income generated by the investment decisions a firm makes, and not by how it distributes that income. Modigliani and Miller went further to argue that regardless of how a firm distributes its income, its value is determined by its basic earning power and its investment decisions. They stated that “given a firm’s investment policy, the dividend payout policy it chooses to follow will affect neither the current price of its shares nor the total returns to shareholders”. In other words, investors calculate the value of companies based on the capitalized value of their future earnings, and this is not affected by whether firms pay dividends or not and how firms set their dividend policies. Modigliani & Miller went further to suggest that to an investor, all dividend policies are effectively the same since investors can create “homemade” dividends by adjusting their portfolios in a way that matches their preferences. That stockholder’s wealth is unchanged when all aspects of investment policy are fixed and any increase in the current payout is financed by fairly priced stock sales. The assumptions of the theory include;

- That there is 100% payout of dividend by management in every period
- That there exists perfect capital markets.
- That investors are rational and that they value securities based on the value of discounted future cash flow to investors.
- That Managers act as the best agents of shareholders.
- And that there is certainty about the investment policy of the firm.

In the light of the foregoing, Modigliani and Miller concluded that the issue of dividend policy is irrelevant.

4.2 Argument for the Relevance of Dividend

The dividend relevance group believes that under conditions of uncertainty, investors are not indifferent as to how the earnings stream is split between dividends and retained earnings. Williams (1938:6) was one of the earliest protagonists of the view that dividends were all that mattered. He stated rather sarcastically in his book, ‘the theory of investment value:’

A cow for her milk

A hen for her eggs
And a stock for her dividend

Williams' prime contention is that the sole reason for an investor to purchase shares for a common stock is to receive future income. Income to shareholders consists of dividends, capital gains or losses upon shares. Thus if dividends are forth coming presently then the value of equity investment is calculated on the basis of the discounted value of those future dividends and capital gains. He therefore, asserts that over long period stock prices reflects the present value of the expected dividends.

Walter (1956:31) argued that dividend policy should be dependent on the investment opportunity available to the company or firm. He was of the opinion that so long as there are investments opportunities from which the firm earn rate of return (r) which is higher than the firms weighted average cost of capital (K_o) the firm should pay no dividend to it's shareholders. But if there are no such opportunities, the firm should payout a part of its profits.

Judging Walter's suggestions, he tends to highlight the information content of dividends. That is, the payment or omission of dividend by a firm is a means of announcing to the public what the firm's future will look like. A firm that pays dividend will be looked like as a weak firm with little or no future prospect and vice-versa. Going further, Walter (1963:380) came up with model explaining how dividend policy affects the value of a share in the stock exchange:

$$P = \frac{D}{K} + \frac{r(E-D)}{K} \dots \dots \dots (1)$$

Where:

- P = Market price per share
- K = Cost of capital
- E = Earnings per share
- D = Dividend per share
- r = Internal rate of return.

Walter's Model portrays that an optimal dividend policy will depend on the relationship between the firms internal rate of return (r) and the cost of capital (k).

Thus, for a growth firm where (r) is greater than (k), it is assumed to have profitable investment opportunities which make the (r) to be greater than (k). All things been equal, it is assumed that all earnings should be reinvested so as to maximize that value per share over and above that rate expected by shareholders. Consequently, the optimum payout ratio for growth firm is zero. And since (r) is greater than (k) the market value per share (P) will increase but for declining firms, r < k. These are firms that do not have any profitable investment opportunities. For companies under this category, their investment rate of return will be less than the minimum rate required by investor. Consequently, the optimum payout ratio will be 100 percent, and since r < k, the value per share (P) will also increase as payout ratio increases.

The third situation is a normal firm where r = k. These are firms with exhaustible investments opportunities but whose internal rate of return run at par with the rate of capitalization. In this case, the price of the stock is indifferent to the dividend policy adopted by the firm. This third category is in conformity with the dividend irrelevance school of thought.

Kirshman (1963); and Graham and Dodd (1951) proved using the 'bird-in-hand' theory; that investors are often ready to pay premium on stocks with higher than average rates of dividends just as they discount the one with the lower rate. This is in line with Gordon's claim. According to him, uncertainty increases with futurity, that is the further one looks into the future, the more uncertain dividend become.

Lintner (1962:234-269) developed a simple minded observation which is consistent with these facts and explains dividend payments well. Here it is: suppose that a firm always stuck to its target payout ratio, and then the dividend payment in the coming year (Div₁) would equal a constant proportion of earnings per share (EPS₁):

$$\begin{aligned} \text{Div} &= \text{target dividend} \\ &= \text{target ratio} \times \text{EPS}_1 \end{aligned}$$

The dividend change would equal:

$$\begin{aligned} \text{Div}_1 - \text{Div}_0 &= \text{target change} \\ &= \text{target ratio} \times \text{EPS}_1 - \text{Div}_0 \end{aligned}$$

A firm that always stuck to its payout ratio would have to change its dividend whenever earnings change.

Solomon (1963:142) in his own contribution to this debate argued that a firm with stable dividends over time which steps up its level of dividends provides a concrete evidence of its ability to generate cash and profits. Thus, highlighting the informational content of dividend which may be better accepted by investors than the release of higher profits, greater expenditure on manpower training etc, in essence, ‘‘actions speaks louder than voice’’. So investors will increase their demand for shares of a firm at any time it increases its rate of dividend.

Gordon (1959:105) demonstrated with empirical data that dividend payout rates that changes thereto had significant effect on price earnings ratios. This, according to him was conclusive evidence that equity stock value is derived from dividends. The problem with Gordon’s analysis is that it suffered from misspecification of the set of explanatory variables (sizes, Leverage, business risk, and retention ratio are not the same for the firms in his sample) as well as from errors of measurement of the included variables.

The work by Durand (1955:30) on bank price of shares seems to indicate that the proportional effect of dividends on the price of shares is greater than the corresponding proportional effect of retained earnings. But he observed that bank stock prices are not suitable for regression with certain specified models using cross-section data. The limitation of his work is that it was found that logarithmic models based on book value, dividends, and earnings do not fit at all 117 banks used in his study satisfactorily owing to heterogeneity of one sort or another.

An empirical study carried out by Osaze (1985:33) on bank stock exchange confirmed that there is a high positive correlation between dividend payout ratio and stock prices. While a negative correlation was noticed between earnings per share and prices. This is in consonance with risk variables whose mission could have led to an upward bias in the dividend coefficient. Ezike (1985:59) stresses the uncertainty in the real world situation, and in his conclusion lent support to the stand of Osaze as regard the preference of the Nigeria investors. The limitation of this work is that he never carried out any empirical test to support his conclusion. The dividend relevance argument as we can see has a good deal of practical appeal. Theoretically, an investor who plans to hold his share in perpetuity expects nothing other than dividend. Such an investor would be naive to ignore payout possibilities in his assessment.

4.3 Bird in Hand Theory

The "Bird in Hand" theory of Gordon (1962) argues that outside shareholders prefer a higher dividend policy. They prefer a dividend today to a highly uncertain capital gain from a questionable future investment. Al-Malkawi (2007:44), asserts that in a world of uncertainty and information asymmetry, dividends are valued differently from retained earnings (capital gains). Adefila et al (2011:3), argued in his theory labeled the bird in hand principle. The firm with a higher dividend payment would be valued more highly than one with a lower dividend payment. Due to uncertainty of future cash flow, investors will often tend to prefer dividends to retained earnings. Though this argument has been widely criticized and has not received strong empirical support, the main assumptions are;

- That investors are taxed at a higher rate than when capital gain is realized on the sale of a share.
- Also that dividends function as a signal of expected cash flows.

Despite the tax disadvantage of paying dividends, management still go ahead to pay dividends to send a positive signal about the firm’s future prospects. The cost of this signaling is that cash dividends are taxed higher than capital gains. While some investors would rather have capital gains to cut down on tax impact, others may want dividend because of immediate cash requirement. He also assumed that assets in which management invest in, outlive the stay of management in position, and that ownership of the assets is transferred to other management overtime.

4.4 Agency cost and the free cash flow theory.

Agency cost is the cost of the conflict of interest that exists between shareholders and management. (See Ross et al, 2008). This arises when management acts for themselves rather than on behalf of shareholders who own the firm. This could be direct or indirect. Though this is contrary to the assumption of Modigliani and Miller (1961), who assumed that managers are perfect agents for shareholders and no conflict of interest exist between them. This is somewhat questionable, as the owners of the firm are different from the management. Managers are bound to conduct some activities which could be costly to shareholders such as undertaking unprofitable investments that would yield excessive returns to them, and unnecessarily high management compensation (See Al-Malkawi, 2007). These costs are borne by shareholders; therefore shareholders of firms with excess free cash flow would require high dividend payment instead. Agency cost may also arise between shareholders and bondholders, while shareholders require more dividends, bondholders require less dividends to shareholders by putting in place debt covenant to ensure availability of cash for their debt repayment. Easterbrook (1984) also identified two agency cost; the cost of monitoring of managers and the cost of risk aversion on the part of managers.

4.5 Signaling Hypothesis Theory.

Though Modigliani and Miller (1961), assumed that there is perfect knowledge about a firm by investors and management, this has been countered by many researchers as management who look after the firm tend to have more precise and timely information about the firm than outside investors. This therefore creates a gap between managers and investors and to bridge this gap, management uses dividend as a tool to convey private information to shareholders (See Al-Malkawi, 2007). Pettit (1972) observed that the amount of dividend paid seem to carry great information about the prospects of a firm, this can be evidenced by the movement of share price. An increase in dividend may be interpreted as good news and brighter prospects and vice versa. But Lintner (1956) observed that management is reluctant to reduce dividend even when there is the need to do so. And only increase dividend when it is believed that earnings have permanently increased.

4.6 Clientele Effects of Dividends Theory.

Investors tend to prefer stocks of companies that satisfy a particular need. This is because investors face different tax treatment for dividends and capital gains. They also face some transaction cost when they trade securities. Modigliani and Miller (1961) argued that for these costs to be minimized, investors lean towards firms that would give them those desired benefits. Likewise, firms would attract different clientele effect which may change the firms' dividends policy, one clientele is as good as another, and therefore dividend policy remains irrelevant. Al-Malkawi (2007) affirms that firms in their growth stage, which tend to pay lower dividend would attract clientele that desire capital appreciation, while those firms in their maturity stage which pay higher dividends attract clientele that require immediate income in the form of dividend. Al-Malkawi (2007), grouped the clientele effect in two, those that are driven by tax effects and those driven by transaction cost. He argued that investors that are on high tax bracket would prefer firms that pay little or no dividend to get reward in the form of share price appreciation and vice versa. Transaction cost induce clientele on the other hand, arises when small investors depend on dividend payments for their needs; prefer companies who satisfy this need because they cannot afford the high transaction cost in selling securities.

[Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividends constitute the cash flows that accrue to stockholders. Although, both growth and dividend are desirable, these two goals are in conflict – a higher dividend rate means less retained earnings and, consequently, a slower rate of growth in earnings and stock prices (Weston and Brigham; 1977).

According to Hussainey et al (2011), dividend policy is a firm's policy with regards to paying out earnings as dividends versus retaining them for reinvestment in the firm. It is the division of profit between payments to shareholders and reinvestment in the firm. The dividend policy can be construed as the magnitude (size) and direction (timing and pattern) of dividend payments or, in other words, the size and pattern of cash distributions over time to shareholders. The essence of dividend policy is to determine what portion of a firm's earnings that will be paid out as dividend or held back as retained earnings (Emekekwe, 2008). Dividend policy is related not only to a decision to pay or not to pay dividends but also to the size and pattern or magnitude and frequency of the payments Vasuthep, (2007). Dividend policy is thus an important part of the firm's long-run financing strategies. In early corporate finance, dividend policy referred to as a corporation's choice of whether to pay its shareholders a cash dividend or to retain its earnings. It addressed the frequency of such payments (whether annually, semi-annually or quarterly) and how much the company should, if it decides to do so, pay. The most important aspect of dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm. Retained earnings are the most significant internal source of financing the growth of the firm. On the other hand, dividend may be considered desirable from shareholders point of view as they tend to increase their current return. Dividend however, constitutes the use of the firm's fund (Pandey, 2005).

Shareholders' wealth is mainly influenced by growth in sales, improvement in profit margin, capital investment decisions and capital structure decisions (Azhagaiyah&Priya, 2008). Firm performance in this case can be viewed as how well a firm enhances its shareholders' wealth and the capability of a firm to generate earnings from the capital invested by the shareholders. Dividend policy can affect the value of the firm and in turn, the wealth of shareholders (Baker et al, 2001). Dividend policy is therefore, considered to be one of the most important financial decisions that corporate managers encounter (Baker and Powell, 1999). It has potential implications for share prices and hence returns to investors, the financing of internal growth and the equity base through retentions together with its gearing and leverage (Omran&Pointon, 2004). Frankfurter and McGoun (2000) concluded that the dividend puzzle, both as a share value-enhancing feature and as a matter of policy is one of the most challenging topics of modern financial economics.

4.7 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 dividend in determining stock price is obvious. 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 the value a firm derive 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: 414). The underlying assumptions for this school are a frictionless market, rational investors and perfect certainty about 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 the cost of financing the investment (Gordon 1963:267). A stock is what one can get out of it, hence, it derives its value from dividend and not earnings. Earnings represent only a means to an end and the means must not be confused with the end (William 1964:57).

4.8 Factors that can influence Stock-Prices

Theoretically, the major factor that influences stock prices in any stock market is the forces of demand and supply. Thus, when there are more persons willing to buy a particular security than suppliers, the price will rise and vice versa. Increase in the demand of stocks shows an anticipation of a buoyant economy. This explains why stock markets worldwide are used as barometers for the economy. But in practice there are some other endogenous and exogenous variables that tend to combine to influence the reaction of stock market participants to stock prices. These factors include:

1. Investors tend to respond to factors that affect the company's future as merger proposals, takeover bids, quality of management, growth history, competitive position of the company and potentials for technological breakthroughs. Hence, in a corporate valuation, a company's analysis is done to select a firm that is not only competitive but has a reasonable chance of at least maintaining its competitive position in future.
2. Speculation of the performance of a company of an aggravate share price movement. Investors generally react to economic conditions which may lead to a bullish or bearish market. For instance, fear or hope of budgetary or monetary measures or even publications of balance of payment figures can influence investors.
3. Level of interest and yield differentials: During the period of rising interest rate, stock prices tend to drop or level-up. The price of bond will move in the opposite direction because of its attractiveness, but from a corporate point of view, as interest rate increases, stock prices might rise depending on the use of internal financing by companies.
4. Money supply and by extension inflation: According to Kraff and Kraff (1977) as supply of money increases, stock price tends to increase, normally which suggests that real stock prices remained constant except if the increase in the supply of money is a lot less than the increase in the stock price. The opposite is the case with bond.
5. Trading volume: Ying (1966) suggested that it takes volume to move the price of a stock on the stock exchange because trading volume is indeed a measure of investor's emotions.
6. Another important factor that can affect stock price is the financial performance of a company, i.e., the company's earnings.
7. The world economy and political situation within the country can influence investors' confidence in the economy and therefore, in their investment behaviour.

Summarily factors that influences share price behaviour are in 5 broad areas namely:

- (i) Economic policies and Events
- (ii) Corporate Managerial Decisions
- (iii) Psycho-social variables
- (iv) Political events and policies
- (v) Institutional parameters

V. Research Methodology

This research will basically relate price volatility empirically with the two main measures of dividend policy: dividend yield and dividend payout ratio. It relied heavily on historic data, as data that was used in the analysis generated from annual financial reports of the sampled firms between the period of 2003 and 2011. Therefore, this research work employed the Ex Post Facto research design. This is because it involves events which have 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 (Agbadudu, 2002).

The data was extracted from the published annual reports and statements of accounts of selected firms for the relevant years sampled for analysis, Fact-books of the Nigerian Stock Exchange Onitsha Branch as they are believed to constitute the most authoritative and accessible documents for accessing information regarding the historical performance of the public owned firms.

Therefore, our sample consists of the seventeen quoted firms in the period under study (2003-2011). The basis for selecting these firms was to ensure that all the sectors was covered though in the process of the research, it became obvious that all the required data was not available hence what was got was used.

VI. Techniques of Data Analysis

For the analysis of the collected data, Pearson's Product Moment Correlation was first used. This is because it is used to describe the direction and strength of linear relationship between two measurements, x and y in a collection of data according to Harry and Steven (1994). In this study, the two measurements are dividend per share declared by the selected firms (x) and the corresponding market prices per share (y). Secondly, Simple Linear Regression (SLR) technique was used to examine the relationship of between the independent variables (x) with dependent variable (y) and to know the effect of independent variables on the dependent variable.

VII. Model Specification

The relationship between dividend payment and ordinary stock price volatility was analyzed using Simple Linear Regression (SLR) technique (applying time series).

The SLR technique in line with the recommendation by Koutsoyianis (2003) was used to determine the relationship between the dependent variable (Y) and the independent variable and SPSS Software was used to aid the regression analysis.

The model was evaluated annually over the seven-year period to measure the periodic effect of dividend payment on stock price volatility.

The simple linear regression is given as:

$$Y = a + b_1 X_1 + e \dots\dots\dots(1)$$

Where;

Y = Dependent variable

a = constant of the regression equation

b₁ =Regression coefficient

X₁ = Independent variable

e = Standard error.

Pearson's correlation is obtained by dividing the covariance of the two variables by the product of their standard deviations, this can be written as:

$$R_{xy} = \frac{\sum xy - n\bar{x}\bar{y}}{\sqrt{[n\sum x^2 - (\sum X)^2] - [N\sum y^2 - (\sum Y)^2]}} \dots\dots\dots(2)$$

Where;

R_{xy} =Correlation of x and y

N = Number of items or measurement

X = First item or measurement

Y = Second item or measurement

VIII. Data Presentation and Analysis

The data used in this research was extracted from the published annual reports and statements of accounts of the seventeen selected firms under study and from Fact-books of the Nigerian Stock Exchange. The selected firms for the study are;

Test of hypotheses.

The hypotheses were tested adopting fixed effect and random effects and decision to reject the null hypothesis were based on the panel least squares for each hypothesis. The tests were aided with Eviews 7, Version 2.0. The Test of adequacy of fixing the effects of the time and cross-sectional specific effects; panel least squares for random effects estimators (if any) were presented in the appendices. The tests of hypotheses are presented thus:

- Re-statement of the hypothesis.
- Decision rule (basis for acceptance or rejection of hypothesis)
- Presentation of the test result.
- Decision.

Test of Hypothesis One.

Hypothesis one seeks to reveal if dividend per share do not have effect on the market prices per share of quoted firms in Nigeria. To test this hypothesis, data from appendix one was used at 95% confidence interval.

Statement of Hypothesis.

H₀: Dividend per share does not have a significant positive effect on the market price of shares of quoted firms.

H₁: Dividend per share has a significant positive effect on market prices of shares of quoted firms.

To test this hypothesis, data from summary of variables on dividend per share and market price per share on table 4.1a in the appendix one was used.

Decision Rule: Accept H₀ if the sign of the coefficient is –tive; t-statistics < 2, p-value > 0.05 otherwise, reject H₀.

Results

The regression result from one hundred and ninety seven (197) observations for test of hypothesis one is as presented in table 4.2.1a and 4.2.1b below.

Table 1a: Method: Panel Least Squares (Fixed)

Dependent Variable: MPS (Market Price per Share).

Sample period: 2000- 2011

Periods included: 12

Cross-sections included: 17

Total panel (unbalanced) observations: 197

White diagonal standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.340577	0.017222	77.84116	0.0000
DPS	0.252363	0.059364	4.251132	0.0000

Effects Specification

Cross-section fixed (dummy variables)

Period fixed (dummy variables)

R-squared	0.843816	Mean dependent var	1.317833
Adjusted R-squared	0.817785	S.D. dependent var	0.532882
S.E. of regression	0.227469	Akaike info criterion	0.011574
Sum squared resid	8.692711	Schwarz criterion	0.494889
Log likelihood	27.85992	Hannan-Quinn criter.	0.207224
F-statistic	32.41614	Durbin-Watson stat	0.755769
Prob(F-statistic)	0.000000		

Source: Author’s Eviews 7.2.

The coefficient of determination R² of our model suggests that 84% of the variations in the market prices per share are caused by the increases and decreases in dividend per share of each company. The F-statistics of 32.41 and a P-value of .0000 shows the goodness of fit of our model and been significant at .0000 < .05 confirms that

our model fits. The sign of the coefficient indicates a positive relationship between market prices per share and dividend per share thereby confirming that a rise in dividend per share brings about an increase in the market price of shares quoted on the Nigerian stock Exchange.

While assuming that the random component e is constant cross-sectionally and varies over time, we as well tested hypothesis one under the random effects assumptions and the obtained result is as presented below:

Table 1b: Method: Panel EGLS (Cross-section random effects)

Dependent Variable: MPS

Sample Period: 2000 2011

Periods included: 12

Cross-sections included: 17

Total panel (unbalanced) observations: 197

Swamy and Arora estimator of component variances

White diagonal standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.377735	0.032291	42.66564	0.0000
DPS	0.648088	0.055561	11.66451	0.0000
Effects Specification			S.D	Rho
Cross-section random			0.100482	0.1441
Idiosyncratic random			0.244928	0.8559
Weighted Statistics				
R-squared	0.469226	Mean dependent var		0.767449
Adjusted R-squared	0.466504	S.D. dependent var		0.371712
S.E. of regression	0.270192	Sum squared resid		14.23570
F-statistic	172.3880	Durbin-Watson stat		0.850442
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.669442	Mean dependent var		1.317833
Sum squared resid	18.39776	Durbin-Watson stat		0.658050

Source: Author's Eviews 7.2. Output

The coefficient of determination R^2 of 0.669442 in our result under the random effects assumption suggests that 66.9% of the variations in the market prices per share are caused by the increases and decreases in dividend per share of each company. The F-statistics of 172.33 indicates that the goodness of fit of our model been significant at $.0000 < .05$ confirms that our model fits. The sign of the coefficient also indicates a positive relationship between market prices per share and dividend per share.

Decision.

Given t-statistics of 4.25 and 11.66 for fixed and random effects estimates respectively > 2 , our result indicates that dividend per share impacts positively on the market price per share of quoted firms in Nigeria. This result and decision is further strengthened by the P-value of the t-statistics of 0.000 for the fixed and random effects estimates < 0.05 significance.

We therefore reject the null hypothesis while accepting the alternate and conclude that dividend payment has a positive and significant effect on the market prices of shares of firms quoted on the Nigeria Stock Exchange.

This result and decision is further strengthened by the P-value of the t-statistics of 0.000 for the fixed and random effects estimates < 0.05 significance.

Test of Hypothesis Two.

Hypothesis two seeks to confirm if dividend yield has any significant effect on the market prices of shares of quoted firms in Nigeria. To test this hypothesis, data from appendix two was used at 95% confidence interval.

Statement of Hypothesis.

H₀. Dividend yield does not have a significant positive effect on the market prices of shares of quoted firms.

H₁. Dividend yield has a significant effect on the market prices of shares of quoted firms.

Decision Rule: Accept H₀ if the sign of the coefficient is –tive, t-statistics < 2 and p-value > 0.05 otherwise, reject H₀.

Results

The regression result from one hundred and ninety seven (197) observations for test of hypothesis two is as presented in table 4.2.4 below.

Table 2: Method: Panel Least Squares (Fixed)

Dependent Variable: MPS

Date: 07/20/13 Time: 14:03

Sample: 2000- 2011

Periods included: 12

Cross-sections included: 17

Total panel (unbalanced) observations: 197

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.888659	0.074513	11.92617	0.0000
DY	-0.309555	0.052580	-5.887357	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.858356	Mean dependent var		1.317833
Adjusted R-square	0.834748	S.D. dependent var		0.532882
S.E. of regression	0.216623	Akaike info criterion		-0.086143
Sum squared resi	7.883467	Schwarz criterion		0.397172
Log likelihood	37.48506	Hannan-Quinn criter.		0.109507
F-statistic	36.35959	Durbin-Watson stat		0.668231
Prob(F-statistic)	0.000000			

Source: Author’s Eviews 7.2.

The Eviews 7.2 result above indicates a coefficient of -0.309, an F-statistics of 36.35 and a P-value of .0000. This shows the goodness of fit of the model, and been significant at .0000 < .05 confirms that the model fits. The coefficient of determination R² suggests that 85% of the variations in the market prices of shares are caused by the variations in dividend yield of each company.

Decision.

The sign of the coefficient is -tive indicating a negative relationship between market prices per share and dividend yield. This suggests that a rise in dividend yield initiates an inverse reaction on the market price of shares quoted on the Nigerian stock Exchange. The t-statistics of -5.88 < 2 while the P-value of 0.0000 < 0.05 indicates that dividend yield has an effect on market price per share of quoted firms. Given that t-statistics < 2 and the sign of the coefficient been –tive, therefore, we accept the null hypothesis and conclude that dividend yield does not have a significant positive effect on the market price per shares of quoted firms.

Test of Hypothesis Three.

Hypothesis three seeks to reveal if dividend payout ratio has a significant positive effect on market price per share of quoted firms. To test this hypothesis, data from appendix three was used at 95% confidence interval.

Statement of Hypothesis.

H₀: Dividend payout ratio does not have a positive relationship with market price per share of firms quoted on the Nigerian Stock Exchange.

H₁: Dividend payout ratio has a positive relationship with market price per share of firms quoted on the Nigerian Stock Exchange.

Decision Rule: Accept H₀ if the sign of the coefficient is –tive, t-statistics < 2 and p-value > 0.05 otherwise, reject H₀.

Result

The regression result from one hundred and ninety seven (197) observations for test of hypothesis two is as presented in table 4.15 below.

Table 3: Method: Panel Least Squares (Fixed)

Dependent Variable: MPS

Date: 07/20/13 Time: 14:15

Sample: 2000 2011

Periods included: 12

Cross-sections included: 17

Total panel (unbalanced) observations: 196

White diagonal standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.338603	0.036180	36.99817	0.0000
DPR	0.367110	0.053372	3.718736	0.0433

Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.830076	Mean dependent var	1.316585	
Adjusted R-square	0.801586	S.D. dependent var	0.533958	
S.E. of regression	0.237845	Akaike info criterion	0.101399	
Sum squared resi	9.447199	Schwarz criterion	0.586426	
Log likelihood	19.06289	Hannan-Quinn criter.	0.297761	
F-statistic	29.13544	Durbin-Watson stat	0.635535	
Prob(F-statistic)	0.000000			

Source: Author’s Eviews 7.2

The F-statistics of 29.13 and a P-value of .0000 shows the goodness of fit of our model and been significant at .0000 < .05 indicates that our model fits. The coefficient of determination R² suggests that 83% of the variations in the market prices of shares are caused by the increases and decreases in dividend payout ratio of each firm.

Decision

The sign of the coefficient is +tive indicating a direct relationship between market price per share and dividend payout ratio of firms. The t-statistics of 3.718 > 2 and p-value of 0.0433 < 0.05 is significant. Therefore, we reject the null hypothesis and conclude that dividend payout ratio has a positive and a significant effect on the market price per share of quoted firms in Nigeria.

IX. Results and Discussion of Findings

Findings from this study reveal that on test of hypothesis one, the t-statistics of 4.25 and 11.66 for fixed and random effects estimates respectively > 2, our result indicates that dividend per share impacts positively on the market price per share of quoted firms in Nigeria. This result and decision is further strengthened by the P-

value of the t-statistics of 0.000 for the fixed and random effects estimates < 0.05 significance. Hence we deduce that dividend per share has a positive and significant effect on the market prices of shares. The finding supports the theory of dividend relevance. This is in line with the findings of Adesola and Okwong (2009) who carried out an empirical study of dividend policy of quoted companies in Nigeria; Graham and Dodd (1951) who concluded that a dollar of dividends has four times the average impact on share price as a dollar of retained earnings; Khemaies (2010) whose empirical investigations reveal that Tunisian investors reward firms that are paying cash dividends. From a theoretical viewpoint, the importance of dividend in determining stock price is obvious. Therefore, the firm's earnings which translate into earnings per share and dividend per share are very important.

Findings from test of hypothesis two reveal that the t-statistics of $-5.88 < 2$ and the P-value of $0.0000 < 0.05$ indicates that dividend yield does not have a significant positive effect on the market prices of shares of quoted firms. This revelation is not in line with the findings Khaled et al (2011) who found a positive relationship between dividend yield and stock price changes. However, our finding supports the result of Okafor et al (2011) who found that dividend yield showed a general negative impact on share price risk.

Findings from the test of hypothesis three reveal positive coefficient indicating a direct relationship between market price per share and dividend payout ratio of firms. The t-statistics of $3.718 > 2$ and p-value of $0.0433 < 0.05$ is significant. This finding indicated that dividend payout ratio has a positive and significant relationship with the market prices of shares of quoted firms. This outcome supports the findings of Timothy and Ochuogho (2009) whose findings indicated that dividend payout was a major factor affecting firm performance in a study of listed companies in Kenya. Khaled, et al (2011) who propounds a negative relation between dividend payout ratio and stock price changes. However, Okafor et al (2011) in their study on dividend policy and share price volatility in Nigeria found that dividend payout ratio another measure of dividend policy, showed negative influences in some years and positive influences on others though all were at lower significant levels.

X. Conclusion and Recommendations

This study examines the effect of dividend payment on the market price of shares of firms on the Nigeria Stock Exchange (NSE). The study seems to be a confirmatory test of dividend relevance or irrelevance as propounded by the various schools of thought.

Using a sample of 17 quoted firms in the period 2003 to 2011, the study first provides both empirical and statistical evidence on the relationship between dividend payment and firms' collective share prices. The result shows that there is a positive relationship between dividend payment and market share prices.

Secondly, the study provides evidence of the aggregate effect of dividend payment on share prices. The result confirms that the impact of dividend payout on share prices is insignificant which is in line with the irrelevance theory of Modigliani and Miller (1961).

Thirdly, the result confirms that there are some other exogenous and endogenous variables other than dividend payout that are responsible for the movement of share prices on the NSE.

Based on the findings from the study, the researcher recommend as follows:

1. That government should assist in improving the quality and availability of secondary data bank to enable research in Nigeria.
2. That the result of positive relationship between dividend payment and market price of shares indicates that dividend payment (no matter how insignificant) is still one of the determining variables of the market price of shares. Firms should not overlook the effect of dividend payout.
3. Quoted firms should endeavour to formulate dividend policies that will maximize shareholders wealth.

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