THE IMPACT OF DIVIDEND POLICY ON STOCK PRICES OF QUOTED FIRMS IN NIGERIA

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Abstract
There have been mixed results from numerous researches conducted not only in Nigeria but also in the rest of the world. Specifically, the relevance/irrelevance of dividend policy in valuation of firms’ market share prices has always generated a controversy. The concern for this thus provided an inspiration to examine the impact of dividend policy on the stock prices of quoted firms in Nigeria. The research was conducted on 22 companies listed on Nigerian Stock Exchange (NSE) using secondary data on their firms’ fundamentals as available on their respective annual reports from 2009 to 2013 and their closing quoted share prices extracted from two Nigerian Dailies – The PUNCH and The GUARDIAN. Regression analysis, Correlation analysis and Granger Causality Test were used to test research hypothesis on 110 observations and the findings reveal that both dividend payout and retained earnings are significantly relevant in the market price per share of the companies. It is, therefore, recommended that optimal trade-off between dividend payment and retained earnings that would increase the shareholders’ wealth in terms of cash and/or stock dividend as well as capital appreciation should be adopted by Nigerian listed firms.

Keywords: Dividend, Retained Earnings, Trade-off, Share Price and Quoted Firms
INTRODUCTION

The importance of dividend policy in the business world cannot be over-emphasized. A number of stakeholders, including investors, managers, lenders, financial consultants/analysts, etc. use it in making informed decisions. Considering the importance of dividend policy from the investors’ point of view, dividend is not only a source of income but also a way to assess company from investment point of view. In other words, their main objective of investing in the stock market is to maximize the expected return at low level of risk, and this return may be in the form of dividends or capital gain. In effect, maximizing shareholders’ wealth depends on the dividend policy of the company because of these shareholders would satisfy their purchasing and consumption patterns (Khan, 2012).

In companies’ perspective, selecting a suitable dividend policy is an important decision for the company because flexibility to invest in future projects depends on the amount of dividends that they pay to their shareholders. As such, certain important factors like managerial and behavioural environment, firms’ profitability ratios, the willingness of the company etc. are considered by companies in designing their dividend policies (Khan, 2012). Ling, Mutalip, Shahrin, & Othman (2008) studied the characteristics of dividend paying companies of Malaysia and found out that dividend paying companies are more profitable, less risky and more mature in their activities as compared to non-dividend paying companies. Their results also indicate that managers of Malaysian companies understand the importance of paying dividends and they pay dividends even if the companies are not earning profits.

Dividend policy, which involves itself in determining the amount to be paid to the shareholders and that to be retained in the company for future reinvestment in profitable projects or for other justifiable needs is one of the cardinal issues involved in financial management; and as such it has consistently received serious attention of researchers, even in the recent time (Chidi, Agu and Ande, 2013; AlTroudi and Milhem, 2013; Ramadan, 2013; Zakaria, Muhammad and Zulkifli, 2012; Salisu, 2012; Frankfurttet & McGoun 2000; Black 1976; Lintner, 1962; Miller and Modigliani, 1961; etc). In spite of ever increasing focus on the dividend policy issue by several authors/researchers, there has never been universally accepted conclusion, as the empirical analyses have always brought mixed results. Black (1976) expresses a view concerning dividend policy that “the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that don’t fit together”. This was corroborated by Brealey and Myers (2005) who describe dividend policy as one of the top ten most difficult unsolved problems in financial economics.
One major area of conflict is whether or not dividend policy influences the market price of firms’ shares and by extension, the shareholders’ wealth. In this connection, two main schools of thought subsist: the first representing the view of some researchers that dividend policy impacts on companies’ share prices (Salih, 2010; Pettit, 1972; Gordon, 1963; etc.); and the second being the view of those who claim that dividend policy bears no relevance in the corporate market value (Farrelly, Baker and Edelman, 1986; Baker, Farrelly and Edelman, 1985; Miller and Modigliani, 1961; etc.). And so, every research focusing on the relationship between dividend policy and stock price is an attempt to confirm or disprove the above hypotheses.

In Nigeria, drastic developments were experienced in the era of indigenization and in the storm of global financial crisis the hit the nation’s economy, which brought down the market values of the equity shares of listed companies. The experience came to fore in most emerging economies of the world, anyway. Following the two events, firms in Nigeria had continued to alter their dividend policies in order to ensure continual survival and maximize share price returns, the situation which seemed to have called the attention to the issue of dividend policy as it affects share pricing. Yet, there hasn’t been consensus of research findings (Adefila, Oladipo and Adeoti, 2013; Adaramola, 2012; Uwuigbe, Olowe and Godswill, 2012; etc.).

This paper thus intends to examine the pattern of dividend policies in Nigeria, assess the impact of dividend policy on NSE-listed companies’ shares’ market values, and determine the extent of the impact, if any, the dividend has on the stock price.

**Motivation for the Research**

The struggle for survival, following the blow by the global economic meltdown, spurred the recognition of dividend policy by companies again to regain the lost investors’ confidence through eventual increase in stock value – the scenario that momentously aroused researches on dividend policy. Whereas most researches concentrated on developed economies have concluded that dividends and share prices are significantly associated (Zhou and Ruland, 2006; Pandey, 2004), many of the research findings that used Nigeria-based data, contrarily, could not find significant correlation (Adefila, et al, 2013; Uwuigbe, et al, 2012; and Okafor, Mgbame and Chijoke-Mgbame, 2011). There is therefore a need to revalidate (or otherwise) the Nigeria-based findings.

**Scope of the Study**

The common proxies for dividend policy are dividend payout, dividend yield and retained earnings. This research focuses on dividend payout and retained earnings, examining how they
impact on quoted stock prices. Twenty-two companies from fifteen different sub-sectors were surveyed and the sampled period covers five years from 2009 to 2013.

Research Hypotheses
From the foregoing, expected relationships between dividend policy and stock price changes is expressed in the hypotheses below:

(i) \( H_0 \): Positive significant relationship does not exist between dividends pay out and stock price in Nigeria.
\( H_1 \): Positive significant relationship exists between dividends pay out and stock price in Nigeria.

(ii) \( H_0 \): Positive significant relationship does not exist between retained earnings and stock price in Nigeria.
\( H_1 \): Positive significant relationship exists between retained earnings and stock price in Nigeria.

Conceptual Definitions
The concept of dividend has been defined by many authors and researchers. Bierman (2001) and Baker, Powell and Veit (2002) have described it as an appropriation of profits to shareholders after deducting tax and fixed interest obligations on debt capital. According to Olimalade, Ojo and Adewumi (1987), it is seen as cash flows that accrue to equity investors. That is a form of return to shareholders on their investment, and the aim is to increase their confidence in the future of the company in which they have invested.

Dividends are usually paid out of the current year’s profit and sometimes out of general reserves. They are normally paid in cash, and this form of dividend payment is known as cash dividend (Adefila, Oladipo, and Adeoti, 2013). Dividend payment is a major component of stock return to shareholders (Zakaria, et al, 2012). Jo and Pan (2009) assert that dividend payment could provide a signal to the investors that the company is complying with good corporate governance practices.

The dividend policy decisions of firms are the primary element of corporate finance policy (Uwuigbe, et al. 2012). Nissim & Ziv (2001) define dividend policy as the regulations and guidelines that a company uses to decide to make dividend payments to shareholders. The major concern of the dividend policy is, of course, the trade-off between dividend payout and retained earnings.

Dividend payout and dividend yield have been generally recognized as the proxies for dividend policy (Ramadan, 2013; Asghar, Shah, Hamid, and Suleman, 2011; etc.). Dividend
payout (Ratio) is defined by Ramadan (2013) as the ratio of total cash dividend paid out to common stockholders to net income available for common stockholders. Dividend yield, on the other hand, is a profitability indicator expressed as a cash dividend per share for common stocks divided by the per share market value, i.e. dividend per share divided by the market value per share.

**LITERATURE REVIEW**

**Theoretical Review**

Literature on dividend policy has produced a large body of theoretical and empirical researches, especially following the publication by Lintner (1956) that favours the relevance of dividend policy in the valuation of firm’s share price. Ever since, there has never been a general consensus of findings. Scholars often disagree even about the same empirical evidence (Al-Malkawi, Rafferty and Pillai, 2010). Lintner (1956) presented a model based on stylized yield of the specific characteristics of a ‘sticky of dividend’. The author found that firms are reluctant to decrease dividends since this could lead investors to interpret poor performance and cause the stock prices to fall as well. Supporting Lintner’s (1956) model, Bhattacharya (1979) and Miller and Rock, (1985) suggested that dividend announcements convey information about the future prospects of the firms.

Whereas Lintner’s (1956) model has been embraced by a number of researchers (Gordon, 1959; Walter, 1963), Miller and Modigliani (1961), often shortened as ‘MM’, hypothesized that dividends are irrelevant in the stock valuation. According to them, retaining earnings or paying dividends does not affect the firms’ values. Firms could pay dividends as much as they need and they also could use external sources of funds to finance their debts without affecting their firms’ values. The authors stated that only future earnings and risk of investment drive the firms’ values. MM based their argument on the assumptions that: no taxes or transactional cost (brokerage cost), investors are rational, managers act as the best agents of shareholders, and investment policy of the firm should be certain. However, MM’s assumptions have been criticized as they cannot be keyed into real economic situation. Especially, Gordon (1962) and Lintner (1956) disagreed with MM arguing that dividend are less risky than capital gains, so a firm should set a dividend payout ratio and offer a high dividend yield in order to minimize cost of capital.

Gordon’s growth valuation model postulates that the dividends of most companies are expected to grow and evaluation of value shares dividend based on dividend growth is often used in valuation of shares. The implication of the model is that when the rate of return is greater than the discount rate, the price per share increases as the dividend ratio decreases.
The reverse applies when the rate of return is less than the discount rate; and the stock value remains unchanged when the two rates are equal (Kishore, 2004). The position of the model that companies might pay low or no dividend despite increased earnings implies that dividend is irrelevant in stock valuation. This is because stockholders or investors would hope not only to start receiving presumably higher dividend in the future but also to have their capital appreciated. On the other hand, at some time in the future when a larger dividend is paid, it would send a positive signal and would resultantly increase the share price Kishore (2004).

Graham, Dodd and Cottle (1962) came out with "bird in hand" theory with the view that dividends are worth more to investors than retained earnings. Their argument, according to Kishore (2004), is that investors will apply a lower discount rate to the expected stream of future dividend than the more distant capital gains, i.e. the bird in bush. This theory conforms to Gordon Growth Valuation Model that places higher values on the firms that offer higher dividend growth.

Another relevant theory that analyses the relationship between dividend policy and firms’ values is the Walter’s Valuation Model, which argues that in the long-run the share prices reflect only the present value of expected dividends. The idea of Walter (1963) was that shareholders would accept low dividends when the expected rate of return is higher than market capitalization rate but would prefer higher dividends when the former is less than the latter. The implication is that dividend is relevant in either growth or declining firm but would be irrelevant in a normal firm.

In the early 1980s, signalling theory was analysed. It revealed that information asymmetry between managers and outside shareholders allows managers to use dividends as a tool to signal private information about a firm’s performance to outsiders (Healy and Palepu, 1988). As observed by Murekefu and Ouma (2012), cash dividend announcements convey valuable information, which shareholders do not have, about management’s assessment of a firm’s future profitability thus reducing information asymmetry. Such information can be made use of by investors in assessing the firm’s share price and making investing decision. Dividend policy under this model is therefore relevant (Al-Kuwari, 2009).

**Review of Past Researches**

Researches on dividend policy have been conducted across the world: Nigeria (Abubakar, 2012; Adesola and Okwong, 2009); Pakistan (Ahmed and Javid, 2009); Australia (Allen and Rachim, 1996); United States (Aivazian, Booth & Clearly 2003); Jordan (AlTroudi and Milhem, 2013); Ghana (Amidu, 2007); India (Anil and Kapoor, 2008); to mention but a few. Yet the variability of firm’s stock price has remained controversial. Samuel & Edward (2011) asserts
that dividend policy has been analysed for many decades, but no universally accepted explanation for companies’ observed dividend behaviour has been established. However, the situation does not undermine the importance of dividend policy. The importance of dividend policy is reinforced in the assertion of AlTroudi and Milhem (2013) that dividend policy is a central strategic concern around which other corporate financial policies rotate.

The findings of Bhattacharya (1979) and Miller and Rock, (1985) favours the position of Lintner (1956) that behaviour of dividend influences stock price; and the signalling theory that dividend announcements convey information about the future prospects of the firms.

Khan (2012) surveyed twenty-one chemical and pharmaceutical companies listed on KSE-100 Index from the period of 2001 to 2010 to study the effect of dividend on stock prices and the results show a positive significant relationship between the variables.

Zakaria, et al, (2012) also conclude from their study of Malaysian firms that “due to the content in dividends, dividend announcements are taken as a signal of the companies’ good position that will raise the stock prices and vice versa”.

**Empirical Findings from Nigeria**

In Nigeria, Adelegan (2009) researched into the price reactions to dividend announcements in the Nigerian Stock Market and concludes that dividend policy matters and that share prices do react to dividend announcements.

Adefila, Oladapo and Adeoti (2013), in their own study, found no correlation between dividend payment and share prices of Nigerian firms as share price fixing, according to them is regulated by the Security and Exchange Commission (S.E.C) in respect of the quoted companies. But then, their findings show that Nigerian firms do have a dividend policy that is dependent on earnings though the trend is not very consistent and proportionate.

Empirical findings by Uwuigbe, et al (2012), using regression analysis to assess the determinants of share price in Nigeria on 30 firms listed in the Nigerian Stock Exchange, shows that there is a significant positive relationship between firms’ dividend payout and the market value of share prices. This is validating the finding of Adelegan (2009).

The research conducted by Adaramola (2012) on top three (3) firms listed on the Nigerian Stock Exchange (NSE) from 1977 to 2009 reveals contradictory results. With a panel model allowing the influence of cross sectional weights, his findings show that dividend payment is insignificant. In another instance, his findings suggest that dividends have significant information content about stock prices in Nigeria.
RESEARCH METHODOLOGY

The research work brought all the firms listed on the Nigerian Stock Exchange (NSE) traded on the Stock Exchange floor as covered daily by PUNCH and GUARDIAN Nigeria Dailies. Precisely, bonds’ and the firms’ quoted prices on the last day of each month of the years 2009 – 2013 were picked for data analysis. Annual averages were then computed; but then, any firm which share was not traded at least once in a year was eliminated. The firms fundamentals, i.e. Dividend Per Share (DPS) and Earnings Per Share (EPS) were extracted from the companies’ annual reports as available online. The researchers used the EPS and the DPS to calculate the firms’ Retained Earnings Per Share denoted as RPS. However, those companies whose annual reports were not, or incompletely, available on the internet were also excluded from the data analysis. This was how the sampled companies were filtered down to twenty-two (22) listed firms, spread across 15 sub-sectors as shown in the Table 1 below.

Table 1: List of Sampled NSE-Quoted Firms

<table>
<thead>
<tr>
<th>S/N</th>
<th>SUB-SECTORS</th>
<th>COMPANIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture/Agro-Allied</td>
<td>Presco Plc</td>
</tr>
<tr>
<td>2</td>
<td>Airline Services</td>
<td>Airline Services and Logistics Plc</td>
</tr>
<tr>
<td>3</td>
<td>Banking</td>
<td>Access Bank Plc</td>
</tr>
<tr>
<td>4</td>
<td>Breweries</td>
<td>Guinness Nigeria Plc</td>
</tr>
<tr>
<td>5</td>
<td>Building Materials</td>
<td>Ashaka Cement Plc</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Lafarge WAPCO Plc</td>
</tr>
<tr>
<td>7</td>
<td>Commercial/Services</td>
<td>Red Star Express Plc</td>
</tr>
<tr>
<td>8</td>
<td>Conglomerates</td>
<td>AG Levenitis Nigeria Plc</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Chellarams Plc</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>UACN Plc</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Unilever Nigeria Plc</td>
</tr>
<tr>
<td>12</td>
<td>Construction</td>
<td>Julius Berger Nigeria Plc</td>
</tr>
<tr>
<td>13</td>
<td>Food/Beverages and Tobacco</td>
<td>Flour Mills Nigeria Plc</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>National Salt Co Nig Plc</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Nestle Nigeria Plc</td>
</tr>
<tr>
<td>16</td>
<td>Healthcare</td>
<td>Glaxo Smithkline Consumer Plc</td>
</tr>
<tr>
<td>17</td>
<td>Insurance</td>
<td>Continental Reinsurance Plc</td>
</tr>
<tr>
<td>18</td>
<td>Media</td>
<td>Afromedia Plc</td>
</tr>
<tr>
<td>19</td>
<td>Petroleum (Marketing)</td>
<td>Conoil Plc</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>Total Nigeria Plc</td>
</tr>
<tr>
<td>21</td>
<td>Printing &amp; Publishing</td>
<td>Academy Press Plc</td>
</tr>
<tr>
<td>22</td>
<td>Road Transportation</td>
<td>Associated Bus Company Plc</td>
</tr>
</tbody>
</table>
The statistical technique of regression analysis, especially Panel Ordinary Least Square, was the main tool used to obtain the estimates of the variables’ parameters and establishing the linear relationship between the firms’ dividend policies and the stock prices. Other techniques were Correlation Analysis and Granger Causality Tests. The correlation analysis was used to establish the relationships and, their directions between the stock price and the explanatory variables; while the Granger Causality Tests investigates causality relationship between dependent and explanatory variables in bivariate models.

**Model Specification**

In analysing data and testing the research hypotheses, Regression Analysis was used employing E-View statistical software, using the following model:

\[ PPS_t = f(DPS_{t-1} & RPS_{t-1}) \]  

......................... (1)

The above function is econometrically expressed as:

\[ PPS_t = \beta_0 + \beta_1 DPS_{t-1} + \beta_2 RPS_{t-1} + u_t \]  

......................... (2)

Where, \(PPS_t = \text{Stock Price Per Share of the Current Year}\)

\(DPS_{t-1} = \text{Dividend Per Share of the Previous Year}\)

\(RPS_{t-1} = \text{Retained Earnings Per Share of the Previous Year}\)

\(\beta_0 = \text{Constant}\)

\(\beta_1, \text{ and } \beta_2 = \text{Coefficients or Parameters of the Explanatory Variables}\)

\(u_t = \text{Error Terms}\)

Also used to test the hypotheses of the study was a bivariate Pearson Product Moment Correlation; and the relationship between the dividend policy and the performance and the dependent variable (PPS) is expressed in the following model.

\[ r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{(N \sum X^2 - (\sum X)^2) \cdot (N \sum Y^2 - (\sum Y)^2)}} \]  

......................... (3)

Where,  
\(r = \text{the Correlation Coefficient}\)

\(N = \text{the Number of Cases}\)
∑ = Sigma, i.e. Summation
X = the Value of each of Explanatory Variables, and
Y = the Values of Stock Prices

Next is the test for causality in the bivariate model by applying the Granger Causality Test. This is an attempt to test whether DPS causes PPS or vice versa or there is no causality between them. The Granger’s model as adapted from Gujarati (2004) is presented below:

$$PPSt = \alpha_0 + \sum_{i=1}^{n} \alpha_i DPS_{t-1} + \sum_{j=1}^{n} \beta_j PPS_{t-1} + u_{1t} \ldots \ldots \ldots \ldots \ldots (4)$$

$$DPSt = \sum_{i=1}^{n} \lambda_i DPS_{t-1} + \sum_{j=1}^{n} \delta_j PPS_{t-1} + u_{2t} \ldots \ldots \ldots \ldots \ldots (5)$$

Substitution of the variable names in the above two models makes them fit also for measuring the bilateral causality between RPS and PPS

**ANALYSIS AND RESULTS**

The regression model needs to be investigated for multicollinearity in order to ensure that the results are free from bias, inconsistency and distortion. The problem of multicollinearity arises, when there exists a linear relationship between the explanatory variables of regression. The following are some of the principal measures of multicollinearity: tolerance (TOL), variance-inflating factor (VIF), correlation coefficient (r) and the coefficient of determination ($R^2$).

A TOL value of zero (0) indicates a perfect multicollinearity problem while a TOL value of one (1) indicates no multicollinearity (Gujarati, 2004). This implies that the closer the TOL to 1 the greater the evidence that there is no multicollinearity problem between the regressors. On the other hand, VIF shows how the variance of an estimator is inflated by the presence of multicollinearity. A VIF value greater than 10 calls for concerns (Myers, 1990). Rafique (2012) suggests that the ‘r’ of 0.76 (0.8 suggested by Gujarati, 2004) and above indicates multicollinearity problem. The clearest sign of multicollinearity is when $R^2$ is very high but none of the regression coefficients is statistically significant on the basis of the conventional t-test.

The TOL electronically calculated using SPSS (see Table 2) shows the TOL is 0.759 for both the DPS and RPS, which indicates that the regression model is free from multicollinearity problem. Meanwhile, the VIF (an inverse of TOL) is 1.317 and this, of course, is far less than 10.
Table 2: Collinearity Statistics

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPS</td>
<td>0.759</td>
<td>1.317</td>
</tr>
<tr>
<td>RPS</td>
<td>0.759</td>
<td>1.317</td>
</tr>
</tbody>
</table>

The SPSS-generated correlation matrix in Table 3 shows that the correlation coefficient of DPS with RPS is on the low side (i.e. 0.491). This too is far below 0.8, the benchmark recommended by Gujarati (2004). The choice of the Statistical Package for Social Sciences (SPSS) was motivated by the fact that the software flags the significance of the relationship where and when necessary, which E-View could not provide.

Table 3: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>PPS</th>
<th>DPS</th>
<th>RPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPS</td>
<td>1</td>
<td>.893</td>
<td>.609</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>DPS</td>
<td>.893</td>
<td>1</td>
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</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>RPS</td>
<td>.609</td>
<td>.491</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>110</td>
<td>110</td>
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</tbody>
</table>

**. Correlation is significant at the 0.01 level (1-tailed).

Furthermore, the regression results in Table 4 below shows that $R^2$ is very high and the $p$ values of the explanatory variables show high significance level at 0.01. All these are statistical evidences that the regression model is free from the problem of multicollinearity.
Table 4: Regression Results, EView

<table>
<thead>
<tr>
<th>Dependent Variable: PPS</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method: Panel Least Squares</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Date: 07/15/14 Time: 07:37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample: 2009 2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Periods included: 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-sections included: 22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total panel (balanced) observations: 110</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPS</td>
<td>26.28052</td>
<td>1.513238</td>
<td>17.36707</td>
<td>0.0000</td>
</tr>
<tr>
<td>RPS</td>
<td>14.96208</td>
<td>2.980487</td>
<td>5.020010</td>
<td>0.0000</td>
</tr>
<tr>
<td>C</td>
<td>-1232.835</td>
<td>580.7020</td>
<td>-2.123007</td>
<td>0.0361</td>
</tr>
</tbody>
</table>

R-squared: 0.835415
Adjusted R-squared: 0.832339
S.E. of regression: 5104.903
Sum squared resid: 2.79E+09
Log likelihood: -1093.738
F-statistic: 271.5608
Prob(F-statistic): 0.000000

Holding the PPS as a regressant (i.e. dependent variable), the regression analysis in Table 4 shows positive coefficients of 26.28 and 14.96 respectively for DPS and RPS both of which are significant at 1%. The constant, represented in the regression model by $\beta_0$ has a negative but insignificant coefficient of -1232.84. Substituting the coefficients in the model gives the following equation:

$$PPS_t = -1232.84 + 26.28*DPSt_{-1} + 14.96*RPS_{t-1} + u_t$$

In testing the hypothesis that a positive significant relationship exists between dividends policy and stock price in Nigeria, PPS was correlated with the two explanatory variables, using Pearson correlation statistical technique (see Table 3). The correlation coefficient ($r$) between PPS and DPS is 0.893 ($p<0.01$). Also, correlation of PPS with RPS shows that $r' = 0.609$ with $p$ value of 0.000 ($p<0.01$). This indicates that the DPS and RPS, both of which represent dividend policy, have highly significant positive relationships with the PPS. Hence, the null hypothesis is rejected and the alternative hypothesis that positive significant relationship exists between dividends policy and stock price in Nigeria is accepted.
The $R^2$ from the regression analysis (OLS) in Table 4 above is 0.835415 with $p$ value less than 1%. This is interpreted as the two explanatory variables, i.e. DPS and RPS of the previous year account for 84% of a change in the current year stock prices of firms listed on the Nigerian Stock Exchange. This is highly significant as the $p$ value is 0.0000 ($p<0.01$)

Lastly, the Granger Causality Tests (Table 6) conducted on the research variables shows that the null hypothesis that DPS does not Granger Cause PPS is rejected in favour of alternative hypothesis. Hence, DPS (Granger) cause PPS. This is evidenced by the $p$ value that is 0.0049 ($p<0.01$). Whereas in other causality relationships, null hypotheses prevail as there is no statistically significant relationship between the variables.

### Table 5: Granger Causality Tests

<table>
<thead>
<tr>
<th>Pairwise Granger Causality Tests</th>
<th>Date: 07/16/14   Time: 09:10</th>
<th>Sample: 2009 2013</th>
<th>Lags: 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null Hypothesis:</td>
<td>Obs</td>
<td>F-Statistic</td>
<td>Prob.</td>
</tr>
<tr>
<td>PPS does not Granger Cause DPS</td>
<td>88</td>
<td>51.2932</td>
<td>3.E-10</td>
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<tr>
<td>DPS does not Granger Cause PPS</td>
<td>8.35655</td>
<td>0.0049</td>
<td></td>
</tr>
<tr>
<td>RPS does not Granger Cause DPS</td>
<td>88</td>
<td>39.2744</td>
<td>1.E-08</td>
</tr>
<tr>
<td>DPS does not Granger Cause RPS</td>
<td>29.0796</td>
<td>6.E-07</td>
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</tr>
<tr>
<td>RPS does not Granger Cause PPS</td>
<td>88</td>
<td>0.09985</td>
<td>0.7528</td>
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<tr>
<td>PPS does not Granger Cause RPS</td>
<td>40.5436</td>
<td>9.E-09</td>
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</table>

### CONCLUSION AND RECOMMENDATIONS

The research was inspired by the controversy that beclouds the relationship between dividend policy and firms’ values in terms of stock price per share. Secondary data on the firms’ fundamentals were sourced online from companies’ annual reports. Though some researches on Nigerian listed firms have favoured dividend irrelevant theories in their findings (Adefila, Oladipo and Adeoti, 2013; Adaramola, 2012; and Adesola and Okwong, 2009), our findings, using three main statistical techniques for testing the research hypothesis have been consistent, accepting the hypothesis that there is a positive significant relationship between dividend per share and stock price in Nigeria. This, however, is in conformity with the findings of Uwuigbe, et al (2012) who researched on 30 firms listed in the Nigerian Stock Exchange. A number of foreign researches also concluded in favour of Gordon’s (1959) view that dividend policy is relevant in the valuation of market prices of companies’ shares (Khan, 2012; Pradhan, 2003;
Kato and Loewenstein, 1995; and Lee, 1995). This could be attributed to the dividend signalling effect, i.e. the information effect of dividend, as increasing dividend improves investors’ confidence. Unlike the result found by Pradhan (2003) that retained earnings has but a weak relationship with stock market price, our findings here reveal a strong relationship between retained earnings per share and stock market price per share, though in a lesser degree compared to the impact of DPS as evidenced in the regression, correlation and causality test. Our findings on DPS and RPS exactly match those of AlTroudi and Milhem (2013) on Jordanian firms. Realizing that the RPS is a financing option, which apart from the fact that it will reduce the firms’ leverage and interest expenses that would have been enhanced by external financing, it would also boost investors’ confidence and thereby influence their demand for more shares – a situation that leads to increase in market share prices. Thus, both dividend payout and retained earnings are found to strong determinants of share prices of firms listed on NSE.

An examination of dividend pattern reveals that most firms’ dividends paid depends on earnings per share; except for few ones that paid relatively constant dividends even when they incurred loss or their earnings per share is nothing to write home about. This aligns with the Lintner’s (1956) finding that decrease in or non-payment of dividend could convey a wrong signal to the investors. However, the survey of the firms shows that only two out of the twenty-two firms surveyed retained all the earnings throughout the sampled period.

Nigerian firms should therefore adopt optimal trade-off policy between dividend payment and retained earnings that would increase the shareholders’ wealth in terms of cash and/or stock dividend as well as capital appreciation.

REFERENCES


