The Role of Dividend Policy in Determining the Market Value of Share of Listed Industrial Goods Companies in Nigeria

Muhammad Kagu Mustapha, Modu Bulama Buni & Abdullahi Idriss
1Department of Business Administration and Management
2Department of Accountancy
3Department of General Studies
Mai Idri Alooma Polytechnic Geidam

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Abstract

This study examines the role of dividend policy in determining the market value of share of listed industrial goods companies in Nigeria, the research design used as a guide is ex-post facto method, as the study entails the use of annual reports and accounts of listed industrial goods companies in the Nigerian Stock Exchange (NSE). The secondary data were sourced from the company's financial report for the period of five years from 2013 to 2017 contained in company's annual reports and account and all were used to compute the dependent variable (share price) while dividend payout ratio and dividend yield as proxies of independent variable respectively. Regression analysis is use establish the relationship between the variables by using Statistical Software (SPSS). The result showed that there is no positive significant relationship between dividend payout ratio, dividend yield and share price of listed industrial goods companies in the Nigeria. Based on findings the study recommends that the existing investors in the Nigerian industrial goods sector should from time to time; ensure extensive and critical evaluation of dividend policy as it can significantly influence their market value which has ultimate effect on the investments.

Keywords: Dividend Policy, Market Value, Industrial Goods, Share Price, Dividend Payout Ratio

Corresponding Author: Muhammad Kagu Mustapha
Background to the Study

Dividend policy has been an issue of interest in financial literature since Joint Stock Companies came into existence. Dividend policy is a deliberate policy to maintain or increase dividend at a certain level with the ultimate aim of sustaining the price of the shares on the stock exchange. This is because capital markets are not perfect, and even though shareholders are indifferent between dividend and retained earnings due to market imperfections and uncertainty, they however, give a higher value to the current year dividend than the future dividend and capital gains (Simon, John, Jonah, Julius and Patrick, 2012). Dividend policy depends on investor's desire for capital gains as opposed to income, their willingness to forgo dividend now for future returns, and their perception of the risk associated with postponement of returns (Adefila, 2010).

The financial crisis that has been wreaking havoc in markets in the U.S. and across the world since August 2007 had its origins in an asset price bubble that interacted with new kinds of financial innovations that masked risk and with regulators and supervisors that failed to restrain excessive risk taking. The financial crisis has brought about major uncertainty; however financial directors of companies are still required to make decisions with regard to payout policy, with absolute certainty (Blundell-Wignall et al, 2009).

Various firms adopt dividend policy depending on the company's articles of association, memorandum of association (in some situation) and the prevailing economic situation. Some make high pay out, while others make low pay out and yet others pay stock dividends (bonus issue) in lieu of or in addition to cash dividend while others pay cash only. All in a bid to maximize shareholders' wealth which, in this case, is the market value of the firm's common stock (Adefila, 2010). A company pays dividend to reward existing shareholders and encourage others that are prospective shareholders to buy new issues of the common stock at high price.

Investors in developing countries like Nigeria mostly look at the profitability of the firm while purchasing equity shares from the secondary market. Since dividend paid to the shareholders is one of the best indicators of profitability, it is generally believed that dividend plays a crucial role in determining market price of the corporate share (Okafor and Mgbame, 2011).

The company generally pays stock dividend if it plans to increase the capital so as to expand the business. The primary objective of dividend policy should be to maximize the shareholders return so that the value of their investment is maximized. The firm issues equity shares to raise ownership capital and the investors buy them with the ultimate expectation to receive a share of profit as well as enjoy capital appreciation. The value of the firm is said to be high when the share price of the company's common stock is higher (Ashamu, Abiola, and Bbadmus, 2012). Firms that perform better than others are expected to have higher share prices and can raise additional funds (both debt and equity) in more favourable contractual terms at the capital market than the others.

Traditionally, managers pay attention to their choice of the dividend policy for the firm since they believe that dividend policy influence the value of their company and hence the wealth of
their shareholders. Value is important for both companies listed on the stock exchange and those not listed (Gladys, 2007). Modigliani and Miller (1961) demonstrated the irrelevance of dividend policy under a set of assumption, that is, dividend policy has no effect on share prices. But when these assumptions are relaxed, the theory begins to disintegrate. Moreover, it has been discovered that the dividend policy of a firm always has short term or long term effect on the market price of its shares. It is against this background that, this study aimed at examining the role of dividend policy in determining the market value of share of listed industrial goods companies in the Nigeria Stock Exchange.

**Statement of the Research Problem**

Maximizing shareholders' wealth is one of the most important objectives that a management tries to achieve by adopting specific administrative and finance policies. Ward (1993), has added another dimension to the differences in implementing these financial and management policies. According to him, these financial and management policies apply to the dividends policy as one of these financial policies that are applied in a company, no matter the type they represent or what activities they undertake. The policies include the residual dividend policy, dividend stability policy and hybrid dividend policy. Companies using the residual dividend policy choose to rely on internally generated equity to finance any project. As a result, dividend payment can come out of the residual or leftover equity only after all project capital requirements are met. On the other hand, the fluctuation of dividends created by the residual policy significantly contrasts with the certainty of the dividend stability policy. With the stability policy, quarterly dividends are set at a fraction of yearly earnings. This policy reduces uncertainty for investors and provides them with income. The final approach is a combination between the residual and stable dividend policy (the hybrid dividend policy) using this approach, companies tend to view the debt/equity ratio as a long-term rather than a short-term goal (Ward, 1993).

A number of studies have been conducted on the relationship between dividend policy and share price, the most notable of which is Miller and Modigliani’s study (1961) which has set up the foundation for what is known as the Irrelevant Theory. Some scholars argue that dividend policy is irrelevant (Miller and Modigliani, 1961) whereas others view it otherwise. Two basic schools of thought on dividend policy have been expressed in the theoretical literature. One school, associated with Gordon and Lintner (1962), among others who hold that the capital gains expected to result from earnings retention are riskier than the dividend expectations. The other school associated with Miller and Modigliani (1961) holds that investors are basically indifferent to returns in form of dividends or capital gains. When firms raise or lower their dividends, the share prices tend to rise or fall in like manner; and there is the likelihood that investors prefer dividends but Miller and Modigliani (1961), argue that they do not. They argue that any effect of change dividends has on the share price of firm's stock is related primarily to information about expected future earnings conveyed by a change in dividends (Weston and Brigham, 1981). To the best knowledge of the researcher, no study was conducted in recent time covering the listed industrial goods companies in the Nigeria Stock exchange. Therefore, this study will attempt to fill the gap in literature by examining the role of dividend policy in determining the market value of share of listed industrial goods companies in the Nigeria Stock Exchange. Thus the problem of a clear cut empirical analysis and the mix findings on the impact of dividend policy on the market value of share stimulated this research.
Objective of the Study
The aim of this study is to examine the role of dividend policy in determining the market value of share of listed industrial goods companies in the Nigeria. Other specific objectives are to:

1. Examine the relationship between Dividend Payout Ratio (DPR) and Share Price (SP) of listed industrial goods companies in the Nigeria.
2. Examine the relationship between Dividend Yield (DY) and Share Price (SP) of listed industrial goods companies in the Nigeria.

Research Hypotheses
Based on the above objectives the following null hypotheses were formulated.

- \( H_{01} \) There is no positive significant relationship between Dividend Payout Ratio (DPR) and Share Price (SP) of listed industrial goods companies in the Nigeria.
- \( H_{02} \) There is no positive significant relationship between Dividend Yield (DY) and Share Price (SP) of listed industrial goods companies in the Nigeria.

Literature Review
The Concept of Dividend Policy
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. Dividends are returns to shareholders from company earnings. A dividend is a cash payment from a company's earnings announced by a company's board of directors and distributed among stockholders. Therefore, dividends can be paid in cash, products or as additional shares of stock. Stock dividends increase the number of shares outstanding and tend to generally reduce the price of each. Dividends can be announced at regular dividends to be paid at regular intervals or as a special dividend, paid only once. Liquidating dividends exceed earnings and might be paid to resolve part or the entire firm. 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 (Oyinlola and Ajeigbe, 2014). The importance of dividend policy in the business world cannot be over-emphasized.

Review of Empirical Studies
Aribaba, Ahmodu, Ogbeide and Olaleye (2017), examined the impact of dividend Policy and Share Price Changes in the Stock Market: Evidence from Nigeria. The study employed the ex-post facto research design. A sample of 15 companies were examined between 2008- 2014 financial year using panel Estimated Generalized Least Squares (EGLS) regression with fixed effect. In the study Share price is the dependent variable while dividend policy, dividend yield, dividend payout, earnings per share, dividend per share and firm size are the independent variables. The study found dividend policy and dividend yield contributed to share price reduction and were not statistically significant. The effect of dividend per share was negative and was statistically not significant across the Quoted firms. Earnings per share were observed to result to positively engender share price changes was not statistically significant; dividend pay-out and firm size positively influence changes of share prices of the quoted companies in Nigerian Stock Market.
Bellal and Asaduzzaman (2017), examined the Impact of Dividend Policy on Stock Price: A Study of Fuel, Power and Cement Industry in Bangladesh. The study used secondary data sourced from the companies in Dhaka Stock Exchange. All 24 companies belong to Fuel, Power and Cement industry listed at DSEX index were included as the sample for a phase from 2000 to 2016. In the study, Fixed Effect Model along with Random Effect Model was used to estimate outcomes. Both Models were exercised on panel data. In the study Stock Price Volatility (SPV) is the dependent variables while Cash dividend, stock dividend, profit after tax, earnings per share, return on equity, growth assets and dividend payout ratio are the independent variables. After adjusting several variables including Earnings per Share, logarithm value of Profit after Tax, Growth of Asset and Dividend Payout Ratio. The study also checked both the Models and found Random Effect Model was more significant than Fixed Effect Model. Afterward, the study applied the multicollinearity test to determine was there any correlation among the variables and found no multicollinearity. The study found a weak form market exists in Bangladesh and investors choose stock dividend more than the cash dividend.

Kehinde, Uwalomwa, Olubukola, Osariemen and Sylvester (2017), examine the impact of dividend Policy on Share Price Valuation in Nigerian Banks. The study covered Ten year period using secondary source data from published financial statements of Access Bank, First Bank, United Bank for Africa and Guarantee Trust Bank. The Study Employed the Ordinary Least Square (OLS) Regression Model for analyzing the data obtained. The study used Market Price per Share (MPS) as the dependent variable while Earnings per Share (EPS), Dividend Yield (DY) and Retention Ratio (RR) are the independent variables of the study.

Puja (2017), examine the impact of Dividend Policy on Share Price of Nabil Bank Ltd. The study used secondary which are mainly quantitative and analysis has been carried out by using simple percentage and statistical tools like as line diagram, pie charts, time line. Market price per share before and after are the dependent and independent variables used in the study. The growth of bank has been increasing and sufficient during the study period. Similarly total sum assured has been positive but fluctuating over the period under study.

Rozaimah, Nurul and Chee (2017). Investigated the relationship between Dividend policy and stock price volatility (SPV) of industrial products firms in Malaysia. The study used secondary data. The sample comprises 166 industrial products public-listed firms covering a time span from year 2003 to 2012. Baskin's framework, firm's SPV (1989). Descriptive statistics, correlation and regression were used for data analysis. The study take Share price volatility as the dependent variable and Dividend per share, dividend payout are the independent variables used while Earnings volatility, firm size, leverage and growth of assets are the control variable in the study. The result showed that earning volatility significantly explains stock price volatility of industrial product firms during the crisis period, while dividend payout ratio predominantly influences volatility during pre- and post-crisis sub-periods. The empirical results indicated that dividend policy was a strong predictor of SPV of industrial products firms in Malaysia, particularly during the post-crisis period.
Taskeen and Nudrat (2017). Studied the Impact of dividend policy on share price volatility. The study used secondary data from top 10 companies listed in Pakistan Stock Exchange (PSX). The study covered a time span from 2007 to 2016. The association connecting variables were investigated by employing regressions analysis under the method of least squares model. Share price volatility served as dependent variable while Dividend yield, dividend payout, firm's size, firm's growth, earning volatility and leverage are the independent variables of the study. The result showed that all independent variables have significant impact on share price volatility, which showed that firms which pay regular dividend to its shareholders are more stable in their stock price.

An analysis by Tharshiga and Velnamby (2017), on dividend Policy and Market Value of Listed Manufacturing Companies in Sri Lanka. The study used secondary data drawn from annual reports which were published in Colombo stock exchange web site for the period of 8 years. Nineteen listed Manufacturing companies were selected using random sampling method. Regression and granger causality test were applied to test the relationship. In the study Share price is the dependent variable and Dividend pay-out and Dividend per share are the explanatory variables while Debt to equity, Asset Growth, earning volatility and Size are the control variable. The result revealed that dividend policy of the companies does not influence on market value and at the same time market value also does not granger cause dividend policy. Therefore, the study consists with Irrelevance theory.

Muhammad, Ashraf and Hussein (2018), examine the Effect of Dividend Policy on Stock Price Volatility: Empirical Evidence from Amman Stock Exchange. The data applied for the study consisted of 228 firms listed on the Amman Stock Exchange from the period 2010 to 2016 which makes up 1596 firm-year observations. Descriptive statistics, Pearson correlation and panel GMM estimation were applied to test the relationship. In the study, Stock price volatility served as dependent variables and Dividend Yield and dividend pay-out ratio served as the independent variables while Earnings volatility, firm size, financial leverage and growth served as the control variables. The findings showed that both main variables of dividend policy-dividend yield and dividend payout have negative significant relationship with stock price volatility. This implies that the higher the dividend yield and dividend payout of the firms, the lower the stock price volatility which lead to more stability of the stock price.

An empirical investigation by Oyedele and Adeleke (2018), on dividend Policy and Share Price of Zenith Bank Plc in Nigeria. The study used secondary source of data from the audited annual financial reports and accounts of Zenith bank Plc from 2007-2016. The market value of the share, earnings and the dividend paid in 2007 to 2016 were considered. Descriptive statistics were used to describe the variables while Correlation Analysis and Ordinary Linear Square (OLS) were used to examine the relationship and effect between the variables respectively. The dependent variable is Market Price while the independent variables are Dividend yield, earning yield and payout ratio. The results showed that dividend yield, earnings yield and payout ratio have negative impact but not significant on share price of Zenith bank. This implies that dividend policy measured by dividend yield, earnings yield and payout ratios are a weak predictor of the share price of Zenith bank.
Prasad and Anuradha (2018), investigated the Relationship between Dividend Policy and Volatility of the share prices: Evidence from Indian Pharmaceutical and IT companies. The study used secondary source of data. The data has been collected from the financial years of 2011-2017. Multiple regression and correlation test have been used for data analysis. The dependent variables are Dividend Yield and Dividend Payout while the independent variables are Earnings Volatility, Long Debts, Growth in Assets and Firm Size The findings showed that the Earnings Volatility, Growth in Assets, Long-Term Debts are positively correlated with price volatility while Dividend Payout, Dividend Yield and Firm Size are negatively correlated with the price volatility.

Methodology
The research design used in this study is ex-post facto method, as the study entails the use of annual reports and accounts of listed companies in the Nigerian Stock Exchange (NSE). Therefore, the non-survey design is adopted to actualize the research objectives. The population of this study is made up of all the listed industrial goods companies in the Nigerian Stock Exchange as at the year 2018. However, Filter sampling technique was used through applying criteria, for a company to be part of the sample; the company should be qualified in terms of the following: They should have been listed on Nigerian Stock Exchange from 2012, There should be no change in the fiscal year during the period, the required data should be available and The required data should be accessible. Seven Industrial Goods Companies has been selected as sample size of the study using Filter sampling techniques criteria. The secondary data were sourced from the company's financial report for the period of five years from 2013 to 2017 contained in company's annual reports and account and all were used to compute the dependent variable (share price) while dividend payout ratio and dividend yield as proxies of independent variable respectively. For the purpose of presentation and discussion of the result of data generated in the course of these research three (3) techniques of data analysis will be used in Stata version 13\textsuperscript{st} statistical tools of analysis. These are: descriptive statistics, correlation and regressions analysis.

Hence, the model is expressed as

\[ SP = f (DPR, DY) \]
\[ SP = \beta_0 + \beta_1DPR + \beta_2DY + \beta_3ADPS \]

Where: SP = Share price, DPR = Dividend payout ratio, DY = Dividend yield, \( \beta_0 \) = Is the constant (i.e. the intercept) e = Error term.

Result and Discussion
This section presents the analyses and interpretations of the data generated relating to each of the statistical hypotheses of the study.

Descriptive Statistics
The descriptive statistics shows the mean and standard deviation of each independent variable from the mean and standard deviation of the dependent variable.
Table 1: Descriptive Statistics of the Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPS</td>
<td>35</td>
<td>0.0000</td>
<td>156.0000</td>
<td>26.1403</td>
<td>39.9424</td>
</tr>
<tr>
<td>DPR</td>
<td>35</td>
<td>-7.4666</td>
<td>3.1058</td>
<td>0.2279</td>
<td>1.5399</td>
</tr>
<tr>
<td>DY</td>
<td>35</td>
<td>-0.0001</td>
<td>0.0548</td>
<td>0.0073</td>
<td>0.0131</td>
</tr>
</tbody>
</table>

Source: Computed using Stata

Table 1 shows the descriptive statistics result of the dependent and independent variables. A total of 35 observations were recorded. The table shows the mean and standard deviation with minimum and maximum range of the dependent and independent variables. On average the market price per share (MPS) has a mean of 26.140 at a minimum point of 0.0 and a maximum point of 156.0 with standard deviation of 39.942 representing above 100% showing that there is much variation among the MPS of the sampled companies. The dividend payout ratio (DPR) has a mean of 0.227 at a minimum point of -7.466 and a maximum point of 3.1058 with standard deviation of 1.539 representing above 100% showing that there is much variation among the DPR of the sampled companies. The dividend yield (DY) has a mean of 0.007 at a minimum point of -0.0001 and a maximum point of 0.0548 with standard deviation of 0.013 representing 1.31% showing that there is no much variation among the DY of the sampled companies.

Correlation Result

The correlation result shows the relationship between each independent variable and the dependent variable. The values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative) the absolute value of the correlation coefficient indicates the strength, with larger values indicating stronger relationships and lower values indicating weak relationships. The correlation coefficients on the main diagonal are 1.0, because each variable has a perfect positive linear relationship with itself.

Table 2: Correlation result

<table>
<thead>
<tr>
<th></th>
<th>MPS</th>
<th>DPR</th>
<th>DY</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPS</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPR</td>
<td>0.2144</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>DY</td>
<td>0.2775</td>
<td>0.4191</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Source: Computed using Stata

Table 2 shows the correlation result of the dependent variable MPS and the independent variables DPR and DY. The relationship between MPS and independent variable DPR is positive but weak, this means that, all things being equal the higher the DPR the higher the MPS. The relationship between MPS and independent variable DY is positive but weak, this means that, all things being equal the higher the DY the higher the MPS.

Regression Result

The regression result shows the impact of each independent variable to the dependent variable. The regression coefficient values indicate the extent of the impact which range from 0% to 100%. This section also presents the F statistics, R’ and adjusted R’ of the model.
Table 3: Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>t-statistic</th>
<th>prob.</th>
<th>95% conf.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.387</td>
<td>7.651</td>
<td>2.660</td>
<td>0.012</td>
<td>4.802</td>
</tr>
<tr>
<td>DPR</td>
<td>0.087</td>
<td>4.820</td>
<td>0.640</td>
<td>0.026</td>
<td>-6.732</td>
</tr>
<tr>
<td>DY</td>
<td>0.497</td>
<td>566.353</td>
<td>1.220</td>
<td>0.030</td>
<td>-460.126</td>
</tr>
</tbody>
</table>

**Source:** Computed using Stata

\[ MPS = \beta_0 + \beta_1 \text{DPR} + \beta_2 \text{DY} + e \]

\[ MPS = 2.388 + 0.087 + 0.497 \text{DY} \]

Table 3 shows regression results of the model. The model consists of dependent variables MPS and independent variables (DPR and DY). The impact of independent variable DPR on dependent variable MPS is positive with coefficient value of 0.087, meaning that an increase in DPR by one unit while other variable remains constant lead to an increase in MPS by 8.7%. The impact of independent variable DY on dependent variable MPS is positive with coefficient value of 0.497, meaning that an increase in DY by one unit while other variable remains constant lead to an increase in MPS by 49.7%. The f-statistic from the table is 1.56 which mean that a model with a larger f statistic indicates that the model account for the variation in the dependent variable buy is statistically significant with the p-value is 0.026 which is greater than 0.005. In the model the multiple coefficient of determination R^2 is 0.487. This means that 48.7% of change in MPS was caused by changes in independent variables DPR and DY while the 51.3% change in MPS was caused by other factors not included in the model.

Test of Hypotheses

In order to decide whether to reject or accept the null hypothesis at 0.05 (5%) level of significant, the rejection point is use which states that. (1) If the p value is equal to or less than 5%, the null hypotheses is rejected and the alternate hypotheses is accepted; (2) If the p value is more than 5%, the null hypotheses is accepted and the alternate hypotheses is rejected.

The t-cal of DPR is 0.526 with p value of 0.026 which is more than 0.05. Therefore; the null hypothesis which states that there is no positive significant relationship between Dividend Payout Ratio (DPR) and Share Price (SP) of listed industrial goods companies in Nigeria is rejected.

The t-cal of DY is 1.220 with p value of 0.030 which is more than 0.05. Therefore; the null hypothesis which states that there is no positive significant relationship between Dividend Yield (DY) and Share Price (SP) of listed industrial goods companies in Nigeria is rejected.

Conclusions

At the introductory section of the study, was reported that the dividend ratio provides analytical information about the financial strength of the company or enterprises along with
reflections about its investor's expectations, the dividend can be distributed either in cash or by capitalization of profit as bonus shares. The section explains problem of the study, research objective which was letter restated in null hypothesis, scope of the study among other. Similarly, there is an extensive but logical review of relevant and related literature of the study with respect to the concept dividend, Dividend policy, relevant of dividend policy and empirical studies. Section three was develop to research methodological issues, were ex-post factor was used as research design, and secondary was used only. Section four was devoted to data presentation, analysis and discussion. The study concludes that Dividend Payout Ratio (DPR) of industrial goods companies in Nigeria can significantly influence their market value, which has ultimate effect on the investment decision of the existing shareholder precisely and Dividend Yield (DY) of industrial goods companies in Nigeria can significantly influence their market value. This influence has negative and positive effect on the potential investor towards investing in the company.

**Recommendation**
The research recommended that: The existing investors in the Nigerian industrial goods sector should from time to time; ensure extensive and critical evaluation of Dividend Payout Ratio (DPR) as it can significantly influence their market value which has ultimate effect on the investments, Potential investors and general public in Nigeria should take note of industrial goods companies Dividend Yield (DY) as it can significantly influence their market value. This influence could be positive and negative effect on the investment decisions on these companies.

**References**


