# Effects Of Dividend Policy On Market Share Price Of Listed Industrial Goods Companies In Nigeria

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Abstract: The main objective of this study was to examine the relationship between dividend policy and market share price of listed industrial goods companies in Nigeria. The specific objectives were to: evaluate the impact of share dividend on market share price, assess the influence of price earnings ratio on market share price and identify the influence of cash dividend on market share price. Correlation research design was adopted for this study. The population of this study consists of all eighteen (18) listed industrial goods companies on Nigeria Stock Exchange (NSE) as at 31st December, 2018. A sample of ten (10) listed industrial goods companies on the Nigeria Stock Exchange (NSE) was taken using filter criteria and judgemental sampling techniques. The secondary data were collected from annual reports of the sampled companies and Nigerian Stock Exchange (NSE) daily official list for five years period from 2014-2018. In analyzing the data. Ordinary Least Square (OLS) was used. The results of the multiple regression revealed that cash dividend and price earnings ratio have a significant positive relationship with share price. While the findings of the study showed that share dividend (bonus share) has no significant relationship with share price. The study recommends that the dividend policy of listed industrial firms operating in Nigeria should favour high price earnings ratio and cash dividend for their share value to be enhanced. This will invariably shore up the fundamental and technical performance of their shares which will position them for improved performance with resultant higher profit. The management and boards of listed industrial firms should hence, ensure that robust dividend policy is put in place. The study also recommends that all businesses should promote investors' confidence and loyalty by consistently paying cash dividend and also, continuously strive towards better price earnings ratio since this would increase shareholders' wealth in the long run.

Keywords: Dividend Policy, Cash Dividend, Share Dividend, Market Price, Dividend Yield.

## I. INTRODUCTION

Dividend policy is a significant financial decision that involves paying shareholders in exchange for their investments. Every business in a given market follows some sort of returns negotiation pattern or strategy, and it is, without a doubt, a monetary sign of the business. As a result, demand for the company's stock is influenced to some degree by the company's dividend policy. Dividend policy is one of the most extensively researched topics in the field of finance but the question whether dividend policy affects share prices still remains debatable among managers, policy makers and researchers for many years. Dividend policy is important for investors, managers, lenders and for other stakeholders (Edward, 2014). It is crucial for capitalists because they consider dividends not only as a source of income but also as a way to evaluate a company's performance from an investment point of view. It is a method of determining whether a company is cash money generating or not. Choosing an acceptable dividend strategy is critical for the company because its ability to invest in future projects depends on the amount of dividends it pays to its investors (Hooi, Albaity & Ibn Ibrahimy, 2015). If a company pays a higher rate of return, then lesser funds will be available for investment in future projects. Lenders are also considering the amount of returns that a company declares; if more money is paid as returns, the business may have less money available for servicing and redemption of their insurance policy cases. Finally, it is crucial

for many other stakeholders, especially claimants, to assist them in lowering company costs (Al- Hasan, Asaduzzaman & Al Karim, 2013). Capitalists' primary aim is to maximise their profit, which can come in the form of dividends or capital gain (Edward, 2014). Investors' decisions about return on investment are influenced by the company's incentive strategy. The main goal of dividend policy, according to Arnold (2008), is to maximise investors' purchasing power and thus maximise their wealth. So maximizing shareholders' wealth depends on the dividend policy of the company because of this shareholders would satisfy their purchasing and consumption patterns.

The industrial goods sector provides capital goods to other businesses for manufacturing and construction. The industrial goods sector is sensitive to economic cycles. The sector's performance is mainly driven by the demand for residential, commercial, and industrial construction. The economic activity level in such areas declines significantly during recessions, reducing the demand for industrial goods. Today, if we want to get a precise analysis of the markets with dynamic activity, we need to keep an eye on all of the important factors. One of the monetary markets' considerations is dividend policy. Every industrial company's return policy has a significant impact on the value of its stock. Many hypotheses exist in the field of returns policy, according to empirical studies. Each of them concentrates on, and records specific aspects of organisational strategies (Asadi, 2013).

The relationship between dividend policy and market share price has been studied extensively, with mixed results. A positive significant relationship between dividend policy and share price was discovered in some research on the impact of dividend policy on share price (Edward, 2014; Al- Hasan, Asaduzzaman & Al Karim, 2013; Tuigong, Jagongo & Ndede, 2016; Nkuah & Yusuf, 2016). Hooi, Albaity, and Ibn Ibrahimy (2015) and Hashemijoo, Ardekani, and Younesi (2012) found a negative significant relationship between dividend policy and share price in their respective studies. The results of the relationship between dividend policy and stock price have been mixed despite numerous studies.

Just a few studies on the effect of dividend policy on market share price have been conducted in Nigeria. According to Oyinlola and Ajeigbe (2014), dividend payments and retained earnings have a huge impact on a company's stock price per share. Ordu, Enekwe, and Anyanwaokoro (2014) discovered that market price per share and dividend per share have a beneficial relationship. The dividend yield has no impact on stock prices. According to Sulaiman and Migiro (2015), dividend per share and earnings per share have a significant positive relationship with market price. According to Okafor, Mgbame, and Chijoke-Mgbame (2011), dividend yield has a negative impact on share price risk, while dividend payout ratio has a negative impact at lower significant levels.

Furthermore, Aribaba, Ahmodu, Ogbeide, and Olaleye (2017) discovered that dividend policy and dividend yield both trigger a share price decline, but the difference isn't statistically important. According to Adesina, Uwuigbe, Uwuigbe, Asiriuwa, and Oriabe, earnings per share and stock price have a significant positive relationship (2017). Complete dividend scheme, according to Osakwe, Ezeabasili, and

Chukwunulu, has a major impact on share price (2019). While Nwaiwu and Ali (2018) found out that dividend yield has an insignificant negative impact on market price per share, dividend payout ratio has a significant positive impact on market price per share, earnings per share has a significant positive impact on market price per share, while net asset per share has an insignificant positive impact on market price per share. Previous Nigerian studies have shown that not all factors influencing market share price of the country's publicly traded firms have been investigated. It was discovered that the influence of variables like share dividend, price earnings ratio and cash dividend on market share price has not been examined by the previous studies in Nigeria and this serves as a gap in the previous studies. This study therefore intends to fill this gap by examining the effect of share dividend, price earnings ratio and cash dividend on market share price of listed industrial goods firms in Nigeria.

The primary goal of this research is to investigate the dividend policy on stock price of industrial goods companies listed on the Nigerian stock exchange (NSE) because of their importance to the economy. The following research hypotheses are developed in order to achieve this objective:

- Ho<sub>1</sub>: There is no significant relationship between share dividend and market share price.
- ✓ Ho<sub>2</sub>: There is no significant relationship between price earnings ratio and market share price.
- Ho<sub>3</sub>: There is no significant relationship between cash dividend and market share price.

# SIGNIFICANCE OF THE STUDY

This study contributes to existing literature by providing new insights into the effects of dividend policy and share price of listed industrial goods firms in Nigeria.

The results of this study support and add to agency theory, which states that agency costs resulting from the divergence of ownership and control, as well as dividend payouts, minimise the free cash flows available to managers, ensuring that managers optimise shareholder capital rather than using funds for their own benefit. The results of the study also back up the signalling hypothesis, claiming that dividend policy can be used to transmit information about a company's future prospects to investors, and that dividends can serve as a symbol of anticipated future cash flows.

## II. CONCEPTUAL REVIEW

# A. CONCEPT OF DIVIDEND POLICY

The concept of dividend has been developed by many scholars and researchers. According to Bierman, dividends are payments made to shareholders after deducting taxes and fixed interest commitments on debt capital (2001). It is described as a return on investment for shareholders with the goal of increasing their trust in the business in which they have invested's long-term viability. According to Hashemijoo, Ardekani, and Younesi, a company's dividend strategy specifies the amount of dividend payments and retained earnings for reinvestment in new businesses (2012).

## B. SHARE DIVIDEND AND SHARE PRICE

Existing shareholders receive dividends in the form of shares rather than cash under this scheme (Ross, Westerfield, & Jaffe, 1999). Since rapid growth or reorganisation necessitate a significant capital expenditure, this strategy is commonly used by a company during these times, motivating the company to maintain as much liquidity as possible to achieve this goal (Pike & Neale, 2009). The transfer of funds between equity accounts is referred to as share dividend policy in the accounting process (Levy & Sarnat, 1994). It doesn't have any outside cash flows, so the shareholders don't get anything (Broyles, 2003). This is due to the fact that the market value per share would fall after the share dividend is declared. However, shareholders' net worth will be unaffected since the number of shares held will be raised to compensate for the decrease in market value per share (Moyer, Kretlow, & McGuigan, 1995). Neale and Pike (2009) Furthermore, since share dividends are distributed in the same proportions as current old equity, neither the amount of control nor the percentage of equity retained would be affected (Ross, Westerfield, & Jaffe, 1999). Owing to an increase in the number of shares, the rate of return per share will decline, but the total rate of return will remain constant as long as the company's rate of return remains unchanged. On the other hand, increasing the number of shares held by shareholders to compensate for the decrease in dividends per share would have little impact on shareholders' net profits. Furthermore, it is doubtful that the company's share dividend policy would have some effect on its valuation as long as investors realise that the substitution of shares for cash dividends is done to recycle resources rather than to resolve financial problems or pay unpaid obligations (Ross, Westerfield, & Jaffe, 1999). The share dividend policy is usually included in the overall dividend policy (Broyles, 2003). It's just a minor split, though, since stock dividends raise the amount of shares issued without impacting the company's risks, profits, or cash flows. A number of studies have looked at how a company's dividend strategy affects its stock price and, as a result, its shareholders' equity. These studies yielded the following findings (Woolridge, 1983): (Grinblatt, Masulis, & Titman, 1984; Lakonishok & Lev, 1987).

## C. PRICE EARNINGS RATIO AND SHARE PRICE

When a company's stock price is much lower than its profit, the stock becomes undervalued. However, if this is the case, it has the ability to increase in the not-too-distant future. If the price of a stock is much higher than its real earnings, it is considered overvalued. Stocks with high P/E ratios produce lower stock returns, according to Basu (1977). The price earnings ratio (PER) tests the market's belief in the firm's ability to gain more money in the future based on its current earnings. Price earnings ratio was also used as an explanatory variable by Mohammad (2013). It's calculated by dividing the market price of a common stock (MPS) by the earnings per share (EPS) of that stock. The price-to-earnings ratio is supposed to have a direct relationship with the market price of common stock.

## D. CASH DIVIDEND AND SHARE PRICE

More often than not, companies will pay out dividends when a payout is made, and this should be taken into consideration when determining how much cash is available to pay the dividend (Pandey, 2010). Not only for politicians, but also for investors, fund managers, and economists interested in stock market efficiency, the effect of cash dividend policy on current share prices is important (Okpara, 2010). The key issue here is whether managers can increase the wealth of the company's owners by implementing a specific dividend policy. Several studies have been conducted on this subject, but there appears to be no consensus on the result. Dividend reform experts disagree about how much of the cash dividend should be paid to shareholders and how it affects the company's valuation and therefore the owners' equity. According to Miller and Modigliani (1961), the cash dividend has little effect on the company's value because the company's value is measured by its ability to generate revenue, not how those profits are distributed. Instead of determining how to split income between dividends and retained earnings, the focus should be on maximising profits through the most efficient investment strategy. Others believe that the way profits are divided between dividends and retained earnings affects the company's price by increasing or decreasing demand for stock, as high-income investors prefer companies without cash dividends if the value of cash dividend taxes is lower (Olson & McCann, 1994); (Lipson, Maquieira, & Megginson, 1998)

## III. EMPERICAL REVIEW

In India, Chawla and Srinivasan (1987) investigated the impact of dividends and retained earnings on stock price. They wanted to see how the expected relationships changed over time and test the dividend retained earnings hypothesis. The results indicate that both dividends and retained earnings play a significant role in explaining share price volatility in the chemical industry. In addition, Pradhan (2003) investigated the relative importance of dividends and retained earnings in determining stock market price. He discovered in Nepal that dividends are more important than retained earnings. The results revealed a strong dividend effect and a weak retained earnings effect, implying that dividends are appealing to Nepalese investors. The Nepalese stock market, according to the findings, has yet to recognise the impact of retained earnings.

Okafor, Mgbame, and Chijoke-Mgbame (2011) examined the relationship between dividend policy and share price changes in the Nigerian stock market. A multiple regression analysis is used to analyse the relationship between share price changes and dividend yield and dividend payout ratio. Dividend yield had the greatest negative impact on share price risk of the two dividend policy metrics. Another measure of dividend policy, the dividend payout ratio, had negative results in some years and positive effects in others, but both were at low levels of importance. The study found that dividend policy is essential in determining share price changes for a sample of companies listed on the Nigerian Stock Exchange.

Hashemijoo, Ardekani, and Younesi (2012) researched the relationship between dividend policy and share price volatility in consumer product companies listed on the Malaysian stock exchange. The relationship between share price volatility and two primary indicators of dividend policy, dividend yield and payout, was analysed using multiple regression over a six-year period from 2005 to 2010, using a sample of 84 companies from 142 consumer product companies listed on Bursa Malaysia's main market. Size, earning uncertainty, leverage, debt, and growth were all applied to the primarily regression model as control variables. The empirical results of this study showed a clear negative relationship between share price volatility and two main dividend policy measures: dividend yield and dividend payout. Furthermore, a significant negative relationship between share price volatility and size is discovered.

Edward (2014) examined the impact of dividend payments on the Ghana Stock Exchange (GSE), as well as how it helps shareholders make educated decisions about whether to retain or sell their stock and reinvest in other companies. From the 36 companies listed on the Ghana Stock Exchange, Ecobank, Cal Bank, and AngloGold Ashanti were chosen at random for the report. Around sixty (60) respondents (shareholders) were selected at random from the total number of shareholders in the companies. The questionnaire was the primary source of data, with secondary sources including the internet and journals such as the journal of risk finance, the national tax journal, the journal of finance, and the journal of corporate finance for information on dividend policy. When a company's dividend expands, the share price rises as a result of the increased demand on the stock. As a result of increased demand for their stock, companies that pay higher dividends see their stock price rise, whereas companies that pay lower dividends see their stock price decline, all else being equal.

Ordu, Enekwe, and Anyanwaokoro (2014) studied the effect of dividend payments on Nigerian stock prices: Between 2000 and 2011, time series on dividend per share, dividend yield, and dividend payout ratio were used to analyse 17 publicly traded companies. The model for data analysis is defined using ordinary least squares techniques with panel estimation. The researchers' empirical findings from panel least squares suggest a positive relationship between market price per share and dividend per share, confirming that a rise in dividend per share leads to an increase in the market price per share of quoted firms; that dividend yield has no significant positive effect on quoted firm market prices in Nigeria; and that dividend yield has no significant negative effect on quoted firm market prices in Nigeria. Furthermore, the study discovered that there are significant variations in the movement of the selected firms' share prices, which in theory could be attributed to supply and demand forces, but in practise could be attributed to a variety of exogenous and endogenous variables such as economic policies, corporate managerial decisions, psycho-social variables, political situations, and institutional factors.

Tuigong, Jagongo, and Ndede (2016) carried out research on the effect of dividend policies (cash and share dividends)

on stock prices for firms listed on the Nairobi Securities Exchange, with the aim of establishing a connection between cash dividend and share prices and determining a link between share dividend and share prices. The data set was generated using data collection schedules for 55 companies that were randomly selected for the study, with volume weighted average price as the dependent variable and cash dividend per share and share dividend per share as the independent variables. Secondary data was gathered from the Nairobi Stock Exchange, Capital Market Authorities, Kenya Bureau of Statistics, and sampled companies from 2001 to 2011. Ordinary Least Square diagnostic tests were used to assess the model's suitability, and the results showed that the model was suitable for estimation because it was free of multicollinearity. heteroskedasticity, and non-normality issues. A random generalised least square regression analysis with a 5% degree of significance was performed using STATA. The results of the market showed that cash dividends and stock prices have a statistically significant positive relationship, but share dividends and stock prices have a statistically insignificant negative relationship.

Nkuah and Yusuf (2016) looked into the effect of dividend policies on the wealth of stockholders of companies listed on the Ghana Stock Exchange (GSE). Annual reports were used to collect secondary data on 25 publicly traded firms from 2005 to 2011. Stockholder equity, as determined by market price per share, was the dependent variable. The explanatory variables included dividend per share (DPS), retained earnings per share (REPS), financial leverage (FLEV), and price earnings ratio (PER). A fixed-effect model was used to suit the results. According to the regression results, dividend payout, retained profits, and price earnings ratio both have a significant positive impact on stock market price. It was also discovered that dividends have a greater impact on companies listed on the Ghana Stock Exchange than retained earnings.

The Nigerian Stock Exchange's dividend policy and share price were studied by Aribaba, Ahmodu, Ogbeide, and Olaleye (2017). Ex-post facto analysis is included in this report. Between the financial years 2008 and 2014, a sample of 15 companies was studied using panel Estimated Generalized Least Squares (EGLS) regression with fixed impact. Dividend policy and dividend yield were found to be non-statistically important contributors to share price declines in the report. Dividend per share has a negative impact that is statistically insignificant for all quoted companies. Earnings per share were found to positively engender share price changes, but this was not statistically significant; dividend pay-out and firm size, on the other hand, were found to positively affect changes in share prices of quoted companies on the Nigerian Stock Exchange.

Nwaiwu and Ali (2018) studied the effect of dividend policy on stock prices using empirical evidence from Nigeria. The dividend policy variables were dividend yield (DY), dividend pay-out ratio (DPO), and earnings per share (EPS), with net asset per share (NAPS) acting as a firm size control variable. One of the dependent variables is the market price share, which is a proxy for stock prices (MPS). The data was compiled using the financial statements of ten consumer goods companies listed on the Nigerian stock exchange. The panel data, which spanned a five-year period from 2011 to 2015, was used. Panel least square regressions were used as the technique. According to the results, DY has a negligible negative impact on MPS, DPO has a major positive impact on MPS, EPS has a significant positive impact on MPS, and NAPS has an insignificant positive impact on MPS.

Osakwe, Ezeabasili, and Chukwunulu investigated the effect of dividend policy on share price indicators in Nigeria (2019). From 1987 to 2017, Nigeria's central bank, the National Bureau of Statistics, issued time series data on different types of dividend policies and share prices. The data was analysed using the Pearson product Moment of Coefficient of Correlation, Multiple Linear Regression Analysis, and Partial Correlation with the aid of SPSS version 21. Overall dividend policy has a significant effect on share price indices, accounting for approximately 82.1 percent, 55.2 percent, and 67.7 percent of market price, respectively, according to the empirical results.

#### IV. METHODOLOGY

The correlation research design was used for this study. The aim of a correlation research design is to see whether two variables are associated. The population for this study is comprised of all eighteen (18) industrial goods companies listed on the Nigerian Stock Exchange as of December 31, 2018. The study used three filter criteria to arrive at the final sample for the study. Industrial goods companies that do not meet or conform to the filter criteria below are eliminated. i. Industrial goods companies must make available their annual. report of five (5) years under study i.e. 2014-2018. ii. Industrial goods companies must be quoted on the Nigerian Stock Exchange before 2014. iii. Their stocks are traded during the period, and that they held a significant part of the market share in their respective sectors. In line with this, the final sample size is ten (10) listed Industrial goods firms. The data for this analysis was gathered from secondary sources. The information was gathered from the sample companies' annual reports and accounts for five years, from 2014 to 2018. The period of the study is considered adequate because it affords an analysis of the association between the independent variables (share dividend, price earnings ratio, and cash dividend) and dependent variable (market share price) over a period that coincides with the industrial reforms introduced in the country and the 2014 share prices fluctuations in the capital marked that eroded the performance of many firms in the country. Data analysis can be done in a variety of ways, but for the purposes of this research, multiple regression analysis is used. The findings of the study were subjected to robustness checks to ensure their validity and fitness. This for Normality, Multicolinearity, includes tests and Heteroskedasticity, all of which are attempts to adhere to OLS's classical assumption and the study's model in general. The STATA 13 edition is used for the study.

#### A. VARIABLES MEASUREMENTS

| Variable              | Symbol | Variable Measurement          |  |  |  |
|-----------------------|--------|-------------------------------|--|--|--|
| Dependent Variable    |        |                               |  |  |  |
| Share Market          | SMP    | Closing year market share     |  |  |  |
| Price                 |        | price                         |  |  |  |
| Independent Variables |        |                               |  |  |  |
| Share Dividend        | SHDIV  | Share bonus ratio to existing |  |  |  |
|                       |        | shareholders                  |  |  |  |
| Price-earnings        | PRER   | Market price per share        |  |  |  |
| ratio                 |        | divided by earnings per       |  |  |  |
|                       |        | share.                        |  |  |  |
| Cash dividend         | CASDIV | Cash dividend per share       |  |  |  |
|                       |        | declared and naid yearly      |  |  |  |

Source: Adapted from Tuigong, Jagongo & Ndede (2016) Table 1: Definition and Measurement of Variables

#### B. MODEL SPECIFICATION

The study adapted the model in the research carried out by Tuigong, Jagongo, and Ndede (2016) on dividend policy and its impact on market share price. The model was adapted because it establishes a relationship between dependent and independent variables. The model is presented below:

 $SMPit = \beta 0 + \beta 1SHDIVit + \beta 2PRERit + \beta 3CASDIVit + \epsilon i$ Where: SMPit = Share market price for company in i year t  $\beta 0 = Coefficient of the constant variable$  SHDIVit = Share dividend for company in i year t  $PRERit = Price \ earnings \ ratio for \ company in i \ year t$   $CASDIVit = Cash \ dividend \ per \ share \ for \ company \ in \ year t$   $\beta 1, \beta 2, \beta 3, = Regression \ coefficients \ of \ independent \ variables$  $\epsilon i = error \ term.$ 

## V. RESULTS

## A. DESCRIPTIVE STATISTICS

The descriptive statistics is presented in Table 2 where minimum, maximum, mean, and standard deviation of the data for the variables used in the study are described.

| Variables | Number of   | Mean       | Standard  | Maximum | Minimum   |
|-----------|-------------|------------|-----------|---------|-----------|
|           | Observation |            | Deviation |         |           |
| SMP       | 50          | 33.7108    | 60.25349  | 218     | 0.94      |
| SHDIV     | 50          | 0.0218129  | 0.1417404 | 1       | 0         |
| PRER      | 50          | 24.69374   | 98.8551   | 689.892 | -37.40414 |
| CASDIV    | 50          | 1.1488     | 2.913496  | 16      | 0         |
| a a       |             | <i>i</i> . |           |         |           |

Source: STATA 13 Output (Appendix 1A)

Table 2: Summary of Descriptive statistics

Table 2 summarises three accounting factors as well as market share values for all ten sample firms over a five-year period. The average market share price is 33.7108, with a 60.25349% standard deviation. The share price's minimum and maximum values are 0.94 and 218 respectively. However, the sample companies' minimum and maximum share dividends are 0 and 1, respectively, with a standard deviation of 0. 1417404 and a mean value of 0.0218129, respectively. The mean of the price earnings ratio of the sampled companies is 24.69374, with a standard deviation of 98.8551 and

minimum and maximum values of -37.40414 and 689.892, respectively, according to table 2. The table also reveals that the firms' average cash dividend per share is 1.1488, with a standard deviation of 2.913496. 0 and 16 are the minimum and maximum values, respectively.

## B. CORRELATION ANALYSIS

The correlation matrix describes the degree of relationship between the study's dependent and independent variables, as well as among the independent variables. Table 3 shows a rundown of the relationships between the study's variables, while appendix 1A contains the complete results.

|        | SMP     | SHDIV   | PRER    | CASDIV |
|--------|---------|---------|---------|--------|
| SMP    | 1       |         |         |        |
| SHDIV  | -0.0813 | 1       |         |        |
| PRER   | 0.0483  | -0.0335 | 1       |        |
| CASDIV | 0.7107  | -0.0513 | -0.0642 | 1      |
| a ar   | 1       |         | 1 4 )   |        |

Source: STATA 13 Output (Appendix 1A)

 Table 3: Correlation Matrix of Dependent and Independent

 Variables

Table 3 shows that the value 0.0813 is negatively associated with the firm's share dividend and market share price. In comparison, with prices of 0.0483 and 0.7107, respectively, the price earnings ratio and cash dividend per share have a positive relationship with the share price. The negative correlation between the independent variables shows that share dividend and price earnings ratio are negatively correlated. The relationship between share dividends and cash dividends is inversely proportional. The highest correlation between independent variables was 0.0642, which occurred when share dividend and price earnings ratio were compared. Simple association between independent variables should not be considered harmful until it exceeds 0.8 or 0.9, according to Judge, Griffiths, Hill, Luthepohl, and Lee (1985).

#### C. NORMALITY TEST

The research employs the Shapiro-Wilk (W) test for normal data, which employs the null hypothesis theory to examine a variable from a normally distributed population. The data is usually distributed, which is the null hypothesis of the test. Table 4 in this analysis shows that data from all variables in the study's models are usually distributed because the P-values are greater than the 5% level of significance. As a result, the null hypothesis is accepted (that the data is normally distributed).

| Variables | Ν  | W       | V      | Z     | Prob > z |
|-----------|----|---------|--------|-------|----------|
| SMP       | 50 | 0.54286 | 21.499 | 6.543 | 0.20510  |
| SHDIV     | 50 | 0.37252 | 29.510 | 7.218 | 0.11000  |
| PRER      | 50 | 0.27255 | 34.211 | 7.534 | 0.23000  |
| CASDIV    | 50 | 0.50106 | 23.465 | 6.730 | 0.30012  |

Source: STATA 13 Output (Appendix 1A) Table 4: Results of Normality Test

## D. MULTICOLLINEARITY TESTS

| Variables | VIF  | Tolerance |
|-----------|------|-----------|
| PRER      | 1.01 | 0.993019  |
| SHDIV     | 1.01 | 0.994521  |
| CASDIV    | 1.00 | 0.996007  |
|           |      |           |

## Table 5: Results of Multicollinearity Test

The multicollinearity test is used to see whether there are any high associations between independent variables that could cause the study's results to be skewed. Collinearity diagnostics are used to formally substantiate the lack of multicolinearity between the independent variables, and the variance inflation factors (VIF) and tolerance values show that there is no multicolinearity in the results. The tolerance and VIF values are mentioned in table 5. The VIF assesses the impact of collinearity among a model's regressors. The VIF is equal to 1/TV. It is never less than or equal to one. Although there is no standardised VIF value for evaluating the existence of multicolinearity, it should not exceed ten (Gujarati & Porter. 2009). The VIF and tolerance values were calculated using STATA 13 and found to be consistently less than ten (10) and one (1), suggesting the absence of multicolinearity. This demonstrates the suitability of using the three independent variables to match the study's model.

## E. HETEROSKEDASTICITY TEST

| Test                            | <b>Chi-square</b> | Prob>chi2 |
|---------------------------------|-------------------|-----------|
| Breusch-Pagan / Cook-Weisberg   | 0.15              | 0.6983    |
| Source: STATA 13 Output (Append | lix 1A)           |           |

Table 6: Breusch-Pagan / Cook-Weisberg test for Heteroskedasticity

This test is conducted to check whether the variability of error terms is constant or not. The present of heteroskedasticity signifies that the variation of the residuals or term error is not constant which would affect inferences in respect of beta coefficient, coefficient of determination ( $\mathbb{R}^2$ ) and F statistics of the study. The study employed the Breusch-Pagan or Cook-Weisberg test for heteroskedasticity. The null hypothesis indicates that the variance of the residuals is constant. If the p value is significant at 5% then the variance is not constant which implies heteroskedasticity. The result of the test reveals that the probability of the chi square is 0.6983 which is greater than 5%. This then indicates absence of heteroskedasticity since it is not significant at 5%.

## F. RESULTS

| No. of          |                                       |            |             |       |  |
|-----------------|---------------------------------------|------------|-------------|-------|--|
| Observation     | 50                                    |            |             |       |  |
| F-statistic     | 15.78                                 |            |             |       |  |
| Prob. $>$ F     | 0.0000                                |            |             |       |  |
| R-square        | 0.5072                                |            |             |       |  |
| Adj. R-squared  | 0.4750                                |            |             |       |  |
| Root MSE        | 43.657                                |            |             |       |  |
| Variables       | Coefficient                           | Std. Error | t-statistic | Sig.  |  |
| SHDIV (Share    |                                       |            |             |       |  |
| dividend)       | -19.1777                              | 44.08886   | -0.43       | 0.666 |  |
| PRER (Price     |                                       |            |             |       |  |
| earnings ratio) | 3.0026431                             | 0.0632627  | 2.04        | 0.067 |  |
| CASDIV (Cash    |                                       |            |             |       |  |
| dividend)       | 14.64478                              | 2.148129   | 6.82        | 0.000 |  |
| (Constant)      | 17.37047                              | 6.960461   | 2.50        | 0.016 |  |
| Source: STATA   | Source: STATA 13 Output (Appendix 1A) |            |             |       |  |

Table 7: Regression Results

Note: Level of significance 1%, 5%, 10%

The results from table 7 above showed that the coefficient of determination ( $R^2$ ) is 0.5072 and the adjusted ( $R^2$ ) value of 0.4750, meaning that 47.50% of share price for listed industrial goods firms is explained by the model's independent variables while 52.50% of share price is explained by the error term and other unobserved independent variables. The results of the regression therefore revealed that at 1%, 5% and 10% level of significance, there is a positive and significant relationship between share price and each of price earnings ratio and cash dividend. The results also showed that there is no significant relationship between share price and share dividend.

## VI. DISCUSSIONS

The beta coefficient of share dividend is -19.1777, while the significant value (p-value) is 0.666, which is greater than the 10% level of significance, according to the results of multiple regression in table 7. This revealed that there is no significant relationship between share dividend and share price of Nigerian listed industrial goods companies. Tuigong, Jagongo, and Ndede (2016) found no important association between share dividend and share price, and this result is consistent with their findings. This study's findings, on the other hand, contradict Edward's (2014) findings, which found a positive significant relationship between share dividend and share price.

Price earnings ratio has a coefficient value of 3.0026431 and a t-value of 2.04 with a p-value of 0.067, which is less than 10% level of significance, according to the regression results in table 7. Since the p-value is less than 10%, this means that there is a positive significant relationship between price earnings ratio and share price of listed industrial goods firms in Nigeria. This means that for every unit increase in the price earnings ratio, the share price of Nigeria's listed industrial goods firms will rise by 3.0%. This result corroborates Nkuah and Yusuf's (2016) findings, which found a positive significant relationship between price earnings ratio and share price.

Cash dividend (CASDIV) has a coefficient value of 14.64478 and a t-value of 6.82 with a p-value of 0.000, according to the regression results in table 7. The positive coefficient value indicates that there is a positive significant relationship between cash dividends and the stock price of Nigerian listed industrial goods companies. However, the p-value of 0.000, which is substantial at the 1% mark, indicates that cash dividends have a significant impact on the share price of Nigerian listed industrial goods companies. This means that with every one unit increase in cash dividends, the share price of listed industrial goods companies in Nigeria continues to rise by 14.64%. This study's findings are consistent with those of Tuigong, Jagongo, and Ndede (2016), as well as Edward (2014).

#### VII. CONCLUSIONS

The study concludes that share dividend has no substantial relationship with the share price of listed industrial goods firms in Nigeria, based on the results of the analysis. This means that the sum of share dividends declared has no impact on the market share price of listed industrial goods companies in Nigeria. Furthermore, the study finds that the price earnings ratio has a substantial positive impact on the share price of Nigeria's listed industrial goods companies. This suggests that classified industrial products with higher priceto-earnings ratios are more likely to have higher market share prices. Finally, the research finds that cash dividends have a strong positive relationship with share price. This means that the amount of cash dividends reported by Nigerian listed industrial goods companies will decide the market price of their stock. This study therefore recommends that the dividend policy of listed industrial firms operating in Nigeria should favour high price earnings ratio and cash dividend for their share value to be enhanced. This will invariably shore up the fundamental and technical performance of their shares which will position them for improved performance with resultant higher profit. The management and boards of listed industrial firms should hence, ensure that robust dividend policy is put in place. The study also recommends that all businesses should promote investors' confidence and loyalty by consistently paying cash dividend and also, continuously strive towards better price earnings ratio since this would increase shareholders' wealth in the long run.

## REFERENCES

- Adesina, K., Uwuigbe, U., Uwuigbe, O.R., Asiriuwa, O., & Oriabe, S. (2017). Dividend policy and share price valuation in Nigerian banks. Euro Economica, 1(36), 185-195.
- [2] Akbar, M., & Baig, H. H. (2010). Reaction of stock prices to dividend announcements and market efficiency in Pakistan. The Lahore Journal of Economics, 15(1), 103– 125.
- [3] Al-Deehani, R. (2005). The determinants of stock prices in the Kuwait stock exchange: An extreme bound analysis. Investment Management and Financial Innovations, 16-24.
- [4] Al- Hasan, M. A., Asaduzzaman, M. & Al-Karim, R (2013). The effect of dividend policy on share price: An evaluative study. Journal of Economics and Finance, 1(4), 6-11.
- [5] Al Masum, A. (2014). Dividend policy and its impact on stock price: A study on commercial banks listed in Dhaka stock exchange. Global Disclosure of Economics and Business, 3(1), 9-20.
- [6] Al-Kuwari, D. (2009). Determinants of the dividend policy in emerging stock exchanges: The case of GCC countries. Global Economy and Finance Journal, 2(2), 38-63.
- [7] Amidu, M. (2007). How does dividend policy affect performance of the firm on Ghana stock exchange?

Investment Management and Financial Innovations, 4(2), 103-112.

- [8] Aribaba, F.O., Ahmodu, O.L., Ogbeide, S.O, & Olaleye, J.O. (2017). Dividend policy and share price changes in the stock market: evidence from Nigeria. Journal of Business and Organizational Development, 9(4), 30-47.
- [9] Asadi, A. (2013). Examining the relationship between the dividend policy and stock prices in companies listed on Tehran stock exchange. Research Journal of Applied Sciences, Engineering and Technology, 6(22), 4186-4191.
- [10] Basu, S., (1977). Investment performance of common in relation to their price earnings ratios: A test of the efficient market hypothesis. The Journal of Finance, 32(3), 63-82.
- [11] Chawla, D., & Srinivasan, G. (1987). Impact of dividend and retention on share price: An economic study. Decision, 14(3), 137-140.
- [12] DeAngelo, H., & DeAngelo, L. (2006). The irrelevance of the MM dividend irrelevance theorem. Journal of Financial Economics, 79, 293–315.
- [13] Edward, A. (2014). The impact of dividend payment on share price of some selected listed companies on the Ghana stock exchange. International Journal of Humanities and Social Science, 9(1), 179-190.
- [14] Gujarati, D. & Porter, D. (2009). Basic Econometrics, 5th edition, New York: McGraw-Hill.
- [15] Hashemijoo, M., Ardekani, A.M., & Younesi, N. (2012). The impact of dividend policy on share price volatility in the Malaysian stock market. Journal of Business Studies Quarterly, 4(1), 112-129.
- [16] Hooi, S.E., Albaity, M. & Ibn Ibrahimy, A. (2015). Dividend policy and share price volatility Investment Management and Financial Innovations, 12(1), 226-234.
- [17] Hussainey, K., Mgbame, C.O. & Chijoke-Mgbame, A.M. (2011). Dividend policy and share price volatility: UK evidence. Journal of Risk Finance, 12(1), 34-56.
- [18] Judge, G. C., Griffiths, W. E., Hill, C. R., Luthepohl, H. and Lee, T. (1985). The Theory and Practice of Econometrics, 2nded. New York, NY: Wiley.
- [19] Kuhlemeyer, G. A. (2004). Fundamentals of financial management (12 ed.). Education Pearson Limited.
- [20] Mohammad, S. S. (2013). The effect of dividend policy on shareholders' wealth: A study of sugar industry in Pakistan. Global Journal of Management and Business Research, 13(7).
- [21] Nkuah, E.F. & Yusuf, H. (2016). Investigating the effect of dividend policy on the wealth of stockholders of listed

companies on the Ghana stock exchange. International Journal of Economics and Finance, 8(7), 47-54.

- [22] Nwaiwu, J.N. & Ali, S. A. (2018). Speaking theorists and searching for facts: dividend policy and share price in Nigeria. International Journal of Advanced Academic Research | Business Development & Management, 4(2), 56-78.
- [23] Okafor, C.A., Mgbame, C.O., & Chijoke-Mgbame, A.M. (2011). Dividend policy and share price volatility in Nigeria. JORIND, 9(1), 202-210.
- [24] Ordu, M.M., Enekwe, C.I., & Anyanwaokoro, M. (2014). Effect of dividend payment on the market price of shares: A study of quoted firms in Nigeria. Journal of Economics and Finance, 5(4), 49-62.
- [25] Osakwe, A. C., Ezeabasili, V. N., & Chukwunulu, J. I. (2019). Effect of dividend policy on stock prices: Evidence from Nigeria. International Journal of Economics and Financial Management, 4(3), 31-45
- [26] Oyinlola, O.M., & Ajeigbe, K.B. (2014). The impact of dividend policy on stock prices of quoted firms in Nigeria. International Journal of Economics, Commerce and Management, 2(9), 1-17.
- [27] Pradhan, R. S. (2003). Effects of dividends on common stock prices: The Nepalese evidence. Research in Nepalese Finance. Katmandu: Buddha academic enterprises (P) Ltd.
- [28] Rashid, K., & Rahman, H. (2008). Relationship between dividend policy and share price volatility of non-financial firms listed on Dhaka stock exchange. Journal of Finance, 4(2), 26-29.
- [29] Sharma, D. S. (2011), Determinants of equity share prices in India. Journal of Arts, Science & Commerce, 2(4), 51-60.
- [30] Sen, S., & Ray, R. (2003), Key Determinants of stock prices in India, The ICFAI Journal of Applied Finance, 9(7), 35-40.
- [31] Sulaiman, L.A., & Migiro, S.O. (2015). Effect of dividend decision on stock price changes: Further Nigerian evidence. Investment Management and Financial Innovations, 12(1), 330-337.
- [32] Travlos, N., Trigeorgis, L., & Vafeas, N. (2001). Shareholder wealth effects of dividend policy changes in an emerging stock market: The case of Cyprus. Multinational Finance Journal, 5(2), 87-112.
- [33] Tuigong, W.K., Jagongo, A.O., & Ndede, F.W.S (2016). Effects of dividend policy on share price of firms listed at the Nairobi securities exchange, Kenya. Research Journal of Finance and Accounting, 7(8), 220-230.