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Influence of Dividend Payout Ratio on Share Prices of Quoted Companies in Nigeria

Samuel Ojogbo[1], Babatunde Oke[2], Isiaka Mustapha[3]

Abstract: This research investigates the influence of dividend pay-out ratio on share prices of quoted companies on the Nigeria Stock Exchange (NSE) between 2014 and 2020 across fifteen (15) companies. panel least square estimation, through the use of Hausman's test, was used to analyze the data. In the econometric model, dependent variable (proxy by the market share price) was regressed on the following explanatory variables of earning per share, dividend yield, return on investment, dividend payout ratio, and retention rate. This research discovered a joint significant relationship between earning per share, dividend yield, return on investment, dividend payout ratio, retention rate and market share prices. This research therefore recommends that; Furtherance to the findings of this research, firms may be well aware that dividend payment may not necessarily be a factor that affect market share price.

Keywords: Dividend; payout ratio; share prices

JEL Classification: F31

1. Introduction

Debate on dividend payments in corporate finance has raged for decades, with academics and professionals arguing over their importance. There's a puzzle-like quality to the dividend choice when we look at it more holistically (Alfred, Vincent & Jessie, 2019). The "Puzzle" remains a prominent and complex issue in current finance literature, whether it is seen as a feature of a company's stock or a policy (Alfred, Vincent & Jessie, 2019).

[1] University of Lagos, Nigeria, Address: University of Lagos, University Road, Akoka, Yaba Local Government, Lagos, Nigeria, Corresponding author: sojogbo@unilag.edu.ng.
[2] University of Lagos, Nigeria, Address: University of Lagos, University Road, Akoka, Yaba Local Government, Lagos, Nigeria, E-mail: boke@unilag.edu.ng.
[3] E-mail: mustapha.isiakadare@gmail.com.

Differences in dividend policy between developed and developing countries may be seen across the board (Miller & Shah, 1995). As a result, they concluded that developing markets only account for two-thirds of the developed market dividend payment, reiterating that a firm's dividend choice is critical to its financial structure and stock price. In addition, the amount of taxes that investors pay may be determined by this choice. There are also several theoretical models established by scholars and researchers that describe the variables that managers should take into account when making dividend policy choices (Huda & Farah, 2011).

The dividend policy choice of today's organizations is a micro prudential driver of organizational success since it enhances the shareholder's profit and wealth maximization (Akani & Sweneme, 2016). The determination of the proportion of a company's earnings to be distributed to equity holders as recompense for capital invested and as a tool for those shareholders to regulate managerial opportunism is one of the strategic financial management decisions (Akani & Sweneme, 2016). While it is vital that corporations pay close attention to the financing of dividends, investors are also concerned about the amount of earnings preserved by businesses for future investment, not just the dividend payment itself (Akinkoye & Akinadewo, 2018). Continuous attention has been paid to strategic financial management and the relevance of a company's investment and retention strategies as strategic tools for successful and efficient management. Investors put their money into firms in the hopes of earning a return on it, whether it's in the form of a dividend, a bonus, or a capital gain through stock trading. The investor expects a high rate of return on their stock investment, which necessitates, on the part of management, the application of sufficient technical and managerial expertise, the adoption of a risky investment strategy, and the efficient management of available resources in order to generate future cash flow (Akinkoye & Akinadewo, 2018).

It is important for future and present investors to consider the amount of earnings distributed to stock holders as dividends and the amount of capital available for reinvestment when assessing the company's fundamentals. Because investors place a lot of weight on the company's reported profits, they tend to pay more attention to the company's retained earnings as a financial asset as well (Akinkoye & Akinadewo, 2018). It has always been the goal of the equity investor to see how well the companies can create future cash flows and increase shareholder value. A corporation's ability to earn a significant return on its investment depends on how much of its profits are distributed to shareholders and how much is reinvested, and so, the worries of knowledgeable investors have focused on how a company uses its retained cash. So in today's business environment, investors put a great deal of emphasis on the function retained profits play in anticipating future cash flows since retained earnings acts as a predictor of future cash flows. Furthermore, the quantity of retained profits has become a crucial concern to investors and other stakeholders

since it is another method to evaluate management's ability to accomplish the goal of increasing the market value of the businesses (Akinkoye & Akinadewo, 2018).

On the basis of Miller and Modigliani's M&M hypothesis of 1958, the dividend policy irrelevance thesis indicates that the value of a corporation is not impacted by dividends. Many of these analysts claimed that any impact on unaffected company value was due to information convergence brought about by dividend adjustments, rather than an actual impact on firm value. When it comes to the price of a stock or its cost of capital dividend policy has no influence, proving that dividend policy has no effect on the value of a firm's earnings but rather on how these earnings is split between dividends and retained profits, as shown in Miller and Modigliani (1958). (Simon-Oke, & Ologunwa, 2016). However, academics and experts in the field of finance have sharply criticized their idea. To put it another way, M&M's ideal capital market assumptions provide the ground for the rise of alternative theories of dividend relevance.

Furthermore, there has been an unsolved issue about the significance and/or irrelevance of dividends in determining business performance and value. The need to determine the influence of dividend payout on the share prices of listed firms in Nigeria across different industries, as well as the importance of retained profits on the issue, prompted this study.

2. Literature Review

Alfred, Vincent and Jessie (2019) examined the effect of dividend policy on stock prices with empirical evidence from Nigeria. Panel data covering a period of five years from 2011 to 2015 was used. The results showed that DY has an insignificant negative effect on MPS, DPO has a significant positive effect on MPS, EPS has a significant positive effect on MPS while NAPS has an insignificant positive effect on MPS. The study thus concludes that dividend policy can influence the stock prices in consumer goods sector of the Nigerian stock market indicating that the theory of irrelevancy of dividends do not hold in the case of Nigeria.

Ohiaeri, Ogumeru, and Akinbowale (2019) looked at the impact of dividend policy on the share prices of 10 Nigerian traded businesses. The analysis showed that dividend yields, earnings per share, dividend per share, profit after tax, retention rate, and market share prices all had a mutually significant link.

Marcel, Okeke and Maria-Gorretti (2018) investigated the effect of dividend policy on the performance of selected quoted firms in Nigeria over the period 2010 and 2016. The result showed that DPR and RE had positive and significant effect on ROI among the sampled firms during the period under study. CD had negative and insignificant effect on ROI.

Ebire, Mukhtar, and Onmonya (2018) investigated the effect of dividend policy on the performance of listed oil and gas firms in Nigeria spanning from 2007-2016. Findings from the analysis revealed that dividend payout ratio and retained earnings positively affects earnings per share of listed oil and gas firms in Nigeria while dividend yield had a significant but negative effect on earnings per share.

Zayol, Mya, and Muolozie (2017) looked at the factors that influenced petroleum companies' dividend policies in Nigeria. Correlations and regression analysis were used to examine secondary data. The study's findings indicated that business size, liquidity, and leverage had little bearing on the dividend policy of Nigerian petroleum companies, but profitability did. Profitability is one of the most important predictors of dividend policy by listed petroleum companies in Nigeria, according to the research.

Farrukh, Irshad, Khakwani, Ishaque, and Ansari (2017) investigated the influence of dividend policy on shareholder wealth and business performance in Pakistan. Dividend policy, as measured by dividend per share and dividend yield, has a positive substantial influence on shareholders' wealth and business performance, according to the regression results. The dividend relevance theory, the signaling impact theory, the bird in hand theory, and the clientele-effect hypothesis were all validated by this research. Al-Malkawi (2007) buttressed that in a world of uncertainty and information asymmetry, dividends are valued differently from retained earnings (capital gains). Adefila, Oladipo and Adeoti (2011) argued in his theory that firm with a higher dividend payment would be valued more highly than one with a lower dividend payment. Hence, due to uncertainty of future cash flow, investors will often tend to prefer dividends to retained earnings. Though this argument has been widely criticized and has not received strong empirical support, the main assumptions are that investors are taxed at a higher rate than when capital gain is realized on the sale of a share and that dividends function as a signal of expected cash flows. Despite the tax disadvantage of paying dividends, management still go ahead to pay dividends to send a positive signal about the firm's prospects. The cost of this signaling is that cash dividends are taxed higher than capital gains. While some investors would rather have capital gains to cut down on tax impact, others may want dividend because of immediate cash requirement.

3. Methodology

This is an ex-post factor research design. The population consists of 160 of over 200 quoted companies still in active status as at the time of this research (Nigerian Stock Exchange, 2020). While a total of fifteen (15) quoted companies was sampled based their leadership in their respective industries. The sampling technique employed is a judgmental sampling technique. The total sample size used as observation is a total

of 105 (One-hundred and five), arrived at by selecting fifteen (15) companies across seven (7) years i.e. 2014-2020.

3.1. Model Specification

The model embraced for this research is synonymous to the model used by Alfred, Vincent and Jessie (2019) in their study "Effect of Dividend Policy on Stock Prices: Evidence from Nigeria" stated as:

Market price per share$_{it}$ = β_0 + β_1Dividend per share$_{it}$ + β_2Earning per share$_{it}$+ β_3Dividend yield$_{it}$ +μ

However, for more robust and comprehensive research, other related variables like retention ratio and return on investment was included to the econometric model stated as follows:

$SPP_{it}=\beta_0+\beta_1 DPR_{it}+\beta_2 EPS_{it}+\beta_3 DY_{it}+\beta_4 RR_{it}+ \beta_5 ROI_{it}+e_{it}$

Where;

β_0; the econometric equation intercept or Constant

β_{1-5}: Econometric regression slope/coefficient

Dependent Variables: Market price per share (SPP)

Explanatory Variable: Dividend pay-out ratio (DPR), earning per share (EPS), dividend yield (DY), retention ratio (RR), and return on investment (ROI).

e_{it}: Error Term/Stochastic Variable

i: Selected quoted companies in Nigeria.

t: Time dimension of the variables

3.2. Estimation Procedure

Multiple Regression (Panel regression) technique was used to analyse data. Hausman's fixed and random effect test was examined for consistency in arriving at a reasonable and robust conclusion. Descriptive statistics was used to make reasonable deduction from the sample size tested in the research.

3.3. Description of Research Variables

Market Price per share (SP): Walter (1980) concluded that the market value of company is used to categorize the company into matured, growth or declining firm. Market price per share was measured using Gordon's 1963 growth model.

Dividend pay-out ratio (DPR): Dividend pay-out ratio is the ratio of dividend per share to the company's earnings per share.

Earnings per share (EPS): Earnings per share is calculated as total profit available to ordinary shareholders divided by the outstanding number of shares issued.

Dividend Yield: Dividend yield is the ratio of company's future dividend to its current market value per share.

Retention Rate: Retention ratio is the percentage of earnings per share that is not distributed to shareholders.

Return on Investment: Return on investment is calculated as net profit after tax divided by total assets.

4. Results

Table 4.1. Descriptive Statistics

	EPS	DPR	RR	DY	ROI	SPP
Mean	5.684190	0.379048	0.621048	8.744571	0.073238	2.700000
Median	1.370000	0.380000	0.630000	0.220000	0.050000	0.470000
Maximum	62.06000	1.420000	3.500000	110.3100	0.540000	30.73000
Minimum	-34.87000	-2.500000	-0.420000	-10.99000	-1.020000	-0.360000
Std. Dev.	12.99889	0.474805	0.474805	21.34124	0.181894	4.839573
Skewness	2.388171	-2.181059	2.180443	3.012452	-1.911930	2.832257
Kurtosis	11.00540	14.90407	14.90221	12.01650	15.21416	13.27845
Jarque-Bera	380.1870	703.2157	702.9750	514.4859	716.6579	602.5829
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Observations	105	105	105	105	105	105

Source: Econometric views (E-views)

From **Table 4.1**, the average value of the dependent variable market share price (SPP) is ₦2.7, median value of ₦0.47 and a standard deviation of ₦4.839573. The maximum and minimum values are ₦30.73 and (₦0.36) respectively.

The retention ratio (RR) has a maximum value of 3.5 percent and a minimum value of 0.5 percent (0.42 percent). The retention rate (RR) has mean, median, and standard deviation values of 0.621048 percent, 0.63 percent, and 0.474805 percent,

respectively. The Jarque-Bera statistic of 702.9750 with a p-value of 0.00000 validates the data's non-normality and also reveals the existence of outliers.

For the time, the average return on investment (ROI) was 0.073238 percent, with a standard deviation of 0.181894 percent. For the time period under consideration, the greatest and lowest values are 0.54 percent and (1.02), respectively. The Jarque-Bera statistic value of 716.6579 with a p-value of 0.00000 validates the data's non-normality as well as the existence of outliers.

For the period, the average earnings per share (EPS) was N 5.684190, with a standard deviation of N 12.99889. For the time period under consideration, the greatest and lowest values are 62.06 and (N34.87), respectively. The 380.1870 Jarque-Bera statistic, with a p-value of 0.00000, validates the data's non-normality and also reveals the existence of outliers.

For the time, the mean dividend yield (DY) was N8.744571, with a median of N0.22 and a standard deviation of N21.34124. For the time period under consideration, the greatest and lowest values are N110.3100 and (N10.99), respectively. The Jarque-Bera statistic of 514.4859 with a p-value of 0.0000 validates the data's non-normality and also reveals the existence of outliers.

Furthermore, during the time period under consideration, the average dividend pay-out ratio (DPR) was 0.379048 percent, with a standard deviation of 0.474805 percent. For the time, the greatest and lowest numbers were 1.42 percent and (2.5 percent), respectively. The Jarque-Bera statistic of 703.2157 with a p-value of 0.000000 indicates that the data is non-normal since the p-value is less than 0.05, indicating the existence of outliers.

Except for return on investment and dividend payout ratio, which were negatively skewed away from the normal distribution point, all variables were found to be favorably skewed in terms of skewness.

4.1. Panel Least Square Regression Result

Table 4.2. Fixed-Hausman Test

Dependent Variable: SPP
Method: Panel Least Squares
Date: 11/21/21 Time: 20:17
Sample: 2014 2020
Periods included: 7
Cross-sections included: 15
Total panel (balanced) observations: 105

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	226.5792	434.5561	0.521404	0.6035
RR	-222.3756	434.6280	-0.511646	0.6103
ROI	0.981908	3.683032	0.266603	0.7905
EPS	-0.028873	0.052912	-0.545673	0.5868
DY	-0.007876	0.041165	-0.191320	0.8488
DPR	-225.8616	434.6097	-0.519688	0.6047

Effects Specification

Cross-section fixed (dummy variables)
Period fixed (dummy variables)

R-squared	0.647128	Mean dependent var	2.700000
Adjusted R-squared	0.535460	S.D. dependent var	4.839573
S.E. of regression	3.298515	Akaike info criterion	5.435548
Sum squared resid	859.5361	Schwarz criterion	6.092719
Log likelihood	-259.3663	Hannan-Quinn criter.	5.701846
F-statistic	5.795098	Durbin-Watson stat	1.582738
Prob(F-statistic)	0.000000		

Source: Econometric views (E-views) output

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

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

H_1: $\beta_1\neq0$, $\beta_2\neq0$, $\beta_3\neq0$, $\beta_4\neq0$, $\beta_5\neq0$ (there is joint impact)

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

The prob(F-statistic) from the result is 0.00000, so the null hypothesis that all parameters equal to zero is was rejected. This means that all the variables have significant joint impact.

The R-squared coefficient of determination measures how well the variation in the dependent variable (SPP) is accounted for by the variation in the independent variables. The R2 is 0.647128 as a result of this. This means that changes in the explanatory variables of retention rate, return on investment, earnings per share, dividend yield, and dividend payout ratio account for about 65 percent of the variation in the market share price (SP).

When all other variables are held constant, the intercept value of 226.5792 indicates that market share price will increase by 226.5792.

Given its coefficient of correlation, the retention ratio (RR) and market share price (SPP) have a negative relationship (222.3756). The relationship is also statistically insignificant because the p-value of 0.6103 is greater than the threshold of significance of 0.05.

With a coefficient of 0.981908, the relationship between return on investment (ROI) and market share price (SPP) was found to be positive. Given a p-value of 0.7905, which is greater than the 0.05 level of significance, the relationship is also statistically insignificant.

The relationship between earnings per share (EPS) and market share price (SPP) was discovered to be negative, with a coefficient of (0.028873). It was also discovered to be statistically insignificant, with a p-value of 0.5868 that is greater than the level of significance of 0.05.

The relationship between dividend yield (DY) and market share price (SPP) was discovered to be negative, with a coefficient of 0. (0.007876). Because the p-value of 0.8488 was greater than the level of significance, the relationship was determined to be statistically insignificant.

Finally, with a coefficient of -225.8616, the relationship between dividend payout ratio (DPR) and market share price (SPP) was discovered to be negative. Because it was greater than the 5% level of significance, the p-value of 0.6047 indicates a statistically insignificant relationship.

5 Conclusions

Based on the results of the panel least square regression of the hausman test, it can be concluded that:

1. There is negative insignificant relationship between retention rate and market share prices of quoted companies on the Nigerian Stock Exchange for the period under review i.e. 2014 to 2020.

2. There is negative insignificant relationship between dividend yield and market share prices of quoted companies on the Nigerian Stock Exchange for the period under review i.e. 2014 to 2020.

3. There is negative insignificant relationship between dividend payout ratio and market share prices of quoted companies on the Nigerian Stock Exchange for the period under review i.e. 2014 to 2020.

4. There is negative insignificant relationship between earnings per share and market share prices of quoted companies on the Nigerian Stock Exchange for the period under review i.e. 2014 to 2020.

5. A joint impact was observed to exist between the dependent variable (proxy by the market share price) and the explanatory variables of earning per share, dividend yield, return on investment, dividend payout ratio, and retention rate.

6. However, positive insignificant relationship was observed between return on investment and market share prices of quoted companies on the Nigerian Stock Exchange for the period under review i.e. 2014 to 2020.

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