

EFFECT OF DIVIDEND POLICY ON SHARE PRICE MOVEMENT OF SELECTED QUOTED COMPANIES IN NIGERIA

Adedokun, Kolade Adebajo
Department of Finance, University of Lagos,
Lagos, Nigeria.
adedokunbk@yahoo.com

Dr. Olalekan Obademi
Associate Professor
Department of Finance, University of Lagos,
Lagos, Nigeria.

Dr. Abass Shiro
Senior Lecturer
Department of Finance, University of Lagos,
Lagos, Nigeria.

Abstract

Dividend Policy remains a contentious area of corporate finance with a school of thought indifferent and another in support. The two contending views under which other hypotheses were premised are; on the popular dividend relevance and irrelevance theories. Dividend policy scholars argued that it expresses information content about future prospects and cash flow of the firm. Irrelevance proponents hinged their argument on the point that all that is necessary is the investment policies and risk of an enterprise in maximizing shareholders wealth. The latter proponents advanced their theories in favour on capital and future gains in preference to immediate payment of cash in form of dividend. This study centered on effects of dividend policy on share price of selected quoted companies in Nigeria with dividend per-share, earnings per-share and profitability taken as endogenous variables. Thirteen quoted companies on the floor of the Nigeria Exchange (NGX Group) using random sampling were used. Pooled OLS regression with fixed and random effects models were employed for estimation. The fixed effects model was preferred as the efficient estimator for the study and the results revealed that dividend per share has inverse and statistically insignificant effects with share price, likewise; earnings per share. Profitability has positive but insignificant effect on share price.

Keywords: Corporate Finance, Dividend Policy, Stock Exchange, Share Price, Earnings per Share, Profitability.

1. Introduction

Investors look for best returns possible within the confine of their risk tolerance level. Central to any intension to invest funds is the returns derivable from it, its legality and risk element of the instrument. Dividend payment by corporate firms is one of the rewards for investment out of the two returns an investor in equity of a company receives. The other benefit being capital gains that accrues from increase in share price as a result of improvement in shareholders' fund. Dividend is considered as a distribution paid to shareholders from the profits of the company in form of bonus issue, stock splits, cash dividend and liquidating dividend among others. Declaration of dividend for payment in most jurisdictions and as applicable in Nigeria must be recommended by the Board of Directors to be approved at Annual General Meeting (AGM). In Nigeria, as in most other climes, the recommendation of the Directors in respect of dividend payment must be approved by the shareholders at AGM. The shareholders can only reduce the amount but cannot increase the dividend amount recommended by the Directors. Dividend is a return due to shareholders as interest payment is that of debenture holders in consonance with loan indenture signed. However, while interest payment to lenders is compulsory, declaration of dividend is not mandatory at it's at the discretion of the Directors considering the operating result of the company.

The non-mandatory nature of dividend payment lay credence to its classification as a variable investment outlet. The relevance or irrelevance propositions of dividend policy both in developed and developing countries has been researched in previous empirical studies (Akani and Lucky, 2015; Sunday et al., 2015; Rheman and Hussain, 2017, Ahmed et al., 2020). Analysts and investing public are concerned with dividend and share repurchase seen as distributions to shareholders, they affect financial ratios as well as investment returns. Investors and portfolio managers place premium on dividend as it indicates information about the organization prospects as well as possible investment returns. It can be an interim or final dividend; the most important factor is that it must be paid out of profits or reserves. Liquidating dividend arises if a firm cease to do business and the organization net assets after payment of all liabilities are distributed to shareholders.

Business organizations aim to create value through provision of services to meet the needs of their customers and to be competitive in their offerings. The dividend irrelevant argument advanced need of preference of increase in wealth of owners using available resources and investment policy. Dividend irrelevance hypothesis was based on the premise that the amount of dividend distributed to shareholders is equal or greater than the free cash flow generated by the fixed investment policy (Magni, 2010). Reduction in dividend rates adversely affect a firm's share price, and in such cases the share prices of firms in the same industry as investors may interpret such reduction negatively (Nwidobie, 2016). Dividend policy is a crucial corporate finance decision, which is interrelated to financing and investing decision (Pinto and Rastogi, 2019).

Different models have been propounded by experts in corporate finance on dividend policy. There are theories in favour of dividend payment; those against as well as with indifferent disposition about it. Whereas managers are concern with the trade-off between dividends and retentions, shareholders always focus on outcomes that will maximize the value of their investments (Abudulai, Adebayo & Aliyu, 2020). Firms finance their operations activities with preference for cheap cost of capital. This line of thinking by Managers favour usage of retained earnings for business finance; then debt and issuance of share capital ranked last.

Pursuing retention of retained earnings for business finance will reduce amount available of dividend payment. Dividend payment acts as a check to managers to guide against expropriation of residual cashflow on unprofitable investment capable of destroying value. It therefore serves as a managerial control mechanism on management. Olowe (2017); argues that dividends payment encompassed firm's earnings and it thus, lessens retained earnings amount employed for internal firm financing.

2. Literature Review

There some notable dividend theories out of which two are in broad categories; the dividend irrelevance and relevance postulations. The irrelevance advocates belief that all that is required is proper utilization of company's assets to achieve optimal operating result; they favoured applying retained earnings to finance business expansion. That with improved performance and high share price, investors with need for cash can sell part or all their shares as the case may be. The proponents of dividend relevance hinged their argument on different hypotheses.

Lintner (1956), led the dividend relevance model, he discovered that companies are unwilling to reduce dividends as this can make stakeholders to by implication infer poor firm performance and resulting in share price to fall. Bhattacharya (1979) and Miller and Rock (1979), in subtle agreement to Lintner's position, posited that dividends pronouncements provides inherent companies prospects. A dividend paying company will therefore attract investors' attention to its shares as a result on information content of dividend declaration. Gordon (1959) and Walter (1963) models embraced Lintner's (1956) position. Miller and Modigliani (1961), led the argument of dividend irrelevance hypothesis. They concluded on irrelevance of dividends in stock valuation and that earnings retention or dividends payment will not have impact of firm's value. They premised their argument on the fact that the important things are the future prospects and risk element to give direction about firm's value. Their argument was based on the belief that: there are no taxes, no transaction or brokerage cost, that investors are rational, managers will act in the interest of owners, and that investment horizon of the firm should be certain. Their model was criticized on the ground of these assumptions that are sustainably doubtful especially in this ever-changing world of investment dynamics and the fact that these assumptions cannot hold in real economic situation.

However. contrary to the position of MM, Gordon (1962) and Lintner (1956) asserted that dividends are less risky than capital gains and advanced that company should set a dividend payout ratio and offer a high dividend yield in order to minimize cost of capital. Among other dividend theories is signaling hypothesis that has its root in (Lintner, 1956) studies that averred that the price of a company's share usually changes when dividend payment changes. Bhattacharya (1979), from his studies states that signaling theory which stipulates that dividends may function as a signal of expected future performance and cash flows. That an increase in dividend indicates that managers expect higher cash flows in the future. This finding is based on the belief that outside investors have problem with information concerning the company's future cash flows and capital gains. An important assumption here is that dividends are taxed at a rate higher compared to capital gains. He argued that despite that, companies would prefer to pay dividends in order to send positive signals to shareholders and investing public.

Litzenberger and Ramaswamy (1979) considered tax-preference dividend model; that stakeholders favour lower dividend payment companies for tax reasons. Argument in favour of this position is that unlike dividend, long-term capital gains allow the investor to defer tax payment until disposal of the shares. Even for time effect's sake assuming the same rate of tax, tax paid now has a higher effective cost of capital than the same tax paid in the future. It is also a line of reasoning buttressing this hypothesis that if shareholder dies, no capital gain tax is collected at all. The beneficiaries of the estate can sell the shares on the death day at their base costs and avoid capital gains tax payment. Pecking Order theory of dividend is the model in dividend payment that provides the order of preference by management in securing funds to finance the operations of the company. This order starts from the cheapest cost of capital option to the highest. The model puts order of source of finance as retained earnings, debt and issuance of shares. With first preference for retained earnings as source of finance, the model tends to favour non-payment or reduced payment of dividend and more in favour of company's investment activities and risk profile.

Agency costs theory of dividend is that model with conflict of interest between management and the owners of firm. This is in contrast to the traditional belief that the firm is one homogeneous unit and that the management's objective is to maximize the value of firm. As indicated by Jensen-Meckling (1976), agency issues in organizations emerge principally from external equity as well as external debt. Agency charge method varies from conventional observation as in it plainly perceives the firm as group of people with self-interest motives as well as inharmonious interests. This behavioral instinct causes people to lessen their usefulness as against expected maximization of firm's wealth. The theory under external equities supports payment of dividend to guide against management wasting free cash flow on unprofitable but self-benefiting projects. The external lenders will prefer the contrary; debenture holders will support low dividend payment to preserve cash flow for payment of interest and eventual loan principal repayment. Clientele-Effect theory of dividend postulates that a company's dividend policy seems to fascinate diverse stakeholders centering on their preference for receipt of their total return on their investment. Those with preference for high current investment income will forgo envisaged long term capital improvements will definitely get the shares with records of high dividend payouts and vice-versa.

In the years gone by, considerable level of research work had gone into this aspect of corporate finance out of which findings extractions are necessary for knowledge enrichment. Dividend policy in the field of finance is most debated and the puzzle yet to be resolved.

Sulaiman and Migiro (2015), analyzes the dividend decision on the changes of stock price; and their discoveries demonstrated that dividend payment adversely and insignificantly affect share price. Bamidele and Luqman (2018), researched on the dividend payout effect on prices of stock in Nigeria. The result revealed that dividend policy, market book value and leverage have positive and significant influence on share price. Oyinlola and Ajeigbe (2014), examined the effect of dividend policy on the price of stock of selected firms in Nigeria using ordinary least square. The result shows positive and significant effects of dividend yield and earnings per share while profitability has positive but insignificant effect on share price. Nwaiwu and Ali (2018), investigate the influence of dividend policy and earnings per share on prices of share in Nigeria. The outcome revealed that dividend policy and earnings per share have negative insignificant impact on share price.

Kibet, Jagongo and Ndede (2016), analyzed dividend payout and profitability effects on share price of firms recorded on the Nairobi Securities Exchange using multiple regression analysis. The result revealed that dividend policy has negative and insignificant relationship with share price while profitability is positively insignificant. Iftikhar, Raja and Sehran (2017), examined the effect of dividend payment on stock valuation of firms in Indonesia using panel data analysis. The outcome shows both dividend policy and profitability to have positive and significant influence on share prices. Joshi and Mayur (2017), investigate the effect of profitability on shares price of firms listed on Bombay Stock Exchange using panel data analysis. The result revealed that profitability has positive and significant influence of share valuation. Olaoye and Owoniya (2017), examined dividend payout and share prices of quoted consumer sector companies on the bourse of Nigerian Exchange Group using ordinary least square. The outcome shows that dividend policy has positive and significant effect on market price per share while earnings per share indicates negative insignificant influence on stock prices.

Abubakar and Garba (2017), examined dividend policy impact on share prices of selected listed equities in Nigeria using multiple regression analysis. The result revealed positive and significant effect of dividend payout and earnings per share; positive insignificant impact on market price per share. Islam (2018), examined dividend policy effect on firm's share price; a panel data study on manufacturing sector in Bangladesh. Random and fixed effects were used with Hausman test as determinant. Dividend payout ratio, firm age, liquidity, size, institutional ownership, investment opportunity and capital structure as variables. Dividend payout ratio, age of firm, firm size, institutional ownership, investment opportunity and capital structure have positive and significant influence on share price. Liquidity however recorded negative and significant relationship with market price. Sherif, Ali and Jan (2015), investigate impact of dividend policy on the prices of firms listed on Karachi Stock Exchange and the results revealed that dividend-per-share shows negative and insignificant influence of price of share. Earnings per-share, dividend-retention ratio, as well as return on equity have positive and significant relationship with share market price.

Marzaie and Abdi (2015), examined cash dividend effects on future share-prices of banks quoted on Tehran Stock Exchange. Results show that sales growth, cash flow, dividend per share, earnings per share have positive and significant effect on future price of stock of banks. Nuhu (2016), analyzed dividend policy impact on prices of stocks of Nigerian banks using ordinary least square analysis. The results revealed that retained earnings and dividend-payout-ratio have positive and significant influence on share price of share and corporate expense indicates negative and significant relationship. Nyamosi and Omwenga (2016), investigate dividend policy effects on the price of stock and the results indicate positive and significant influence of earnings per share, dividend payout ratio on stock price while profitability has positive insignificant impact on share prices. Oloruntoba and Adeleke (2018), examined dividend payment influence on share price of Zenith bank in Nigeria. The results revealed that dividend yield and earnings per share have negative and insignificant impact on share price of the bank. Bhattarai (2016), looks at the dividend effect on the price of stock of banks in Nepal and discovered that earnings per share and size are positive and significantly related to price of share while profitability has positive insignificant influence on share price. The noted gap this study intends to fill is having current information for shareholders and investing public of the sampled companies.

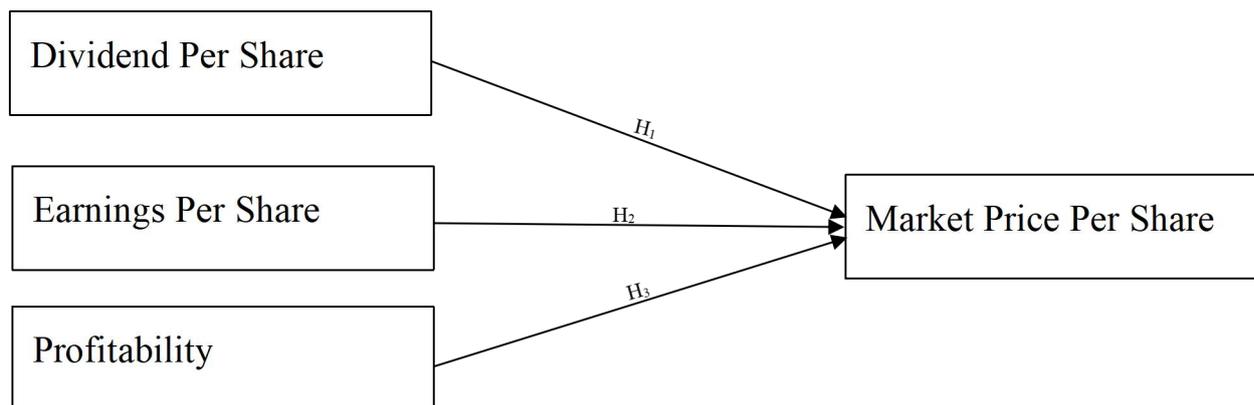


Figure 1: Conceptual Framework

This study aims at investigating the relationship between dividend per share on market share, the relationship and effect of earnings per share on market price as well as the relationship and effect of profitability on market price of selected companies.

3.0 Research Methodology

The study randomly selected 13 quoted equities on the Nigerian Exchange (NGX Group) cutting across banking, hospitality, construction, communication and manufacturing companies. The selected listed equities were: Zenith Bank Plc., United Bank of Africa Plc., GT Bank Plc., Sterling Bank Plc., Access Bank Plc., MTN Nigeria Plc., Dangote Cement Plc., Lafarge Wapco Plc., Julius Berger Nigeria Plc., Nigerian Breweries Plc., Guinness Nigeria Plc., Transcorp Plc. and Okomu Oil Plc. These companies were selected on the basis on their capitalization on the floor of NGX Group. Data from these companies as sample were collected during the 5 years (2017-2021) period from audited financial statements and NGX factbooks. It is a secondary data study and a causal comparative research design was employed for this study. The study is premised on dividend irrelevance theory has propounded by Miller and Modigliani (1961).

Model Specification

This investigation model requires panel data as in: fixed effects, pooled regression, random parameters, as well as random effects (Greene, 2007). This study used pooled regression, fixed effect and random effects as methodology in data analysis. Market price per share is the explained variable while dividend per share, earnings per share and profitability are the explanatory variables. it is a panel data study and the model as thus:

$$MPS_{it} = \beta_0 + \beta_1 DP_{it} + \beta_2 RE_{it} + \beta_3 PROF_{it} + \beta_4 EPS_{it} + \mu \text{ ----- (1)}$$

Where:

MPS_{it} = Market price per share of ith company in t year.

DPS_{it} = Dividend per share of ith company in t year.

PROF_{it} = Profitability, measured as natural logarithm of profit after tax of ith company in t year.

EPS_{it} = Earnings per share of ith company in t year.

β_0 = The intercept of the regression line.

$\beta_1, \beta_2, \beta_3$ and β_4 = The slope which stands for the degree with which market price per share changes as the independent variable changes by one unit variable. Priori expectation of this study is that the coefficients $\beta_1, \beta_2, \beta_3$ and $\beta_4 > 0$.

μ = Error term.

Fixed effects estimation allows for the unobservable company heterogeneity. The model states that intercepts for each company are allowed to vary, but the slope for each are equal. The following fixed effects model is applied:

$$Y_{it} = \beta X_{it} + \alpha_i + \epsilon_{it} \text{ ----- (2)}$$

Where, $\alpha_i = z_i \cdot \alpha$ embodies all the observable effects and specifics an estimable conditional mean.

Greene (2007) has asserted that if the unobserved individual heterogeneity, however, formulated, can be assumed to be uncorrelated with the included variables, then the model may be formulated in random effect form. The random effects model as propounded Greene (2007) as:

$$Y_{it} = \beta X_{it} + \alpha + u_i + \epsilon_{it} \text{ ----- (3)}$$

Random effects approach specifies that u_i is a group specific random element, similar to ϵ_{it} except that for each group, there is but a single draw that enters the regression identically in each period.

Definitions of Variables

S/Nos	Variables	Symbols	Definitions	Authors
1.	Market price per share	MPS	Represents the end-of-year price for each of the companies for the sample period.	Singh and Tandon (2019)
2.	Dividend per share	DPS	Dividend amount less preference dividend/No. of shares outstanding.	Michael (2019)
3.	Earnings per share	EPS	Profit after tax/No. of shares outstanding.	Srikumar (2022)
4.	Profitability	PROF	Represents return on assets. Profit after tax/Total assets.	Adebayo, et al. (2020)

4 Results and Discussion

This section of the study presents the result of data analysis and tests of the hypotheses formulated. Descriptive statistics, followed by pooled OLS regression, fixed effect, random effect regression and Hausman test using Strata 14 are presented and analyzed, and then recommendations deduced from findings of the study.

Table 1. Descriptive Statistics

	MPS	DPS	EPS	PROF
Mean	49.1770	3.3364	4.2346	4.1069
Std. Dev.	54.6437	3.2528	5.2729	1.4629
Minimum	1.25	0	-9.6425	0
Maximum	225	12	17.4	5.5914
Obs	65	65	65	65
Skewness	.1459	-.4914	-.1991	-.2303
Kurtosis	4.3211	3.2135	2.4318	2.7400

Source: The authors using Strata 14

From Table 1, the mean of market price per share is 49.18 and 3.34 for dividend per share with earnings per share and profitability having an average of 4.23 and 4.10 respectively. The minimum value for share price is 1.25 while the maximum is 225; dividend per share is having a minimum of 0 and maximum of 12. Minimum for earnings per share is -9.6425 while the maximum is 17.4. The minimum negative value was as a result of some negative EPS posted by some companies. Profitability has a minimum of 0.00 and maximum of 5.591426.

Table 2. Pooled OLS Regression result

MPS	Coef	Std. Err.	t	Prob.	95% Conf.	Interval
DPS	14.6256	2.1965	6.66	0.000	10.2333	19.0180
EPS	.3740	1.5542	0.24	0.811	-2.7339	3.4820
PROF	-1.4112	2.9593	-0.48	0.635	-7.7329	4.5062
CONS	4.5912	12.4175	0.37	0.713	-20.2392	29.4217

Number of Obs. = 65
 F (3,61) = 80.5
 Prob > F = 0.0000
 R-Squared = 0.7983
 Adj R-Squared = 0.7884
 Root MSE = 25.134

Source: The authors using Strata 14

As revealed in table 2, dividend per share had positive and significant effect on market price per share (coefficient of DPS = 14.625; p-value = 0.000). Though earnings per share is positively related to market price, it is statistically insignificant (coefficient = 0.3740; p-value = 0.811). Profitability is negatively related to share price and statistically insignificant (coefficient = -1.4113; p-value = 0.635). The coefficient of determination or R-squared indicates that 79.83% of the variation observed in the dependent variable was explained in variations in the independent variables. The Adjusted R-squared is 0.7884 that is, 78.8% indicating that the dependent variable was explained in variations in the independent variables. It shows that dividend per share, earnings per share and profitability represents 78.8% of the variation of the selected companies share prices. The F-Statistics of 80.5 and F-statistics p-value of 0.000, indicates goodness-of-fit and that the model is well specified. This

result supports other studies on relevance of dividend payout for example, Nuhu (2016), Bhattarai (2016) and Nyamosi & Omwenga (2018).

Table 3. Fixed effects result

MPS	Coef	Std. Err.	t	Prob.	95% Conf.	Interval
DPS	-1.0294	2.0185	-0.51	0.612	-5.0856	3.0269
EPS	-0.4285	.9005	-0.48	0.636	-2.2381	1.3812
PROF	2.2175	2.1246	1.04	0.302	-2.0520	6.4871
CONS	45.3186	9.0790	4.99	0.000	27.0736	63.5636

Number of Obs. = 65
 F (3,61) = 0.50
 Prob > F = 0.6820
 Sigma_u = 59.7481
 Sigma_e = 12.4446
 Rho = .95842
 F test that all u_i=0: F(12,49) = 16.65
 Prob > F = 0.0000
 R-Sq:
 within = 0.0299
 between = 0.7833
 overall = 0.6299

Source: The authors using Strata 14

Table 3 shows the fixed effects within regression with f-statistics of 0.50 with p-value 0.6820. The R-squared is 0.7833 and p-value > 0.05. All the independent variables are not statistically significant with DPS and EPS having inverse relationship with MPS. Though profitability has positive relationship, it is not significant.

Table 4. Random effects GLS regression

MPS	Coef	Std. Err.	z	Prob.	95% Conf.	Interval
DPS	7.6700	2.1487	3.57	0.000	3.4586	11.8814
EPS	.1489	1.1791	0.13	0.900	-2.1621	2.4599
PROF	-.6103	2.6807	-0.23	0.820	-5.8643	4.6437
CONS	25.4623	13.1529	1.94	0.053	-.3169	51.2415

Number of Obs. = 65
 Wald chi2(3) = 22.77
 Prob > chi2 = 0.0000
 Sigma_u = 18.3494
 Sigma_e = 12.4446
 Rho = .6849
 R-Sq:
 within = 0.0068
 between = 0.9089
 overall = 0.7983

Source: The authors using Strata 14

Table 4 shows random effect with Wald chi of 22.17 and p-value of 0.0000. R-squared puts at .9089 and DPS positively and statistically significant (coefficient = 7.6699; p-value = 0.000). EPS is positively but insignificantly related while profitability is negatively related however, insignificant.

Table 5. Hausman test result

	(b)	(B)	(b-B)
	Fe	Re	Difference
DPS	-1.0294	7.6700	-8.6993
EPS	-.4285	.1489	-.5774
PROF	2.2175	-.6103	2.8278

Chi2(3) = 182.98
 Prob>chi2 = 0.0000

Source: The authors using Strata 14

Hausman test result in table 5 above indicates the most efficient estimation between fixed effects (within) estimation and random effects GLS estimation. The chi-square statistics at 182.98 and p-value of 0.0000. At p-value of 0.0000, the fixed effect is significant and accepted as the most efficient estimation model of the study.

The model equation therefore will be:

$$MPS_{it} = 45.31861 - 1.029364DPS - 0.4284678EPS + 2.217546PROF$$

The findings from this analysis, with the fixed effects adoption as the efficient model for the study, results revealed that dividend per share and earnings per share of the 13 selected quoted equities on the floor of NGX have negative and insignificant impact on market price per share while profitability proxied by returns on asset has positively but insignificant effect of share price. Research works of Sulaiman and Migiyo (2015); Nwaiwu and Ali (2018); Kibet, Jagongo and Ndede (2016) and Sherif, Ali and Jan (2015) supported finding of dividend per share having negative and insignificant effect on share price. However, research works of Luqman, 2018; Oyinlola and Ajeigbe (2014); Iftikhar, Raja and Sehran (2017) and Islam, (2018) presented reverse results, hence not supporting the finding. Earnings per share negative and insignificant relationship with share price result is supported by previous studies by Nwaiwu and Ali (2018); Olaoye and Owoniya (2017) and Oloruntoya and Adeleke (2018) while research studies by Oyinlola and Ajeigbe (2014) and Marzaie and Abdi (2015) reported contrary positions.

Profitability has been positive and insignificant influence of share price agrees with the findings of Oyinlola and Ajeigbe (2014); Kibet, Jagongo and Ndede (2016) and Nyamosi and Omwenga (2016) while works of Iftikhar, Raja and Sehran (2017); Jushi and Mayur (2017) and Abubakar and Garba (2017) are in contradiction with the research findings.

Diagnostics Tests

Multicollinearity

In order to check for the level of relatedness of independent variables to ensure adherence to OLS assumption of non-correlation of explanatory variables, Variance Inflation Factor (VIF) was used. The result as in table 6 below:

Table 6. Variance Inflation factor result

Variable	VIF	1/VIF
DPS	5.17	0.1934
EPS	6.80	0.1470
PROF	1.90	0.5267
Mean VIF	4.63	

Source: The authors using Strata 14

The mean of Variance Inflation Factor of 4.63 in table 6 is within the acceptable threshold point of 10 (Wooldridge, 2008). EPS has the highest VIF of 6.80. In all, with the VIF mean of 4.63, it can be concluded that there is no problem of multicollinearity. The average tolerance level (1/mean VIF) of 0.2160 is within acceptable limit. The null hypothesis of no multicollinearity is accepted and alternative hypothesis of presence of multicollinearity is rejected.

Heteroscedasticity

Breusch-Pagan test and White's test of heteroscedasticity were used to check whether the variances of error terms are constant. The result of Breusch-Pagan test as in table 7 and that of White's test in table 7 below:

Table 7. Result of Breusch-Pagan test for heteroscedasticity

Breusch-Pagan/Cook-Weisberg test for heteroscedasticity

H_0 = Constant variance

H_1 = Non constant variance of error terms

Chi2(1) = 53.08

Prob >chi2 = 0.0000

Source: The authors using Strata 14

The chi2 (1) of 53.08 and probability of 0.0000 reveals that the series error terms are not constant, hence there is problem of heteroscedasticity.

Table 8. White's test for heteroscedasticity

H_0 = homoscedasticity;

H_1 = unrestricted heteroscedasticity

Chi2(7) = 38.72

Prob>chi2 = 0.0000

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	prob
Heteroscedasticity	38.72	7	0.0000
Skewness	7.81	3	0.0500
Kurtosis	4.73	1	0.0297
Total	51.26	11	0.0000

Source: The

authors using Strata 14

The result shows a chi2 (7) of 38.72 and probability 0.0000 confirms the position of heteroscedasticity as given by Breusch-Pagan test in table 7. In line with the results presented by the tests, the null hypothesis of homoscedasticity is not accepted and the alternative hypothesis of presence of heteroscedasticity is accepted.

Autocorrelation

Runs test was used to check for serial-correlation in the error terms. The result of the test as presented in table 9 hereunder:

Table 9. Runs test autocorrelation result

N(runs) = 28
 Z = -1.37
 Prob > |z| = .17

Source: The authors using Strata 14

The result revealed that the series have no problem of autocorrelation with $Z = -1.37$ and probability of 0.1700 which is greater than 0.0500. Therefore, a null hypothesis of no autocorrelation is accepted and alternative hypothesis of serial-correlation is rejected.

5. Conclusions and Recommendations

This investigation studied the effects of dividend policy on the market price per share of 13 quoted companies in Nigeria, for the period of 5 years using pooled OLS and panel data regression methods. Data utilized were drawn from audited financial statements of the selected companies over the period of study. Descriptive statistics and panel data regression in form of Fixed Effects Model (FEM) were employed as the method of estimation. The regression results revealed that DPS and EPS have negative and insignificant effect on the stock price, while profitability has positive insignificant relationship on market share price of these selected quoted companies.

Arising from the findings of the study, the following conclusions are drawn:

Dividend per-share (DPS) is considered to have an adverse effect on share price and statistically insignificant. By implication, increase in the amount of dividend payment is negatively associated with rise on fall in stock price but not statistically relevant;

An increase on decrease in earnings per share (EPS) will have negative effect but insignificant influence on stock price;
Profitability with positive insignificant relationship with stock price is empirically irrelevant.

In view of the conclusions of the study, the following recommendations are proffered:

The Board of Directors of these companies with responsibility to recommend dividend for payment should apply more funds available to value-added investment and business expansion rather than dividend. The investors of these companies seem to prefer capital gains to immediate dividend payment. The management should embrace Pecking Order using more of retained earnings for investment in profitable opportunities instead of payment of dividend;

Management of these companies should ensure efficient use of available resources and always act in the interest of shareholders by making their wealth maximization priority.

REFERENCES

- Abubakar, A. & Garba, A. (2017). Dividend Policy and Stock Price of Quoted Deposit Money Banks in Nigeria. *Lapai Journal of Management Science*, 7(3), 424-434.
- Baker, H.K. & Jabbouri, I. (2017). How Moroccan Institutional Investors view Dividend Policy. *Managerial Finance*, 43(2), 1332-1347.
- Bamidele, M.O. & Luqman, S.O. (2018). The Effect of Dividend Policy on Stock Price in Nigeria. *Acta Universities Danubius*, 14(6), 55-71.
- Bhattarai, Y.R. (2016). Effect of Dividend Payment on Stock Prices of Commercial Banks in Nepal: Panel Approach. *Economic Journal of Development Issues*, 21-22(1-2), 55-68.
- Gordon, M. J. (1963). Optimal Investment and Financing Policy. *Journal of Finance*, 18(2), 264-272.
- Gujarati, D. & Sangeetha, S. (2007). *Basic Econometrics*. Tata McGraw Hill Publishing Co Limited.
- Hail, L., Tahoun, A. & Wang, C. (2014). Dividend Payouts and Information Shocks. *Journal of Accounting Research*, 52(2), 403-456.
- Iftikhar, A.B., Raja, N.J. & Sehran, K.N. (2017). Impact of Dividend Policy on Stock Prices of Firm. *International Scientific Journal of Theoretical and Applied Science*, 3(47), 32-37.
- Islam, M.S. (2018). Panel Data Study of Dividend Policy Effect on Firms' Value: Study on Manufacturing Sector of Bangladesh. *IITM Journal of Management*, 9(2), 1-9.
- Joshi, A.B. & Mayur, M. (2017). A Study on the Impact of Dividend Announcement on Stock Price. *Journal of Advance in Social Science and Humanities*, 3(5), 35048-35055.
- Kanwal, M. & Hameed, S. (2017). The Relationship Between Dividend Payout and Firm Financial Performance. *Research in Business and Management*, 4(1), <http://dx.doi.org/10.5296/rbm.v4i1.10784>.

- Kibet, T.W., Jagongo, A.O. & Ndede, F.W. (2016). Effects of Dividend Policy on Share of Firms Listed at the Nairobi Securities Exchange, Kenya. *Research Journal of Finance and Accounting*, 7(8), 220-229.
- Lintner, J. (1956). Distribution of Incomes of Corporations among Dividends Retained Earnings and Taxes. *American Economics Review*, 46, 97-113.
- Mirzaie, H. & Abdi, H.M. (2015). The Effect of Cash Dividend on Future Share Prices of Financial Institutions Listed on Tehran Stock Exchange (2007-2012). *European Online Journal of Natural and Social Sciences*, 4(1), 1163-1169.
- Modigliani, F. & Miller, M. (1961). Dividend Policy, Growth and the Valuation of Shares. *Journal of Business*, 34(4), 411-433.
- Nerviana, R. (2015). The Effect of Financial Ratios and Company Size on Dividend Policy. *The Indonesian Accounting Review*, 5(1), 23-32.
- Nuhu, M.S. (2016). Effect of Dividend Policy on Stock Prices: Analysis of Listed Banks in Nigeria. *International Journal of Business and Techopreneurship*, 6(3), 379-392.
- 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*, 4(2), 56-78.
- Nyamosi, E.N. & Omwenga, J. (2016). Effect of Dividend Policy on Stock Prices for Manufacturing and Allied Industry Firms listed on the Nairobi Securities Exchange. *International Academic Journal of Economics and Finance*, 2(2), 25-47.
- Olaoye, F.O. & Owoniya, B.O. (2017). Dividend Policy and Share Price Fluctuations of Sampled Quoted Nigerian Companies. *Archives of Business Research*, 5(11), 94-100.
- Oloruntoba, O. & Adeleke, M.K. (2018). Dividend Policy and Share Price: Empirical Investigation of Zenith Bank Plc, Nigeria. *Asian Research Journal of Arts & Social Sciences*, 6(1), 1-9.
- Olowe, R. (2017). *Financial Management Concepts, Financial System and Business Finance*, Lagos, Nigeria: Brierly Jones Nigeria Limited.
- 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), 1-7.
- Ozo, F.K., Arun, T.G., Kostov, P. & Uzonwanne, G. (2015). Corporate Dividend Policy in Practice: The views of Nigerian Financial Managers. *Managerial Finance*, 41(11), 1159-1175.
- Panigrahi, S. & Zainuddin, Y. (2015). Dividend Policy Decisions: Theoretical Views and Relevant Issues. *Reports on Economics and Finance*. 1(1), 43-58.
- Peicher, L. (2019). The Role of Dividend Policy in Share Price Volatility. *Journal of Economic and Financial Sciences*, 12(1), a221, <http://doi.org/10.4102/jefv1211.221>.
- Pekkaya, M. & Acikgoz, E. (2016). Dividend Payment Affect on Stock Prices: A panel Regression Analysis on BIST30 Equities. *International Journal of Management Economics and Business*, 16(3), 358-368.
- Sharif, I., Ali, A. & Jan, F.A. (2015). Effect of Dividend Policy on Stock Prices. *Business & Management Studies: An International Journal*, 3(1), 56-87.

- Sulaiman, L.A. & Migiroy, S.O. (2015). Effect of Dividend Decision on Stock Price Changes: Further Nigerian Evidence. *Journal of Investment Management and Financial Innovations*, 12(1), 329-337.
- Yensu, J. & Adusei, C. (2016). Dividend Policy Decision Across African Countries. *International Journal of Economics and Finance*, 8(6), 1996-9728.