Effects of Dividend and Earnings on Stock Price Movement in Nigerian Banking Sector

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Abstract: The study assessed the effects of dividend and earnings on stock price behaviour in Nigerian banking sector. Banking sector-specific study on the subject remains underrepresented in spite of the importance of the sector in the nation's financial system. The sample period spans from 2000 to 2014 and comprises of annual stock prices, dividend and earnings per share of 15 quoted banking firms. The pooled least square model, fixed effect model, random effect model and Hausman test were employed. The study found that current dividend has a significant positive effect on the stock prices of quoted deposit money banks while earnings and previous dividend payment have insignificant effect on banks' stock prices in Nigeria. It implied that regular dividend payment is a significant factor that enhances shareholders wealth in Nigerian banking firms and established the truism of the dividend relevance school. Based on the findings of the study, bank management should be favourably disposed to payment of dividend to the shareholders because of its impact on the maximization of wealth which is the most important objective of the firm.

Keywords: Dividend; Earnings; Stock Price; Information content.

JEL Classifications: G21; L10; L21

1. Introduction

Dividend refers to the return paid by firms on each of its shares which is intended to increase, promote and improve investor's participation in the firm stock of capital. The decision to pay dividend is of vital importance given the significant role of finance in the firm's growth and survival (Sujata, 2009). Over the years, corporate finance, through the financing, capital budgeting and dividend decisions, remains

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central to the successful operation of firms (Baker & Wurgler, 2004). Financial decisions, most especially the dividend decision must be handled strategically by business managers. Managers do not only consider how much of the firm's earnings are needed for investment, but they also take into consideration the amount that will be paid as dividends to shareholders out of the residual profits. The issue of dividend payment has piqued the interest of researchers and managers for decades; and yet it is still one of the most rigorously examined areas of modern finance. It is one of the major decisions of a firm and perhaps the main parameter for ascertaining the performance and survival of a firm. Dividend, which is the distribution made out by firms from their earnings after all fixed income holders' obligations have been settled could be in form of cash, stock dividends, bonus or scrip issues. Cash dividend is considered in this study being the commonest form of dividend payment. It is the part of firm's net incomes distributed to shareholders based on their proportional holdings in the company (Pandey, 1979).

Therefore, dividend payment can be seen as the return paid by firm to its shareholders for using their money in the business and the decision to pay dividend is made by firm with the aim of maximizing shareholders wealth. Dividend policy determines the ratio of firm's earnings distributed to shareholders as dividend and retained for further investments in the firm. The task of allocating earnings between dividend and retained earnings must be handled with strict professionalisms by managers because this decision has the most significant effect on corporate financing and growth. According to the share valuation model, the amount of dividend distributed to shareholders has a significant impact on the value of a share (Krainer, 1971; Litzenberger & Ramaswamy, 1982; Murhadi, 2010). From time to time, theorists in the area of finance have come up with arguments and numerous empirical studies so as to proffer solution to series of questions emanating from dividend decision. For instance, why do firms pay dividend? How should firms set up their dividend policy? Do these policies affect share value of the firms? Is there any visible link between share price in the market and dividend payment policy of the firms?

The effect of dividend payment on share price behaviour has presented different issues in various sectors of the economy. Banking sector constitutes the backbone of a nation's financial system. Such is the relevance of banking system to growth and development of a nation that it is still the most regulated sector. Nigerian banking system has undergone remarkable changes over the years. In 2004, the then central bank of Nigerian governor, Professor Charles Soludo announced the recapitalisation of banking sector via the sales of shares in the capital market or consolidation through mergers and acquisitions. The exercise saw a number of banks who could not raise the required N25 billion or get merging partner(s) going into extinction. It is surprising that firms in this sector could find it so difficult to attract potential investor to subscribe for their shares. Dividend has been identified as one of the main factors which attract investors to invest in company's shares due to its significant

effect on equity value (Ree, 1997). However, the effect of dividend and earnings on share prices in Nigerian banking sector remains a puzzle, and it is essentially a matter of empirical investigation. Some studies in this direction have used small sample, thereby making generalisation of findings difficult (Oliver, 2014) while others have not taken the effect of earnings into consideration. This study evaluates the effect of dividend and earnings on share prices of 15 quoted banking firms in Nigeria.

2. Literature Review

2.1. Theoretical Framework

Dividend relevance theory is traceable to Gordon and Shapiro (1956), Gordon (1959, 1963), Lintner (1962) and Walter (1963). It holds that dividends enhance firm's value. Due to information asymmetry and uncertainty, dividend receipts are preferred to retained earnings or future return from reinvestment plan (Gustav & Gairatjon, 2012). Investors would choose the "bird in the hand" of current dividends over the "two in the bush" of expected capital gains. Rising dividend payments, all other things being equal, tends to bring about an increase in share value. Such an increase in cash dividend minimizes the uncertainty associated with expected cash flows, reduces the cost of finance and improves or maximizes the share value.

Modigliani and Miller (M & M) (1961) differ from the dividend relevance hypothesis. M & M opine that firm's value is not influenced by the way it allocates its earnings but by the riskiness of its operating cash flows. Thus, "bird-in-the-hand" theory was considered as a fallacy as M & M showed that under the assumption of perfect capital markets, dividend policy has no relevance. In the presence of perfect capital market, firm's share prices and the cost of finance are not affected by dividend policy; hence the shareholders would be indifferent to future return on investment and current dividends. The argument is that shareholders wealth is affected by the cash flows from firms' investment policy rather than how earnings are distributed. They stated that investors calculate the value of companies based on the capitalized value of their future earnings, which has no bearing on whether dividends are paid or not. M & M proposition is based on idealistic assumptions of rational investors and perfect market.

Theorist and market participants have also noticed that dividends might portend implicit information about company's prospects. In the presence of imperfect markets, stock prices may change with changes in dividends (M & M, 1961). That is, dividend announcements may be considered to pass implicit information about the company's potential income. Thus investors draw inference about a company's future potential income via the signal received from dividend announcements, its stability and changes. Signalling hypothesis has some underlying assumptions. One is the asymmetric information in which managers are viewed by the shareholders as

having private information which can be inferred whenever dividends are paid. Therefore, announcement of increase in dividend is considered as good news which will bid up stock prices and vice versa. Firms usually increase dividends when managers believe that incomes have permanently increased (Lintner, 1956, Lipson, Maquieira & Megginson, 1998). Signalling hypothesis is supported by the British financial managers (Dhanani, 2005).

2.2. Empirical Review

Oyinlola and Ajeigbe (2014) analysed the effect of dividend policy on share prices of 22 Nigerian quoted firms using correlation analysis, regression analysis and granger causality test. The study reveals that last year dividend per share and retained earnings have significant positive effect on the current stock prices. Olowe and Moyosore (2008) examined factors determining dividend payout in the Nigerian quoted banks using panel data. The result shows that capital adequacy is a significant determinant of dividend payout. Profitability, liquidity, size and activity mix are statistically significant factors which positively influence dividend payout. Abubakar (2009) studied the nexus between stock prices and dividend payout ratio of quoted non-service firms in Nigeria using descriptive research approach and linear regression. The significant relationship between stock prices and dividend payout ratio can be explained by the size of the sampled firms. Adediran and Alade (2013) studied dividend policy and corporate performance in twenty five quoted firms in Nigeria. Dividend paid was specified as dependent on return on capital employed, fixed assets and earnings per share. Regression analysis showed that there is a significant direct relationship between dividend policies and profitability, investments as well as earnings, hence good dividend payment enhances profitability and attracts investments to the organisations.

Testing dividend irrelevance hypothesis in the Nigerian capital market, annual data of twenty highly capitalized quoted companies from 2005 to 2010 were analysed using regression and correlation analyses. It was discovered that about seventy percent of sampled companies has its level of dividends been influenced by the level of retained profits while there is no significant relationship between change in market price and dividend policy. It was concluded that dividend policy is irrelevant in ascertaining firm's value and that only capital appreciation and the reinvestment level determine stock market behaviour in Nigeria (Toby, 2014). Ozuomba, Okaro and Okoye (2013) examined the shareholder's value and firm's dividend policy of 10 quoted public limited companies in Nigeria from 2000 to 2011. Dividend per share, earning per share and market price per share were analysed using multiple regression and it was found that dividend policies affects shareholders' wealth in Nigeria. Fodio (2009) employed the parsimonious multiple regression model to investigate the dividend policy of a cross-section of 53 firms quoted on the Nigerian Stock Exchange (NSE) between 1993 and 2002. The findings revealed that current

earnings, cash flow, investment and net current assets have significant impact on dividend policy of the quoted firms while none of the growth, firm size and industry classification provides a statistically significant effect. Using regression and correlation to analyse earning per share, dividend per share and investment of two brewery companies from 2002 to 2010; Olabisi, Oyinlola and Adeniran (2014) found that dividend policy is relevant and that a firm's dividend policy is seen as a major determinant for firms' performance.

Asogwa (2009) used random effect model to evaluate the determinants of shareholder value of banks listed in Nigeria stock exchange between 2004 and 2008. The study concluded that dividend policy has a significant influence on firm value than profitability and earnings growth and that size and structure of banks does not affect value creation. Fodio and Atoyebi(2013) utilised Q test model and OLS regression analysis to investigate the relationship between earnings quality and share price changes of 15 listed banks in Nigeria between 2006 and 2010. Results showed a significant direct relationship between income quality and share price changes with global financial crisis having a significant inverse effect on the relationship. Khan (2012) investigated the effect of dividends on stock prices of 25 chemical and pharmaceutical companies in Pakistan from 2001to 2010. Using fixed and random effect model, the study concluded that dividend payment, retained earnings and return on equity have significant direct effect on market price while stock dividend and earnings per share have insignificant inverse influence on market prices.

Khan, Aamir, Qayyum, Nasir and Khan (2011) evaluated the impact of dividend payout on share prices of 55 listed companies in Pakistan. The study concluded that share prices are directly affected by earnings, dividend yield, and equity return and after tax profit while retention ratio has inverse effect on share price. Ali and Chowdhury (2010) examined stock price reactions of listed private commercial banks in Bangladesh over a period of 44 days of the dividend announcement dates. The study employed a standard event study methodology using 25 listed sample banks in the observation period. The statistical pooled t-test revealed that stock price reactions to dividend announcement are not statistically significant. Studying the determinants of share prices of the listed banks in Amman stock exchange from 2005 to 2011; Almumani (2014) used ratio analysis, correlation and a linear multiple regression models to verify the effect of dividend per share, earning per share, and book value of share, dividend payout ratio, price/earnings ratio and size on market price of shares. The result revealed a positive correlation between the independent variables and dependent variable and a significant positive relationship between earning per share and the market price of the listed banks in Jordan.

Sarwar (2013) studied the impact of dividend policy on shareholder's wealth in 33 listed sugar companies at Karachi stock exchange between 2006 and 2011. Descriptive statistics and multiple regression analysis were used to analyse dividend,

earnings, previous market price ratio, previous and current price earnings ratio, and retained earnings ratio as explanatory variables and market price per share as regressand. All explanatory variables have joint significant relationship on dependent variable. Adaramola (2012) studied information content of dividend payments in Nigeria using generalized least square (GLS) regression. The results show that changes in dividend payment brings about changes in share prices and that there is no significant proof which indicates that the changes in stock prices is as a result of dividend payment but the records of dividend payments Granger cause stock prices. Using multiple regression model, granger causality and Johansen cointegration to analyse market price of share (MPS), bank age, earnings per share (EPS) and return on assets (ROA) of 4 banks from 2004 -2013; Oliver (2014) found that earnings per share is the major determinant of movement of market prices of shares with regards to other variables considered.

Gordon (1959) examined three possible hypotheses why investors would buy a stock: to obtain both dividends and earnings; to obtain dividends; and to get the earnings. It was discovered that dividends have greater influence on share price than retained earnings. Ordu, Enekwe, and Anyanwaokoro (2014) studied the effect of dividend payment on the market prices of shares in Nigeria between 2000 and 2011. Ordinary least squares techniques showed that there is a significant positive relationship between market price per share and dividend per share, and that dividend yield does not have a direct influence on the stock prices in Nigerian listed firms. Ojeme, Mamidu and Ojo (2015) examined the effects of dividend policies on the value of shareholders' wealth in 21 Nigerian quoted banks before and after the financial meltdown (2007-2010). Using Correlation analysis with market value of shares as dependent on dividend paid, it was submitted that payment of dividend is relevant to market value of shares.

3. Research Method

3.1. Data

Secondary data were employed in this study. They were obtained from Nigerian Stock Exchange fact-book and Banks' annual financial statements. Data used in the study include annual stock prices being the dependent variable and dividend per share (DPS), previous dividend per share obtained as lag of DPS and the earnings per share. The data covered a period of fifteen years (2000-2014) subject to the availability of data. There are twenty two registered banks in Nigeria financial landscape. Fifteen of these banks whose reports are published by the Nigeria Stock Exchange (NSE) during the sample period were selected for the study. They include First Bank of Nigeria plc, Zenith Bank plc, Guaranty Trust Bank plc, Access Bank plc, United Bank for Africa plc, Unity Bank plc, sterling Bank plc, Diamond Bank

plc, Ecobank Nigeria plc, First City Monument Bank plc, Skye Bank plc, Spring Bank plc (now Heritage Bank Plc), Wema Bank, Stanbic IBTC Bank Nigeria plc and Fidelity Bank plc.

3.2. Model Specification and Estimation Technique

The Panel data regression technique was used to estimate the effect of dividend payment on share price behaviour of quoted banks in Nigeria. Three different estimations, namely pooled least square, fixed effect and the random effect were carried out. Hausman test was carried out to determine the best estimation. The statistical significance of the estimated parameter and models were determined using F-statistics and T-statistics.

The current study used share prices as dependent and dividend and earnings per share as explanatory variables. The models employed in this study were presented as follows:

3.2.1. Pooled Least Square (PLS) Method

$$SP_{it} = \alpha + \beta_1 DPS_{it} + \beta_2 DPS_{it-1} + \beta_3 EPS_{it} + £_{it} \quad 1$$

Where: i = 1, 2 ….....15; t = 1, 2 ….....15; SP_{it} = Stock Price; DPS_{it} = Dividend per Share; DPS_{it-1}= Previous Dividend per Share; EPS_{it}= Earnings per Share; £= Stochastic error term; β_1 β_2 β_3 = Slope coefficient, α = Intercept. Stating the model in a log-linearized form, model becomes:

$$Log(SP_{it}) = \alpha + \beta_1 Log(DPS_{it}) + \beta_2 Log(DPS_{it-1}) + \beta_3 Log(EPS_{it}) + £_{it} \quad 2$$

Where: Log = Natural Logarithm

3.2.2. Fixed Effect Model (FEM)

Panel data regression is considered to be superior to pure time series or cross section. A fixed effect model is estimated so as to take the peculiarity of every bank into consideration because pooled OLS failed to distinguish between various banks in the model. As in the pooled OLS, FEM also assumes that slope coefficients do not vary across banks but intercept differs across individuals. The major assumption, therefore, is that while the intercepts are cross-sectional variant, they are time invariant, which informed the inclusion of subscript i in equation 3

$$Log(SP_{it}) = \alpha_i + \beta_1 Log(DPS_{it}) + \beta_2 Log(DPS_{it-1}) + \beta_3 Log(EPS_{it}) + £_{it} \quad 3$$

3.2.3. Random Effect Model (REM)

An alternative approach; random effects regression model is applicable where the variables of interest are constant for each firm and such variables cannot be included. REM assumes that since the individual banks are pooled from larger population, they tend to have the same mean. Thus such omitted variables, captured by α_i in FEM

can be divided into mean α and variation from mean ε_i (Gujarati, **2013**). ε_i is added to the existing error term ($£_{it}$) to form μ_i

$$Log(SP_{it}) = \alpha_i + \beta_1 Log(DPS_{it}) + \beta_2 Log(DPS_{it-1}) + \beta_3 Log(EPS_{it}) + \mu_{it} \quad 4$$

4. Results and Findings

4.1. Descriptive Analysis

The results of the descriptive analyses of data employed in the study were presented in table 1. SP, EPS, DPS and DPS ($_{-1}$) averaged 6.803346, 4.794333, 3.776197 and 3.646519; and varied from a minimum of 3.401197, 2.079442, 0.000000 and 0.000000 to a maximum of 8.900413, 7.113142, 5.164786 and 5.164786 respectively. DPS has the lowest mean and SP has the highest mean value. DPS and DPS ($_{-1}$) have the lowest minimum value while SP has the highest maximum value. EPS has the lowest standard deviation of 0.871851 while SP has the highest standard deviation value of 1.081307. From the table SP, EPS, DPS and DPS ($_{-1}$) have negative skewness or long left tail. SP, EPS, DPS and DPS ($_{-1}$) have Kurtosis greater than three (3), hence they are peaked or leptokurtic. The table also shows that all the variables do not follow normal distribution except EPS which has a lower than 5% probability value of Jarque-bera test statistic.

Table 1. Descriptive Statistics

	SP	EPS	DPS	DPS(-1)
Mean	6.803346	4.794333	3.776197	3.646519
Median	6.928763	4.948760	4.007333	3.912023
Maximum	8.900413	7.113142	5.164786	5.164786
Minimum	3.401197	2.079442	0.000000	0.000000
Std. Dev.	1.081307	0.871851	1.030150	1.070434
Skewness	-0.882964	-0.553085	-1.290532	-1.136323
Kurtosis	3.989745	3.607264	4.836624	4.058197
Jarque-Bera	14.34335	5.573337	35.12278	21.99646
Probability	0.000768	0.061626	0.000000	0.000017
Sum	571.4811	402.7240	317.2005	306.3076
Sum Sq. Dev.	97.04571	63.09037	88.08032	95.10380

Source: Author's estimation, 2018

4.2. Collinearity

The correlation between regressors, using the Pearson Matrix is presented in table 2. The table indicates that the correlations between all the independent variables are positive. The correlation coefficients ($R_{EPS/DPD}$ = 0.445497, $R_{EPS/DPS\ (-1)}$ = 0.337294, $R_{DPS/DPS\ (-1)}$ = 0.654146) show a low correlation between one or more independent variables with each other. Even the correlation between DPS and DPS (-1) is

0.654146 which means that the multicollinearity which could be a potential problem does not exist as the correlation between two independent variables is less than 70%.

Table 2. Pearson Correlation Matrix

	EPS	DPS	DPS(-1)
EPS	1.000000		
DPS	0.445497	1.000000	
DPS(-1)	0.337294	0.654146	1.000000

Source: Author's estimation, 2018

Collinearity between independent variables was further tested using Variance Inflation Factor (VIF). The VIF values between regressors were shown in Table 3. It can be seen that all the VIF values between the regressors are very close to 1. It means that there is no collinearity between the explanatory variables or that the variables are independent of each other. Therefore, collinearity has no significant effect on the relationship between the regressors and regressand.

Table 3. Variance Inflation Factor (VIF)

	R	R^2	$1-R^2$	VIF $1/(1-R^2)$
EPS, DPS	0.445497	0.198468	0.801532	1.247611
EPS, DPS(-1)	0.337294	0.113767	0.886233	1.128371
DPS, DPS(-1)	0.654146	0.427901	0.572093	1.897198

Source: Author's estimation, 2018

4.3. Model Estimation Results

The result pooled OLS in table 4 shows that EPS is negatively related to SP with an estimated coefficient -0.145504. This implies that a % increase in the EPS leads to a decrease in the banks' SP by 14.5504 %, putting DPS and DPS(-1) aside. The coefficient of DPS (0.346018) reveals that a positive relationship exists between DPS and SP. It means that, 1% increase in the former leads to an increase in the latter by 34.6018%, holding EPS and DPS (-1) constant. Also, the coefficient of DPS (-1) is 0.137352, meaning that a unit increase in DPS (-1) leads to13.7352% increase in SP, all other factors being equal. Taken a *p*-value lower than 0.05 as the basis for rejection of null hypotheses of a zero coefficient, it can be seen from table 4 that probability values are greater than 5% for all the regressors with the exception of DPS. These mean that EPS and DPS (-1) are not statistically significant in explaining SP. The DW statistics closer to 2, implies zero autocorrelation. DW of 1.466985 falls into inconclusive region. The positive adjusted R^2 of 0.1379 shows that model is not poorly fit but EPS, DPS and DPS(-1) only explain 13.8% of the changes in SP.

Table 4. Pooled Least Square Result

Variable	Coefficient	Standard Error	t-Statistic	Prob
C	5.774451	0.539672	10.69992	0.0000
EPS?	-0.145504	0.125207	-1.162111	0.2480
DPS?	0.346018	0.118797	2.912672	0.0044
DPS(1)	0.137352	0.101019	1.359670	0.1770
R^2= 0.16327	**AdjR^2** = 0.138	**DW** = 1.466985	Prob(F-stat) .005	

Source: Author's estimation, 2018

Dependent Variable: Stock Price (SP)

Effort to determine the true relationship between SP and EPS, DPS and DPS (-1) across the fourteen banks leads to fixed effect estimation. With respect to slope coefficients which are assumed to be cross-sectional and time invariant, DPS and DPS (-1) coefficients have negative signs. Putting other factors aside, DPS and DPS(-1) have negative effects on SP such that 1% rise in them leads to 0.028039 and 0.053698% fall in SP respectively. However, EPS has a positive effect on SP which implies that if all other factors are held constant, 1% increase in former brings about 17.2249 % increase in latter.

Differential intercept coefficient relates negatively with SP of FIDE, DIAM, ECOB, SKYE, WEMA, UBAB and UNIT. Hence, if all explanatory variables are held constant, a 1% rise in all other factors other than EPS, DPS and DPS(-1) brings about 13.70581, 3.6585, 13.8218, 94.8481, 72.6892, 17.3416 and 255.5337 % decrease in SP of FIDE , DIAM, ECOB, SKYE, WEMA, UBAB and UNIT respectively. The same leads to 4.5587, 44.4894, 40.3813, 4.1812, 15.6622, 61.2618, and 19.0566 % increase in SP of ACES, ZENI, GTBB, FCMB, STAN, FIRS and UNIO respectively. The differential intercept may be due to unique feature of each company. The differential intercepts (C) are negative for seven (7) and positive for seven (7) of the fourteen (14) banks. It can be seen that UNIT has the highest negative differential intercept; hence, Unity Bank SP suffers most from the negative impact of other factors which are not common to all the banks. *p*-value are greater than 5% for all the regressors, meaning that EPS, DPS and DPS(-1) are not statistically significant in explaining SP. Reported DW of 1.803009 falls into acceptance region while the positive adjusted R^2 of 0.253296 shows that EPS, DPS and DPS(-1) can only explain 25.3% of the changes in SP.

Table 5. Fixed Effect Result

Variable	Coefficient	Standard Error	t-statistics	Probability
C	6.392443	0.639704	9.992813	0.0000
EPS?	0.172249	0.196291	0.877517	0.3827
DPS?	-0.028039	0.178165	-0.157378	0.8753
DPS1?	-0.053698	0.116464	-0.461071	0.6459
R^2 = 0.370426 **Adj R^2** = 0.253296 **DW** = 1.803009, , Prob(*f*-stat) =0.000294				
Fixed Effects (Cross)				
ACES—C	0.045587	SKYE—C	-0.948481	
ZENI—C	0.444894	WEMA—C	-0.726892	
GTBB—C	0.403813	STAN—C	0.156622	
FIDE—C	-1.370581	FIRS—C	0.612618	
DIAM—C	-0.036585	UBAB—C	-0.173416	
ECOB—C	-0.138218	UNIT—C	-2.555337	
FCMB—C	0.041812	UNIO—C	0.190566	

Source: Author's estimation, 2018

Dependent Variable: Stock Price (SP)

From table 6, the average intercept coefficient for all the quoted deposit money banks maintains insignificant positive relationship with SP. However the differential intercepts show varying types of relationship with SP. Holding average intercept, EPS, DPS and DPS(-1) constant, 1% rise in differential intercept tends to increase SP by 1.7587, 17.4624, 16.0921, 3.2565, 7.2977, 6.5182, 17.0261 and 30.5402 % in ACES, ZENI, GTBB, DIAM, ECOB, FCMB, STAN, FIRS and reduce it by 52.1855, 7.6802, 15.5054, 4.8305, and 17.8963 % in FIDE, SKYE, WEMA, UBAB, UNIT and UNIO respectively. It can be seen that DPS and DPS(-1) relate positively with SP. Keeping all other factors constant, 1% increase in DPS and DPS(-1) bring about 30.1119 and 10.5640 % increase respectively in SP of quoted deposit money banks. Conversely, 1% change in EPS brings about 13.3975% reductions in SP. As in the pool OLS, only DPS is statistically significant in explaining SP with a *t*-statistic greater than 2 (2.545190). DW of reported in the table 6 falls into acceptance region while the adjusted R^2 of 0.072892 shows that EPS, DPS and DPS(-1) can only explain 7.3% of the changes in SP. *P*-value of *f*-statistics is 0.014758 which is smaller than 0.05 shows that the overall model is significant.

Table 6. Random Effect Result

Variable	Coefficient	Standard Error	t-statistics	Probability
C	5.952654	0.552576	10.77256	0.0000
EPS	-0.133975	0.126982	-1.055067	0.2940
DPS	0.301119	0.118309	2.545190	0.0125
DPS1(-1)	0.105640	0.098357	1.074051	0.2854
R^2 = 0.100160, **R^2** = 0.072892, **DW** = 1.576547, Prob(*f*-stat) = 0.014758				
Random Effects (Cross)				
ACES—C	0.017587	SKYE—C	-0.076802	

ZENI—C	0.174624	WEMA—C	-0.155054
GTBB—C	0.160921	STAN—C	0.170261
FIDE—C	-0.521855	FIRS—C	0.305402
DIAM—C	0.032565	UBAB—C	-0.048305
ECOB—C	0.072977	UNIT—C	-0.178963
FCMB—C	0.065182	UNIO—C	-0.018539

Source: Author's estimation, 2018

Dependent Variable: Stock Price **(**SP)

The study proceeds to Hausman test in order to determine which of the random effects, pooled OLS and fixed effect gives the best estimation. The outcome of the test is presented in table 7. It can be seen from the table that *p*-value of Chi-Square Statistic is 0.0633 which is greater than 5%. Therefore the study concludes that the assumptions for the random effects estimation are not violated and the random effect estimation is the most efficient to use in this case.

Table 7. Hausman Test

Test			**Chi-square**	**Prob**
Cross-section random		7.287186	3	0.0633
Variable	Fixed	Random	Var(Diff.)	Prob.
EPS?	0.172249	-0.133975	0.022406	0.0408
DPS?	-0.028039	0.301119	0.017746	0.0135
DPS1?	-0.053698	0.105640	0.003890	0.0106

Source: Author's estimation, 2018

5. Discussion and Concluding Remarks

The study assessed the effect of dividend and earnings on stock price behaviour in Nigerian Banking Sector. The findings of the study reveal that dividend per share has a significant positive effect on the stock prices of Nigerian commercial banks. This implies that banks' stock prices increase in the market with increase in the dividend payment to shareholders. This substantiates the position of the Bird-in-hand school which holds that most investors are risk averse and prefer cash in hand, dividend. This is also in support of the findings of Ordu *et al.,* (2014) and Ojeme *et al.,* (2015) in Nigeria which indicated that dividend per share has a significant positive effect on market price of shares. This has important implication for the firm management and shareholders. A firm that is not paying cash dividend would fail to attract shareholders and find it difficult to raise capital in the capital market when in need of fresh capital. Failure of most of Nigerian banks to raise capital for recapitalisation in the early 2000 could therefore be attributed to their failure to pay reasonable dividend which made their share unattractive to new buyers.

Similarly, previous dividend has a positive impact on the stock prices of quoted banking firm. This finding is in consonance with the dividend signalling hypothesis whereby increase in previous dividends transmit positive signal to the market and increase the price of stock. It is also a proof to the truism of information content of dividend where dividend payment is viewed as a means by which management who knows, passes information to the shareholders who do not know about the earning potentials of the firm. The finding is also consistent with Oyinlola and Ajeigbe (2014) which found that past dividend payment drives stock prices. The favourable effect of previous dividend on stock prices implies that payment of dividends enhances the future public outlook of the banks. Consequently, dividend payment represents a means by which shareholders maximise their wealth considering the possibility of disposing share at higher prices in the future.

The study reveals that current earnings per share of Nigerian banking firms do not impact stock prices. This finding negates the position of Modigliani and miller dividend irrelevance theory which holds that earnings drives stock prices and not the dividend. The negative sign is at variance with the theory and *a priori* expectation. The insignificance of earnings supports the findings of Khan (2012) in Pakistan which indicated an insignificant impact of earnings on stock prices. The insignificant and negative effect of earnings on stock prices has implication for the shareholders. It implies that the shareholders should not be deceived by retention which may not necessarily enhance their wealth. Whether retention enhances share value may however require further study on the effect of previous earnings on current share value.

Based on the findings of the study, banks management should be favourably disposed to payment of dividend to their shareholders because of its impact on maximization of wealth which is believed to be the most important objective of the firm. Management should also ensure operational efficiency so as to earn reasonable profits part of which goes to the shareholders in the form of dividend. Earnings should be deployed by management and board member of the bank in such a way as to maximise the wealth of the shareholders.

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