
THE EFFECT OF DIVIDEND PAYMENT ON SHARE PRICE OF LISTED OIL AND GAS FIRMS IN NIGERIA

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ABSTRACT: *The issue of dividend payment has a long history and some dividend theories are prominent in finance literatures. This study investigates the impact of dividend policy on share price of listed companies in the stock exchange market of the Nigeria economy from 2013 to 2017 on a panel data analysis. Given the crucial impact of the oil and gas sector in Nigeria, it becomes expedient to critically analyze the impact of dividend per share and other variables proxy for dividend that are likely to affect share prices in the oil and gas sector in Nigeria. The study adopted a simple statistical methodology. Some underlining theory of dividend policy in line with the efficient market hypothesis was adopted to practically test the efficacy of the model and if the research hypothesis result corroborates with other studies. Due to the numbers of firms operating in the oil and gas sector in Nigeria, the study uses the Yamane's formula to derive the appropriate sample size while the Kolmogorov test was used to test for normality under the OLS assumption. The variables in the model are statistically significant and the coefficient of determination is very high, indicating that the total variation in the dependent variable are explained by the independent variables in the model. Therefore, the study found out that dividend per share (DPS) affect share price (SP) in the oil and gas sector in Nigeria.*

KEYWORDS: Share Price, Dividend Per Share, Oil & Gas, Regression, Stock Market.

INTRODUCTION

The global financial market crash deeply affected the Nigeria economy, which on the other hand affected the Nigeria capital market. This led most investors in Nigeria to move out their funds from the Nigeria capital market due to the negative impact that the financial crisis had caused. Also, most firms could not pay dividend due to decline in earnings. Thus, there was high level of foreign direct investment (FDI) withdrawal from the economy. In the first quarter of 2018, the Oil and Gas firms share are the most sorted shares in the Nigeria stock exchange market.

In Nigeria, the oil and gas sector industry are one of the most heavily regulated sectors with great attention of investment having noted that Nigeria is a mono economy, i.e depending majorly on crude oil. In finance and economic literatures in Nigeria, it has been considered that the oil and gas firms play a pivotal role in economy development. Oil and gas firms share is highly sort for on the floor of the Nigeria stock exchange. Most firms could not pay dividend and this negatively affect investors interest in trading on shares in the floor of the Nigeria stock exchange. Oil and gas share which are highly in demand decline in price. At this point, investors and the general public began to debate the effect of dividend on share price as investors are only interested in wealth maximization. To maximize wealth of shareholders, dividend policy that necessitates dividend payment is perceived to be the constitutional rights of the shareholders. Pandey (2005), stated that for shareholders wealth to increase up to a

particular level, profit of the firm must increase and that stand as a core objective of the firm. This therefore corroborate with the idea of Baker and Powell (1999), that an essential management decision is the decision of dividend policy because of its effect on share price. Empirical literatures such as the work of Gordon, Walter, Modigliani and Miller etc. has shown that a quantum of the movement of share prices are attributed to some factors such as earnings, dividend and general economic conditions. The question is which variables affect share price? As a result of this question led this study to integrate efficient market hypothesis and the theory of dividend policy.

Dividend has a long history in the world in general. As noted by Sujala (2009) that 'Dividend is the distribution of past or present earnings in terms of real assets among company shareholders proportionally as per their ownership'. Hashim, Shahid, Sajid and Umair (2013), gives reasons why companies pay dividend such as the need for cash or to eliminate agency cost as well as reducing investor's insecurity. Sharma, (2011) stated that earnings per share and dividend per share are vital variables that gives information on value of share price. Therefore, the impact of announced earnings per Share (EPS) on stock prices is something that has been at the core of interest to investors and shareholders. And this owes to the fact that EPS is a crucial instrument that evaluates a company's performance in the long run. As Cootner (1964) claims that "security prices are normally sensitive and responsive to all real and imagined events" made out of the firm's profits/revenues and the decision to pay out dividends is rooted on the dividend policy of the company.

Dividend policy has been a debatable issue in the area of corporate finance. This is indicative of the various theories that have been propounded to either support or reject it. Notable among these theories are the dividend irrelevance theory, the bird-in-hand theory, signaling theory, tax preference theory, agency theory, life cycle theory, dividend smoothing theory and Clientele effect. The Efficient Market Hypothesis proposed by Fama (1965) opined that share price of firms should reflect all available information. The efficient market hypothesis states that current share prices reflect all available information. However, information can be in form of dividend policy, impacts of macro and micro (internal) economic variables. The work of Collins (1957) in the determinants of share price opined that dividend, operating earnings, net profit and book value are core variables the affect share prices.

The work of Baskin (1989) goes along with the work of Graham and Dodd (1934) on investors' preference and dividend but found an inverse relation between stock prices and dividend policy. The inverse relationship is in the context of a fall in price when there is dividend payment or a rise in price when dividend is not paid. In our own view, the implication of this theory to the study of dividend policy on oil and gas firms in Nigeria is that the share price of oil and gas firms in the Nigeria stock exchange market should reflect all available information that will attract investors into the market of investing on the oil and gas sector in Nigeria.

Husam-Aldin et al (2010), carried out an empirical review of theories on dividend policy. They concluded that the more attention is been given to the different types of theories of dividend policy in finance the more it becomes harder to analyze and at the end of it, it may look like a puzzle. There work corroborate with the work of Fisher Black. Erasmus (2012). There are various forms and ways in which dividends can be paid; a company May decide to pay dividends in the form of cash once or twice in a year or declare bonus shares. According to Erasmus, from an investor's perspective, it is not only the level of dividend payment that may be imperative, but also the stability of dividend payments for a considerable period. Thus,

management should be cognizant of the fact that unanticipated changes in dividend payments could alienate existing and potential investors. Unstable dividend policy may have an adverse investors' perception of the Company performance in the financial markets. Priya & Mohanasundari (2016). The principal aim of the study was to review theories on dividend policy and its practical application. Many theories were reviewed such as the Modigliani and Miller theory, the bird in hands theory and the agency cost theory play significant role on this study among others. From the study of Priya & Mohanasundari, we can deduce that there is a divergent view between the management and shareholders due to personal opposing interest. As a result, this divergent interest, one will ask what is the objective of the management and the shareholders in a business platform. Therefore, it is obvious that the aim of the management is growth oriented for the firm while shareholders aim is wealth oriented in terms of share price. Since the aim of the firm and the aim of the aim of the shareholders are two parallel line, it became obvious for Priya and Mohanasundari (2016) to conclude that the more they try to understand dividend decision of firms the more it looks like a game(puzzle).

Harleytega & Ayodele (2017) empirically investigate the impact of dividend policy on firm performance of quoted firms. While they proxy performance with return on asset and return equity. The methodology used by Harleytega & Ayodele (2017) was a simple regression and hypothesis was tested based on the research questions formulated. The findings of their study show that there is a positive relationship between firm's performance and dividend per share. A number of empirical studies have been conducted to examine the relationship between dividend policy and share price (Hussainey, Mgbame, & Chijoke-Mgbame, (2011); Nishat & Irfan, 2004; Suleman, Asghar, Ali Shah & Hamid, 2011). However, the findings by these researchers are not consistent. Uddin (2009) opined that dividend, earning per share, net asset value per share are factors that affect share prices through dividend decision in a firm. Duke et al (2015) carried in their study of dividend policy on commercial banks in Nigeria opined that there is a positive significant relationship between dividend yield and share price. While Mukora (2014) stated that there is a significant positive relationship between dividend announcement and shares yield in the stock market of some selected firms. Baskin (1989) found a negative association between stock prices and dividend yield. His findings, however, was at variance with (Hussainey *et al.*, 2011) who failed to established a negative association between the two variables. In the United Kingdom, Goddard *et al.* (2008) examined the long-run relationship between stock dividends and stock prices, using panel data. Using panel unit root and panel co-integration techniques, the authors found evidence of long-run association between stock prices and dividends. In other words, the study found that share prices and dividend move together in the long run.

Also, a study by Bitok (2004) on the effect of dividend policy on the value of the firms quoted at the NSE found that paying dividends reduces risk to the companies and thus influence stock price. The study also found that dividend yield and payout ratio serve as proxies for the amount of projected growth opportunities. Baker *et al.* (2001) conducted a survey among 603 American firms listed on the New York Stock Exchange (NYSE). Survey was done among the chief financial officers of the selected firms. Their results indicated that majority of the respondents strongly agreed that stock prices will be affected by dividend policy. Gordon (1962) studied dividend policy and market price of the shares and proposed that the dividend policies of firms affect the market value of stocks even in the perfect capital market. He stated that investors may prefer present dividend instead of future capital gains because the future situation is uncertain even if in perfect capital market. Indeed, he explained that many investors may prefer

dividend on hand in order to avoid risk related to future capital gain. He also proposed that there is a direct relationship between dividend policy and market value of share even if the internal rate of return and the required rate of return will be the same.

Linking Dividend Policy and Share Prices of Firms

Dividend policy involves the organization's choice to either pay dividend or not. Besides, dividend policy also examines the frequency of dividend payment (whether semi-annually, annually or quarterly). According to the signaling hypothesis, announcements concerning dividend change should correlate positively with share price movement and future changes in earnings. In recent years, a number of studies have attempted to examine the impact of dividend policy on the share price changes of companies. Al Masum (2014) conducted a study in Bangladesh to examine the impact of dividend policy on the share prices of listed banks on the Dhaka stock exchange. In the study, dividend yield and dividend per share were used as independent variables while controlling for earnings per share, return on equity and retention ratio. A panel data approach was employed to investigate the relationship between dividend and stock prices. The overall result of the study indicates that dividend policy has significant positive effect on stock prices. Waithaka *et al.* (2012) investigated the impact of dividend policy on share prices of selected companies on the Nairobi Stock Exchange. The study used linear regression model to examine the relationship between dividend policy and share prices. They find that share prices are positively related with dividend announcement, implying that dividend policy has some level of impact on the share prices of listed companies. Also, Nazir *et al.* (2010) used panel data analysis to investigate the role of corporate dividend policy in determining stock price changes in the Karachi Stock Exchange. The study established that movement in share prices is significantly affected by dividend policy as measured by dividend yield and dividend payout ratio. According to a study conducted by Rashid & Anisur Rahman (2008), the authors established that there is an insignificant positive relationship between dividend policy (Dividend yield) and share price volatility of 104 non-financial firms listed on the Dhaka Stock exchange from 1999 – 2006.

The review of the literature reveals the existence of many gaps of knowledge in respect of dividend policy. As per the review of the literature most of the empirical studies that have been conducted with the aim of identifying dividend policy theory on performance such as the work of Priya and Mohanasundari (2016) in the India and some emerging markets. Moreover, the literature review also reveals the existence of controversial conclusions that results from different studies made so far. Furthermore, so far as the review of the literature discloses, very scanty work has been done with the objective of identifying the effect of dividend policy on share price in Nigeria using firms from the oil and gas sector.

METHOD

The methodology employed in this study is the OLS and descriptive statistics. Given the nature of the topic of this study and the variables applied in achieving the objectives, the OLS method is seen fit for a study of this nature. To justify this methodology, similar study such as the work of Zhou and Roland (2006) used a multiple regression technique to linearize the relationship between the dividend payout and future earnings growth of some selected firms.

The model for the study is hereby specified as follows:

$$SP = f(DPS, EPS, DY, INF) \dots \dots \dots \text{model}$$

$$SP = B_0 + B_1DPS + B_2EPS + B_3DY + B_4INF$$

Where:

- SP = Share Price
- DPS = Dividend Per Share
- EPS = Earnings Per Share
- DY = Dividend Yield
- INF = Inflation Rate

Table 1.2.3: Panel Least Square for Variables

Dependent Variable: SP
 Method: Panel Least Squares
 Periods included: 5
 Cross-sections included: 13
 Total panel (balanced) observations: 65

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	28.77220	1.560012	1.840013	0.0000
EPS	-0.788895	1.860013	-4.250012	0.0000
DPS	26.75235	2.420012	1.100013	0.0000
INF	0.885891	2.200013	4.030012	0.0000
DY	-873.4974	8.170011	-1.070013	0.0000
R-squared	1.000000	Mean dependent var	32.62000	
Adjusted R-squared	1.000000	S.D. dependent var	3.080189	
S.E. of regression	8.820013	Akaike info criterion	-52.60069	
Sum squared resid	4.670023	Schwarz criterion	-52.43343	
Log likelihood	1714.523	Hannan-Quinn criter.	-52.53470	
F-statistic	1.950026	Durbin-Watson stat	2.269967	
Prob(F-statistic)	0.000000			

Source: Computed using Eviews 2018

Test of Hypothesis Using T-Test Derived From The Panel Data Model Result.

The t-test value is assumed to be the average weighted and can be used to test hypothesis. We assume that T-tabulated is 5% (0.05).

We reject H₀ if T-calculated > T-tabulated. T-calculated can be obtained from the regression table above. T-calculated = 1.100013.

Hypothesis

H₀: Dividend per share does not significantly affect share price in the oil and gas listed firms in Nigeria

From the panel data result, the t-calculated for DPS is 1.100013 and is therefore compared with 0.05 i.e. $1.100013 > 0.05$ we reject the null hypothesis and accept the alternative hypothesis that dividend per share (DPS) affect share prices (SP) in the oil and gas sector of the Nigeria. Therefore, findings of this study are that dividend per share (DPS) affect SP. This finding corroborates with the theory and model of dividend relevance stated by James Walter.

DISCUSSIONS AND INTERPRETATION OF RESULT

Table 1.3 shows the relationship between share price (SP) and all variables mentioned in the panel data functional relationship model. The SP represent the dependent variable and the independence variables are EPS, DPS, INF and DY. Dividend Yield (DY). The panel data functional relationship result shows the relationship between Dividend Yield (DY) and SP is a negative relationship of 873.4974. This means that one percent increase in dividend yield (DY) will lead to a corresponding fall in share price (SP) listed in the oil and gas sector of the Nigeria stock exchange. The negative outcome in this study corroborates and negates the study of other previous scholars. The work of Rashid & Rahman (2008) shows that there is positive relationship between share price and dividend yield but not statistically significant. The work of Nazir et al (2010) shows that dividend yield affect stock price volatility. Nazir et al uses 73 firms listed in Karachi Stock Exchange (KSE-100) to empirically investigate their analysis. The work of Nazir et al corroborate with this study but negate the findings of the work of Rashid & Rahman, (2008). Therefore, it would not be an overstatement to generalize from this empirical analysis that dividend yield affect share price. Hussainey et al. (2011), stated that firms with higher dividend yield will have minimum share price volatile when compared with firms with low dividend yield having noted that dividend yield is one of the core determinants of the volatility of share price. Earnings per share (EPS) from the above regression result show a negative relationship with share price (SP) of -0.788895. This means that one percent increase in EPS will lead to a fall in SP. Natasha et al (2017) on their study titled 'the effect on earnings per share on share price, the south Africa evidence' stated that EPS is a strong accounting indicator of risk because any up and down movement of EPS reflect on share price. Their study shows that the impact of EPS on share price is dependent on the degree of EPS as Natasha et al (2017) splinted EPS into three degree. Vaidya (2014) stated that the purpose for calculating EPS is for profit distributing hence EPS represent a quantum of share price. Having noted the significance of EPS on SP, some studies such as Almunani, (2014), Chang et al (2008), Haque & Faruquee (2013) Menaje (2012), Menike & Prabath (2014) and Sharma (2011) justify that there is an EPS as a significant relationship with SP. To generalize this relationship, this study therefore shows empirical that the relationship between EPS and SP is negative in the oil and gas sector. Dividend Per Share (DPS) shows a positive relation with SP of 26.75235. This means that one percent increase in DPS will lead to a corresponding increase in SP. We can deduce that Share Price belong to an investment class called asset. Bond belong to that class of asset. Harley Tega et al (2012). Harley Tega et al noted that the bond prices increase as bond approaches maturity. In this context where there is a positive relationship between DPS and SP, there is certainty that as firms in the oil and gas sector regularly pays dividend the dividend

per share will positively affect share price in the oil and gas sector of the Nigeria economy in the long run. This however, justify the theory of dividend relevance policy that investor is interested in the future benefit if they purchase stock today. The panel functional relationship between DPS and SP is 26.75235. This indicates a positive relationship. From the economic criterion, it is expected that DPS should be positive and thus bring about a positive effect on SP. Therefore, the result of DPS corroborate with the apriori expectation. In this study, dividend per share (DPS) is computed by dividing earns by number of shares. Since the shares of firms operating in the oil and gas sector in Nigeria are highly sorted for having noted that the Nigeria economy is a mono economy, this make the dividend per share to move in an opposite direction with the share price as most investors are not interested in dividend but on the movement of share price for profit making. This decision corroborates with the dividend relevance theory and the efficient market hypothesis. In this study, we can also deduce that there is a positive relationship between INF and SP of 0.885891. Based on apriori expectation, there should be a negative relationship between INF and SP. Therefore, the result of this study negates the apriori expectation. This study does not corroborate with the assumptions that Inflation has a negative impact on any economic value. In this study the relationship between inflation and SP tends to be positive indicating that one percent increase in inflation will lead to a rise in SP of about 0.885891. In the result, the coefficient of determination is very high. It shows that about 100 percent of the total variations in SP are explained by all the independent variables in the panel data functional relationship. The adjusted R^2 also indicates that about 100 percent of the total variations in SP are explained by the functional relationship. This however, indicates that the dependent variable and the independent variables are good fit. The F-statistic is significant at 5 percent critical level. It indicates that the joint variations of the model are significant.

REFERENCES

- Amidu, M. (2007). How does dividend policy affect performance of the firm on Ghana Stock Exchange, *Investment Management and Financial Innovations*, 4(2), 104 – 112.
- Azhagaiah, R. and Priya, S. N. (2008). “The impact of dividend policy on Shareholders’ wealth” *International Research Journal of Finance and Economics* 20. 180-187.
- Baker, H. K. & Powell, G. E. (1999). How corporate managers view dividend policy?. *Quarterly Journal of Business and Economics*, 38(2), 17-27.
- BAKER, K.et al. (2002) Revisiting Managerial Perspectives on Dividend Policy. *Journal of Economics and Finance*, 26(3), 267-283.
- Baskin, J. (1989). “Dividend Policy and the Volatility of Common Stock”, *Journal of Portfolio Management*, 15(3): pp19-25.
- Black, F. & Scholes, M. (1974). The effects of dividend yield and dividend policy on common stock prices and returns. *Journal of Financial Economics*, 1 (1), 1-22.
- Collins, J. (1957). How to Study the Behavior of Bank Stocks. *The Analysts Journal*, 13(2): 109-113.
- Duke, S. B., Ikenna, N.D. & Nkamare, S. E. (2015). Impact of Dividend Policy on Share Price Valuation in Nigerian Banks. *Archive of Business Research*, 3(1)156-170.

- Eugene F. Fama (1965) Behaviour of Stock-Market Prices. *Journal of Business*. 38(1), 34-105.
- Frankfurter, G. M. and Wood, B. J. (2002), "Dividend Policy Theories and their Empirical Tests", *International Review of Financial Analysis*, 11(2) 111-138.
- Gordon, Myron, 1962, *The Investment, Financing, and Valuation of the Corporation*, Irwin Publishing.
- Graham, B. and Dodd, D. L. (1934), *Security Analysis*, 1st edition, New York: McGraw Hill Book Co.
- Harley T. W. & Ayodele D. T. (2017) An Empirical Investigation of the Impact of Dividend Policy on Performance of Quoted Companies in a Developing Economy. *Singaporean Journal of Business, Economics and Management*. 5 (12), 1-7.
- Husam-Aldin Nizar Al-Malkawi, Michael Rafferty & ekha Pillai, (2010), Dividend Policy: A Review of Theories and Empirical Evidence. *International Bulletin of Business Administration*. 9(1), 171-201.
- Hussainey K, Mgbame CO & Chijoke-Mgbame AM (2011) Dividend policy and share price volatility: UK evidence, *Journal of Risk Finance*, 12 (1), 57-68.
- Masum, A. A. (2014). Dividend policy and its impact on stock price—A study on commercial banks listed in Dhaka stock exchange. *Global Disclosure of Economics and Business*, 3(1), 9- 17.
- Michael R. Baye & Dennis W Jansen (2006). *Money banking and financial markets an Economics approach*.
- Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, 34(4), 411-433.
- Mukora, W.Y.M, (2014). The effects of dividend announcement on stock returns of firms listed at Nairobi Securities Exchange. Masters of Science Thesis. University of Nairobi. Unpublished.
- Nazir, M. S., Nawaz, M. M., Anwar, W., & Ahmed, F. (2010). Determinants of stock price volatility in karachi stock exchange: The mediating role of corporate dividend policy. *International Research Journal of Finance and Economics*, 55, 34-38.
- Nduka Moseri (2018): The effect of Dividend Policy on Share Price of listed firms in the oil and gas sector in Nigeria. Dissertation submitted to the Department of Finance, University of Leicester. Unpublished dissertation.
- Nissim, D., & Ziv, A. (2001). Dividend Changes and Future Profitability. *Journal of Finance*, 56(6), 2019–65.
- Omran, M. and Pointon, J. (2004). "Dividend policy, trading characteristics and share prices: empirical evidence from Egyptian firms," World Scientific Publishing Company, *International Journal of Theoretical and Applied Finance*, 7, (2): 121-133.
- Pandey, I. M. (2005), *Financial Management* 9th edition, New Delhi: Vikas Publishing House PVT Ltd.
- Priya & Mohanasundari (2016). Dividend Policy and Its Impact on Firm Value: A Review of Theories And Empirical Evidence. *Journal of Management Sciences and Technology*, 3(3), 59-69.

- Rahman, A. Z. M. Anisur (2008) Dividend policy and stock price volatility: evidence from Bangladesh. *Journal of Applied Business and Economics*, 8 (4), 71-81.
- Sharma S. (2011) Determinants of Equity Share Price in India. *Journal of Arts, Science and Commerce*. 2(4), 51-60.
- Waithakaet, John, Jonah Julius & Patrrick. (2012). Effect of Dividend Policy on Share Price. *Prime Journal of Business Administration and Management*, 2(8), 642-648.
- Zakaria, Z., Muhammad, J., and Zulkifi, A. (2012). The Impact of Dividend Policy on Share Price Volatility: Malaysian Construction and Material Company. *International Journal of Economics and Management Sciences*, 2(5), 1-8.
- Zhou, P. & Ruland, W. (2006). Dividend payout and future earnings growth. *Financial Analysts Journal*, 62(3), 58 – 69.