



## **DIVIDEND POLICY AND SHAREHOLDERS' WEALTH AMONG FINANCIAL AND NON-FINANCIAL FIRMS**

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**ABSTRACT:** *Firms are at liberty to adopt a dividend policy that best supports the attitude of their investors. Shareholders however, seeks to look out for high paying investments with an acceptable risk. The peculiarities of financial services and non-financial services firms in Nigeria presumes that shareholders may react differently to dividend policies in both sectors. This study therefore investigated the effect of dividend policy on shareholders' wealth among 19 financial and 41 non-financial, with eleven-year period spanning 2006 to 2016. The Chow and Hausman tests were relied on to adopt the Fixed Effect for the financial services sector model and Random Effect for the non-financial services sector model. The findings showed that dividend policy and its control variables accounted for 70% and 67% of the variation in shareholders' wealth of the financial services and non-financial services sub-sector in Nigeria. For the financial services firms, none of the dividend policy variables (dividend payout and dividend yield) had a significant contribution to shareholders' wealth; while dividend payout had a positive and significant effect on shareholders' wealth in the non-financial services firms. The moderating variables of a dividend policy that can influence shareholders' wealth in the financial services firms are positive effects of the firm size and growth opportunities while the positive effect of firm size and profitability drives dividend policy influence in the non-financial services sub-sector. The study thus posit that dividend policies drives shareholders wealth in non-financial firms, which implies that investors in non-financial services sector prefers dividend returns to other forms of investment returns like capital gains.*

**KEYWORDS:** Dividend Policy, Shareholders Wealth, Share Prices, Financial and Non-Financial Firms, Nigeria

### **INTRODUCTION**

The primary objective of financial management is to maximize firms' value to the owners and the stakeholders (Priya & Mohanasundari, 2016). Managers achieve this through the three corporate financial decisions on investment, financing and dividend payment. Seyedkshosroshahi, Sabaei and Vatankhah (2013), opined that "Investment" determines how the firm could allocate its resources; "financing" defines the combination of the required resources for investment and; "Dividend" answers the question of how much should be paid to shareholders.



Dividend distribution by a corporate firm is a fundamental obligation to shareholders and therefore ranks as one of the most important of all corporate financial policies (Uwuigbe, Jafaru & Ajayi, 2012). Company's ability to consistently pay out increased dividend over time conveys information about the management's assessment of the firm's future prospects. Dividend decisions, therefore, send strong signals to the market about firm's fundamentals. The investigation towards revealing the key determinants of dividend policy has been on over the years but still remains a puzzle. Research works on this subject have no doubt increased our understanding of the concept of dividend policy and its constituents but the puzzle still persists (Black, 1976). This could be the justification for the position taken by a school of thought that researchers have merely contributed to the multiple paradoxes of corporate dividend policy, thereby adding more pieces to an enlarged puzzle rather than finding the final matching piece that would provide a more precise and complete understanding of the determinants of dividend policy.

In early corporate finance practice, dividend policy referred to a corporation's choice of whether to pay its shareholders a cash dividend or to retain its earnings. It addressed the frequency of such payments (whether annually, semi-annually or quarterly) and how much the company should if it decides to pay. Dividend policy, in today's corporations, has progressed beyond this scope to include such issues as whether to distribute cash via share repurchase or through specially-designated rather than regular dividends. Other issues considered are how to balance the preferences of highly taxed and relatively 'untaxed' investors; how to maintain, and improve the shareholders' wealth vis-à-vis, value of its shares and stocks in the market.

Shareholder's wealth is the present value of the expected future returns to the owners of the firm. The most widely accepted objective of the firm is to maximize the value of the firm for its owners, that is, to maximize shareholder wealth. The price of the stock is used to measure the primary goal of maximising shareholders' wealth (Priya & Azhagaiah, 2008). A rising stock prices may imply improve wealth to the shareholders and decreasing stock prices, the reverse in shareholders' wealth. Shareholders' value is predominantly a function of the company's investment, financing and dividend decisions. The place of dividend decisions in determination of shareholders wealth hinges on the assumptions that dividend policies sends signals to can be used to evaluate firm performance.

In the earliest works on dividend matters, Miller and Modigliani (1961) posited that investors should be indifferent to whether or not they receive dividends now or capital appreciation in the future. This idea is known as the Dividend Irrelevance Theory. According to them, an increase in current dividends must lead to a reduction in the terminal value of the existing shares because the dividend stream on the existing shares must be diverted to attract outside capital from which higher future dividends are paid. This theory has been grossly criticised for the assumption that markets are frictionless and does not carry transaction costs. These arguments have given rise to varying explanations on how dividend policy can affect firm value by other theorists.

The position of Proshare (2016) as cited in Inyiama and Ubesie (2016:1) seems to support the relevance proponents of dividend policy that dividend-paying stocks, for many investors, have come to make a lot of sense in Nigeria given the traditional belief that making returns on investment is the essence of engaging in any investment or business venture. It further emphasized that many investors think of dividend-paying companies as having low-return investment opportunities compared to high-flying small capitalised companies whose volatility



can be exciting; thus, representing dividend-paying stocks as more mature and predictable. In Nigeria where capital gains are one of the items that enjoy tax exemptions (Capital Gains Tax Act Cap. 354 LFN, 1990, as amended, 2004), and dividend incurs 10% tax rate at the source, one would think that investors may disregard dividend-paying firms for the non-paying firms.

In a quest to understand the workings of the quoted firms in the financial and non-financial sectors of Nigeria, this study observed a number of heterogeneities from preliminary descriptive analyses. Among these observations is glaring discrepancy in their dividend payment pattern wherein greater proportion (53%) of the financial firms pay dividend from corporate reserve and yet greater proportion (58%) also are non-dividend paying firms as compared to 32% and 37% payment dividend payment from reserve and non-dividend paying policy, respectively. This understanding according to authors will boost the robustness of the findings following that this form of unique industry factors could influence results on the dividend-performance nexus (Rashid & Rahman, 2008; Khan, 2010).

Contextually, understanding the possible effect of dividend policies of Nigerian firms becomes pertinent. The core interest is to understand the signals that dividend decisions of management send to the users of its financial statements. The study did not intend to explain the factors that determine dividend policies but rather the aftereffects of these dividend policies. In an imperfect market like Nigeria, where insider information may exist, it is difficult to monitor firm operations and decisions from outside. A study has to be carried out to assist investors to capitalise on available information on a firm's dividend policy, as a signal to make feasible investment decisions through the stock market.

Extant studies in Nigeria have shown divergent and conflicting findings on the effect of dividend policy variables (dividend per share, dividend payout ratio, and dividend yield) on shareholders' wealth. For instance, on dividend per share, studies from Adeleke and Obademi (2013), Garba (2014), Ordu, Enekwe & Anyanwaokoro (2014), Ojeme, Mamidu and Ojo (2015), Sulaiman and Migiro (2015), Omoregie and Eromosele (2016), Simon-Oke and Ologunwa (2016) posited significant positive effect on shareholder wealth while Ezejiofor, Echekeba, Nwaolisa, Adigwe and Onyali (2014), Ordu, *et al* (2014), Alayemi (2013) reported that it has no effect. The dividend payout ratio had significant positive effects from Oyinlola *et al* (2014) but no effect from Anike (2014) while dividend yield showed a significant positive effect from Duke, Ikenna and Nkamare (2015) but the significant negative effect from Anike (2014). With these arrays of different arguments in this issue, further research should be undergone in order to have a better understanding in this area.

**Table 1: Extant Eclectic Studies on Dividend Policy and Shareholders Wealth Nexus in Nigeria**

Independent Variables	Findings		
	Positive Effect	Negative Effect	No Effect
Dividend Per Share (DPS)	Adeleke and Obademi (2013), Garba (2014), Ordu, <i>et al</i> (2014), Ojeme, <i>et al</i> (2015), Sulaiman and Migiro (2015), Omoregie and Eromosele (2016), Simon-Oke and Ologunwa (2016)		Ezejiofor, <i>et al</i> (2014), Ordu, <i>et al</i> (2014), Alayemi (2013)
Dividend Payout Ratio (DPR)	Oyinlola and Ajeigbe (2014)		Anike (2014)
Dividend Yield (DY)	Duke, <i>et al</i> (2015)	Anike (2014)	
Survey	Ozuomba, <i>et al</i> (2016), Dada and Awoyemi (2015)		

Despite these conflicting results on dividend policy effects in Nigeria witnessed on Table 1, Pradhan (2014) has given clue that all change on share prices may not be associated with dividend policy variables. It supposes that the mix-ups in empirical results in Nigeria could be that these studies only captured the time variances arising from an only boom or bear trend perspectives. Any study that uses a wider time frame covering periods of economic boom and periods of economic crises/recession could produce a more reliable cause-effect model of dividend policy in the Nigerian context.

## THEORETICAL FRAMEWORK

The theoretical framework of shareholders' wealth and dividend policy nexus hinges on the Miller and Modigliani (MM) Theory, the Bird-in-the-Hand theory, and the Signalling Theory. These theories can be grouped into two proponents: the dividend irrelevance and the dividend relevance proposition. The MM theorists posit that dividend policy does not matter therefore firms should use their profits in a manner that improves capital gains only. The MM theory argues that dividend payment is irrelevant to the firm performance and as such should be ignored. This generally supposes that investment policy and financial leverage has no effect on the cost of capital; and that investors and managers have the same information about prospects;



the distribution of income has no effect on the cost of equity, and capital budgeting policy is independent of its dividend policy (Panigrahi & Zainuddin, 2015). Thus, the MM theory seems to becloud practicable financial management and would hardly fit the real world of market imperfection.

The bird-in-the-hand theory has been developed by Gordon in the year 1962, developed a more realistic model that explains how dividend policy can carries a rich amount of information content sound enough to enable investors to evaluate the firm. The bird-in-the-hand theory posits that time value of money makes it that cash dividend paid is worth more than capital gain expected in the future. This supports share pricings being the measure for shareholders wealth can be influenced by dividend policies. The Gordon's model believes that the dividend policy impacts the company in various scenarios. If the growth rate of return is above the cost of capital (CoC), shareholders will be benefited more if the company reinvests the dividends rather than distributing it. In addition, when the internal rate of return (IRR) is equal to the cost of the capital (CoC), the reinvestment of the dividends would not make any difference. This model has therefore been greatly criticized due to the assumption of constant IRR and CoC, which is not accurate, as it means business risks are not accounted (Panigrahi & Zainuddin, 2015). The "bird-in-the-hand" theory is however relevant to shareholder wealth evaluation. Time value of money is the focal point of the argument. Thus, cash dividend paid today is expected to worth more than capital gain expected in the future.

On the other hand, the Lintner's (1956) Signalling Effect Theory, also known as information content theory posits that dividend payment carries material information to shareholders and investors in the stock market about the prospects of its performance. The firm managers have the necessary information about the financial position and costing which the investors and existing shareholders do not have. The managers relied on this information to make a financial forecast on the future growth prospects of the firm. This information can be used for or to the detriment of the shareholders. The shareholders use external information as a measure of the intents of managers and prospects of the firm. Thus, the investors and existing shareholders may rely on the external pieces of information, one of which is the one offered by the dividend payment, as an outlook to the business prospects of the firm. Hence, dividend policy has information content that serves as signals. For this reason, the capital market responds quickly to the announcements of share buybacks as they offer new information that is often called a signal to the shareholders or investors about a company's future and hence its share price (Panigrahi & Zainuddin, 2015).

The two important assumptions of the signalling theory are that (1) outside investors have imperfect information regarding the firm's future cash flows and capital gains, and that, (2) dividends are taxed at a higher rate compared to capital gains. Both assumptions are true to the real world: the imperfect capital market system. Thus, this theory could be the most suitable of all the three (3) theories on which this study is based. Bhattacharya (1980) argued that dividends might function as a signal of expected future cash flows. Under these assumptions of the imperfect market, even when there is a tax disadvantage for dividends, firms would prefer dividend payment in order to convey positive signals to investors and shareholders who do not have first-hand information about the firm.

For these reasons, investors and shareholders use dividend policy as an eye into the affairs of the firms (Healy & Palepu, 1988, Murhadi, 2008). They follow dividend policy in making their investment decisions. For instance, Lindeman (2016: 44-45) would explain that reduction in



firm's dividend signals that everything is probably not going as planned and expected financial results were not achieved; as such investors reactions reflect on the share price, presumably making it decrease in value. On the other hand, increasing and high dividend payout will signal growth opportunities and as such, shareholders can re-invest the funds in the high dividend paying firms thereby providing opportunities for expansion in the future (Duke, *et al*, 2015). Presumably, this expectation may bring about the rise in the share price. However, Duke, *et al* explained that level of dividend payment (high or low) does not always connote that a firm is doing well or poorly. Duke's *et al* explanation is true especially when firms can go out of their way to pay a dividend from past years reserves.

According to Oppong (2015:26), the dividend signalling theory has several implications for the firm. These include: (1) firms will pay dividends to signal quality goodwill to the market; (2) firms will be very reluctant to cut their dividend because that will provide a negative signal; (3) firms will not increase their dividend unless they feel comfortable that they can maintain the dividend in the future; (4) as a result, the pattern in dividend payments will be much smoother than the pattern in earnings or cash flows; (5) As dividend increases are associated with positive stock price changes, and dividend cuts associated with negative stock price changes, firms may forego projects that add value to the firm in order not to have to cut the dividend. Further to this, Oppong (2015:26) asserted that firms would normally be reluctant to cut dividends. As investors know this, they would hence interpret dividend cuts to indicate a serious problem; this makes firms more reluctant to cut dividends. This theory is therefore of huge significance to this study, as it implies that dividend policy can be employed to convey information about the cost of investment.

## METHODOLOGY

**Research Design:** The ex-post facto research designs were employed. The study is of the opinion that the ex-post facto research design is suitable when the data already exist and the researchers do not intend to change the state of the data (Onwumere, 2009; Kerlinger, 1973). Thus, analyses were performed without direct intervention from concomitant variations of independent and dependent variables.

**Population of the Study:** The population of the study comprised all the 173 firms quoted on the Nigerian Stock Exchange as at June 20, 2017 ("Nigerian Stock Exchange", 2017). The population is considered finite and divided into twelve sectors consisting of agriculture, conglomerates, construction/real estate, consumer goods, healthcare, ICT, industrial goods, natural resources, oil and gas, services, financial services and utilities. However, no firm has been registered under the utility sector as at date. The comprehensive number of firms are shown in Table 2.

**Table 2: Sample Selection from Firms Quoted on the NSE**

SN	Sectors Quoted in the NSE	Total Number of Companies*	Sample**	Percentage Distribution**	
				Sample	Population
1	Agriculture	5	2	3.3%	2.9%
2	Conglomerates	6	2	3.3%	3.5%
3	Construction/Real Estate	8	3	5.0%	4.6%
4	Consumer Goods	22	8	13.3%	12.7%
5	Healthcare	11	4	6.7%	6.4%
6	ICT	7	2	3.3%	4.0%
7	Industrial Goods	17	7	11.7%	9.8%
8	Natural Resources	4	2	3.3%	2.3%
9	Oil and Gas	12	3	5.0%	6.9%
10	Services	24	8	13.3%	13.9%
11	Financial Services	57	19	31.8%	33.0%
12	Utilities	0	0	0%	0%
	Total	173	60	100%	100%

Sources: \*\*Author's computation, \*Extracts from the list firms of quoted on the Nigerian Stock Exchange, as at June 20, 2017

**Sample Size and Sampling Technique:** The sample of the study is 60 firms purposively selected from the firms quoted on the Nigeria Stock Exchange which is about 34.7% of the total population of 173 firms. However, the proportional sampling technique was adopted to adequately accommodate the eleven active sectors in the Nigerian Stock Exchange (see Table 2).

**Sources and Nature of Data:** The study employed a panel data set from the annual reports and financial statement of firms quoted on the Nigerian Stock Exchange. The panel covered a time frame of eleven (11) years from 2006 to 2016 and a cross-section of 60 firms. Thus, it is a secondary data set.

### Description of Variables

The variables included in the study are in line with the dividend policy and shareholders' model developed. In line with the ideology of Chang and Lee (1982), the variables were normalized (by the earnings or other relative data) so that spurious correlation and multicollinearity problems can be avoided or reduced. The description of the variables aims to explain the measure adopted and its justification for the study.

- 1. Shareholders Wealth (SW):** This is measured as the stock market price per share. It is generally used as a measure for shareholders wealth in literature. Theoretically, it increases with increased dividend payment. Thus, shareholders, wealth has a positive effect on dividend policy.



- 2. Dividend Payout Ratio (DPO):** This is the amount of earnings paid out as a dividend to shareholders. It measures the amount of the profit distributed as a dividend to stockholders. Investors can use the payout ratio to determine what companies are doing with their earnings. The higher the dividend payout ratio, the more attractive the stock is to the stockholders (Ullah, Saqib and Usman, 2015). It is the sum of the cash dividend paid to common shareholders divided by the earnings per share for each year. This method is the general formula used in literature for the computation of the dividend payout ratio (see Hashemijoo, Ardekani and Younesi, 2012).
- 3. Dividend Yield (DY):** Dividend yield comprises the total dividend paid and how the stock market perceived the firm during the time of valuation (Egbeonu, *et al*, 2016). Therefore, it is a profitability indicator expressed as a cash dividend per share for common stocks divided by the per share market value, that is, dividend per share divided by the market value per share (Oyinlola & Ajeigbe, 2014).
- 4. Firm Size (SIZE):** Firm size is the measure of the largeness or smallness of the firm. Various indicators of firm size are the volume of sales, total assets, market capitalization, turnover and interest received and receivable from banks. However, there is no theoretical reason for using a particular measure of size (Hackston & Milne, 1996). The most common measure of firm size in studies of dividend policy has been the total asset. This study adopted that asset as the measure of size. It is measured by the natural logarithm of total asset.
- 5. Firm Liquidity (FLIQ):** Liquidity measures the availability of money or near money for immediate cash spending. In this study, firm liquidity is measured as cash divided by the total asset.
- 6. Firm Leverage (LEV):** This measures the level of debt involved in the operating of the firm. A firm can have huge debt compared to equity (high levered) or small debt compared to equity (low levered). Leverage is calculated as the ratio of total debts to total assets.
- 7. Firm Growth Prospects (GR):** Firms growth can be measured in terms of asset, sales or income revenue. In this study, the firm growth rate is achieved based on a percentage of the difference in sales of the current year from the previous year divided by the sales of the previous year (Rashid & Rahman, 2008; Irandoost, Hassanzadeh and Salteh, 2013).
- 8. Firm Profitability (PROF):** Firm profitability was measured using the return on equity. Return on equity is a measure that shows investors the profit generated from the money invested by the shareholders (Epps & Cereola, 2008). It measures the profitability of shareholders' investment and shows the net income as a percentage of shareholders' equity. The ROE is adopted in this study because it is widely used by investors to measure a company's earnings performance (Bizuayehu, 2015). This is calculated by dividing the firm's value of profit after tax with shareholders' equity. Return on equity is a meter of a firm's ability to earn profits by assessing the amount a company makes through the investments of the shareholders (Sharif, et al, 2015). In general, financial analysts consider the return on equity ratios in the 15-20% range as representing attractive levels of investment quality (Richard, 2015 as cited in Bizuayehu, 2015).



## Model Specification

This study regressed dividend policy variables and corresponding control variables on shareholders wealth. If the relevant control variables are omitted from the regression equation, as is well known in econometrics, the estimates obtained are likely to be biased (Chang & Lee, 1982); and its inclusion is capable of limiting the confounding complications that may apply (Malombe, 2011, Hashemijoo, *et al*, 2012; Kenyuru, Kundu and Kibiwott, 2013). Therefore, the regression model is such that dividend policy and its confounding variable(s) are the explanatory (independent) variables, while share price (shareholder wealth), is dependent variable.

The use of both dividend payout ratio and dividend yield as proxies for dividend policy decisions of the selected firms is replete in extant literature across different economies even in Nigeria (Waworuntu, *et al*, 2017). This approach was adopted as in Hashemijoo, *et al* (2012), and Kenyuru, *et al* (2013) as applied to stock volatility model and profitability model (Malombe, 2011).

The equation of the relationship between dividend policy and shareholders' wealth is thus:

$$SW_{it} = a_0 + a_1DPO_{it} + a_2DY_{it} + a_3SIZE_{it} + a_4GR_{it} + a_5PROF_{it} + a_6FLIQ_{it} + a_7LEV_{it} + \mu_i \quad (1)$$

Where:

Symbol	Meaning	Apriori Expectation
SW =	shareholder wealth proxied by Market Price per Share	Dependent variable
DPO =	Dividend payout ratio measured as dividend per share divided by earnings per share	Positive
DY =	Dividend yield measured as dividend per share divided by market price per share	Positive
SIZE =	firm size measured as the log of Total Assets	Positive
GR =	growth opportunities measured as income revenue growth	Positive
PROF =	Profitability measured as return on equity	Positive
FLIQ =	Firm liquidity proxied cash to asset ratio.	Positive
LEV =	Financial leverage proxied by total debt to total asset	Negative

The subscripts t denotes the time frame covered while i subscripts denotes the firms.  $\mu$  is the error term.  $a_0$  is the constant,  $a_{1-2}$  is the coefficients of dividend policy while  $a_{3-7}$  are the coefficients of the control variables.

The control variables included in this model are firm size (SIZE), growth opportunities (GR), profitability (PROF), firm liquidity (FLIQ) and financial leverage (LEV). The inclusion of these variables are supported by previous studies: Firm size (Salih, 2010; Iqbal, Waseem and Asad, 2014, Chenchene, *et al*, 2015; Waworuntu *et al*, 2017), Growth opportunities



(Waworuntu, *et al*, 2017), profitability (Chenchehene, *et al*, 2015), firm liquidity (Salih, 2010) and LEV (Chenchehene, *et al*, 2015; Waworuntu *et al*, 2017).

### Method of Data Analyses

Data analyses is based on panel regression technique consisting of Pooled Ordinary Least Square (OLS), Fixed Effects (FE) Model and Random Effects (RE) model. The Pooled Ordinary Least Square (OLS) is suitable if it is found that both the time series and the cross-section of firms, do not have an effect on the regression results. When there is no time and firm effect in the models, it implies that the often-present omitted variable bias in Pooled OLS estimations is not in the results. One way to deal with this is to assume that the omitted variable is constant over time and use certain statistical methods to control for the unobserved heterogeneity. This method gives rise to the use of panel regression (fixed or random effect model).

If it is assumed that both time and firm-specific effect exist in the model, the random effect is deal but where there is no time effect, the fixed effect becomes permissible. In determining the most appropriate analytical technique, both the poolability and Hausman tests were conducted. The poolability test was used to select between OLS and the fixed effect model, while Hausman test decided between Fixed and Random Effect.

The null hypothesis is based on the lack of individual and group effects; and is the hypothesis is as follows:

Ho: pooled model

Hi: Fixed effect model

**Decision Rule:** At 0.05 level of significance, reject H<sub>0</sub> if the probability of test statistic (H) is less than 5% significant level; otherwise do not reject H<sub>0</sub>.

For the Hausman test, the null hypothesis underlying its use is that fixed and random effects models do not differ substantially; with the following hypothesis:

Ho: Random effects would be consistent and efficient

Hi: Fixed effects would be consistent and efficient

**Decision Rule:** At 0.05 level of significance, reject H<sub>0</sub> if the probability of test statistic (H) is less than 5% significant level; otherwise do not reject H<sub>0</sub>.

Empirically, if the probability value of the chi-square is greater (less) than 0.05, the estimation based on the Random effects (Fixed effects) will be better off.



## RESULTS

The results of regression analyses on the effect of dividend policy on shareholders' wealth are presented in Table 3 (for the financial firms) and Table 4 (for the non-financial firms). The suitable panel regression technique was determined using the Chow and Hausman tests.

For Table 3, the financial firms, the test to select between the pooled OLS regression and panel data regression (Chow test) showed a Chi-square result (134.9292) with probability value (0.0000) less than 0.05 level of significance. Thus, the null hypothesis that the pooled model is preferred, is rejected. The further test to choose between the Fixed and Random Effect models was done using the Hausman test. The Hausman statistics (Chi-square) value of 41.382 (0.0000) was rejected at 0.05, therefore, the null hypothesis that random effects would be consistent and efficient is rejected. Thus, the Fixed effect model is chosen for analysing the effect of dividend policy on shareholders' wealth. This implies that results are time-invariant but the individuality of the selected firms are recognised (factored in) in explaining the effect of dividend policy on shareholders' wealth among the financial firms.

For the non-financial firms, the preferred model is the random effect technique. At the 0.05 level of significance, the poolability test rejected the use of the Pooled OLS regression, and the Hausman test rejected the use of a fixed effect model. Using the random effect model implies all the selected non-financial firms have a common mean value. That is, both time and firms' specific characteristics do not affect the results.

Table 3 revealed an R-square of 0.7000 indicating that about 70% of changes in shareholder wealth can be explained by dividend policy (DPO, DY) and the control values (Size, GR, PROF, FLIQ and LEV). The F-statistics (14.6563) with a probability value of (0.0000) which is less than 0.05 indicates that at least one of the explanatory variables have a significant effect on shareholders' wealth of the financial firms in Nigeria. The Durbin Watson statistics of 1.6901 suggests that there is no autocorrelation in the model.

From the coefficient or regression, it can be seen that DPO has a positive but insignificant effect on shareholders' wealth, while DY has a negative and insignificant effect on shareholders' wealth. This implies that dividend policy may not lead to changes in shareholders' wealth of the financial sub-sector firms in Nigeria.

The results from the control variables showed that firm size (8.9677), and growth opportunities (0.0235) have a significant positive effect on shareholders' wealth. The results imply that a percentage increase in firm size is capable of increasing shareholders' wealth by 8.97%. More so, a unit increase in growth opportunities (revenue generation) might lead to 0.02 units of increase in shareholders' wealth. This suggests that firm size and growth opportunities are strong variables that can be factored into dividend policies to boost shareholders' wealth of the financial firms in Nigeria.

The other control variables including firm profitability (0.0184), firm liquidity (0.0270) and financial leverage (0.0257) have a positive but insignificant effect on shareholders' wealth of the financial firms in Nigeria. This implies that profitability, liquidity and financial leverage do not necessarily influence firm shareholders' wealth through its dividend policies.

**Table 3: Result of the Effect of Dividend Policy on Shareholders Wealth for Financial Firms**

Independent Variables	Method	Pooled OLS	Fixed Effect (Preferred Model)	Random Effect
Constant (C)		-41.3697 (-5.4218)	<b>77.9042*</b> ( <b>3.8277</b> )	-15.6742*** (-1.7295)
Dividend Payout Ratio (DPO)		0.7453 (1.2320)	<b>0.0921</b> ( <b>0.1952</b> )	0.3608 (0.7749)
Dividend Yield (DY)		-0.2844*** (-1.7563)	<b>-0.0888</b> ( <b>-0.6352</b> )	-0.2773** (-2.1191)
Firm Size (SIZE)		6.2949* (5.0195)	<b>8.9677*</b> ( <b>3.6131</b> )	2.1618 (1.6171)
Growth Opportunities (GR)		0.0399* (3.1638)	<b>0.0235**</b> ( <b>2.2497</b> )	0.0426* (4.4672)
Firm Profitability (PROF)		0.0414*** (1.9184)	<b>0.0184</b> ( <b>1.0772</b> )	0.0263 (1.5636)
Firm Liquidity (FLIQ)		0.0315 (0.5855)	<b>0.0270</b> ( <b>0.5654</b> )	-0.0249 (-0.5736)
Firm Leverage (LEV)		-0.0617 (-1.3041)	<b>0.0257</b> ( <b>0.4547</b> )	0.0701 (1.5010)
R-Squared		0.3729	<b>0.7000</b>	0.1552
F-statistic (Prob)		14.8720(0.0000)	<b>14.6563</b> ( <b>0.0000</b> )	4.5960 (0.0000)
Durbin Watson (DW)		0.504786	<b>1.6901</b>	0.6487
Poolability Statistic			134.9292 (0.0000)	
Hausman test				41.382 (0.0000)

*Dependent Variable: shareholders' wealth (SW), significant at \*1%, \*\*5%, \*\*\*10%;  
( ) t-statistics*

*Source: Extract from Results presented on Appendix 3a*

**Table 4: Result of the Effect of Dividend Policy on Shareholders Wealth for Non-Financial Firms**

Independent Variables	Method	Pooled OLS	Fixed Effect	Random Effect (Preferred Model)
Constant (C)		-278.7586 (-12.1153)	-201.2677* (-3.7637)	<b>-228.8036*</b> <b>(-5.6822)</b>
Dividend Payout Ratio (DPO)		0.0115* (3.0814)	0.0098* (4.7574)	<b>0.0098*</b> <b>(4.7776)</b>
Dividend Yield (DY)		0.4091 (0.6050)	-1.3465* (-2.9201)	<b>-1.2195</b> <b>(-2.6894)</b>
Firm Size (SIZE)		39.4297* (12.1519)	34.1300* (4.5949)	<b>37.3283*</b> <b>(6.7234)</b>
Growth Opportunities (GR)		0.6370 (0.0067)	0.0001 (0.1814)	<b>0.0001</b> <b>(0.2533)</b>
Firm Profitability (PROF)		0.0811** (2.4605)	0.0356*** (1.7814)	<b>0.0409**</b> <b>(2.0702)</b>
Firm Liquidity (FLIQ)		0.3075 (1.5285)	-0.2600 (-1.3811)	<b>-0.1811</b> <b>(-1.0059)</b>
Firm Leverage (LEV)		0.4629* (4.0672)	-0.0086 (-0.0894)	<b>0.0430</b> <b>(0.4643)</b>
R-Squared		0.3639	0.8327	<b>0.6724</b>
F-statistic (Prob)		31.63100 (0.0000)	36.7645 (0.0000)	<b>11.51900</b> <b>(0.0000)</b>
Durbin Watson (DW)		0.3005	1.0180	<b>2.2481</b>
Poolability Statistic			527.6902(0.0000)	
Hausman test				13.142419 (0.0687)

*Dependent Variable: shareholders' wealth (SW), significant at \*1%, \*\*5%, \*\*\*10%; () t-statistics*

The results in Table 4 addressed objective one for the non-financial firms. The preferred model is the random effect technique. From the random effect model, the coefficient of determination (R-squared) value of 0.672 showed that about 67% of changes in shareholders' wealth is explained by dividend policy and host of the control variables included on the model. The result of the F-statistics (11.51900, p. 0.0000) indicates that, at least, one of the explanatory variables is statistically significant in explaining the effect of dividend policy on shareholders' wealth of the non-financial firms in Nigeria.

The coefficient of DPO (0.0098) has a positive and significant effect on shareholders' wealth while dividend yield (DY) has a negative and insignificant effect on shareholders' wealth for



the non-financial sub-sector firms in Nigeria. This means that an increase in the dividend payout ratio would lead to about a 0.01% increase in shareholders' wealth.

However, among the control variables, firm size (37.3283) and firm profitability (0.0409) have a positive and significant effect on shareholders' wealth. This supposes that a unit increase in firm size will contribute approximately 37% increase in shareholders' wealth. In a similar vein, a unit increase in firm profitability result in 0.04% increase in shareholders' wealth.

On the other hand, Growth Opportunities (GR), and financial leverage have a positive but insignificant effect while firm liquidity had a negative and insignificant effect on shareholders' wealth. These variables (growth opportunities, leverage and liquidity) did not influence shareholders' wealth through dividend policies of the non-financial firms in Nigeria.

## DISCUSSION OF FINDINGS

The study has shown that dividend policy variables (dividend payout and dividend yield) did not have a significant contribution to shareholders' wealth for the financial services firms in Nigeria. This means that the financial services sub-sector cannot employ dividend policies to improve their shareholders' wealth. These results tend to suggest that the MM theory of dividend policy applies in the financial services sub-sector of the Nigerian Stock Exchange. Thus, dividend policy was seen as irrelevant financial decisions for firms in the Nigerian financial services sectors. Thus, firms in the financial services sub-sector can only improve its shareholders' wealth by enhancing its earning power and effectively managing its business risks. The investor attitude in the financial services sector is being indifferent to the source of returns which can be dividend payments or capital appreciation. The results provided support for the MM theory of irrelevant dividend policy.

In Nigeria, Anike (2014) study on dividend policy and shareholders' wealth nexus in the commercial banking sector found a mixed result wherein dividend yield had a significant negative impact on shareholders' wealth but dividend payout had no effects. Further disagreement with the present finding is the work of Duke, *et al* (2015) carried out using two Nigerian banks (GTBank and United Bank for Africa) spanning from 2003 to 2013 and found that dividend yield had a positive effect on shareholders' wealth. Other studies (Adeleke, *et al*, 2013; Omoregie, *et al*, 2016; Simon-Oke, *et al*, 2016) conducted on Nigerian banks using the dividend per share as a proxy for dividend policy showed a positive effect on shareholders' wealth. These studies would confirm that there is still no consensus on the effect of dividend policies on shareholders' wealth in the financial sub-sector of the Nigerian Stock Exchange.

For the non-financial services sub-sectors, the dividend payout ratio had a positive and statistically significant effect on the firms' market capitalisation. This suggests that higher payout ratio is capable of engendering improved valuation of the firms' share and hence enhanced shareholders' wealth. However, despite that the payout ratio can increase share prices, the expected increases in share prices would not translate into an improved dividend yield to investors of non-financial services firms. A number of studies in the non-financial service sub-sector of Nigerian Stock Exchange confirmed that dividend policies proxied by payout (Oyinlola, *et al*, 2014), dividend per share (Garba, 2014; Ordu, *et al*, 2014; Sulaiman, *et al*, 2015), and a host of survey studies including Dada, *et al*, (2015) and Ozuomba, *et al* (2016) showed positive effect on shareholders' wealth in Nigeria. These studies supported the



dividend relevance proponents which averred that dividend policy would influence shareholders' wealth such that increase in dividend policy is expected to send a positive signal that the firms have prospects. The reactions to such signals would engender positive evaluation of the firm fundamentals about the shares of the firm and hence results in higher pricing and improved shareholders' wealth. Some Nigerian studies including Ezejiofor, *et al* (2014), Ordu, *et al* (2014), and Alayemi (2013) had supported the irrelevancy of dividend policy on shareholders' wealth. This supposes that the dividend policy nexus on shareholders' wealth for non-financial firms in Nigeria is still not resolved even by this present study.

## CONCLUSION AND RECOMMENDATIONS

Dividend policy has contributed in reasonable measures to shareholders' wealth of the non-financial services firms, but no effect in the financial sector. It is therefore notable that dividend policy effect is not an all-firm, all-season bound policy. As has not been noted in previous studies, the present study showed that dividend policy effects vary between financial and non-financial services firms in Nigeria. This study however, assuaged the position of Khan (2010) that industry characteristics influences that relationship between dividend policies on firm performance. Thus, the study of dividend policies nexus with shareholders wealth has remained a puzzle such that further research rather complicates and creates multiple paradoxes that makes dividend policy an "unending" issue in practice and academics.

The study therefore posits that following recommendations:

1. The Management of firms in the non-financial services sector in Nigeria should consider their firm size and profitability in designing dividend policy aimed at enhancing its shareholders' wealth.
2. Also, for the non-financial services firms, because the firm size and profitability drive dividend policy influence in the non-financial services sub-sector, firm size and earnings volatility should be factored into dividend policies aimed at stabilising stock market volatility.

## REFERENCES

- Adeleke, S. S. & Obademi, O. E. (2013). The impact of dividend policy on shareholders' value: Evidence from Nigeria. Retrieved on June 12, 2017 from [http://www.unilag.edu.ng/opendoc.php?sno=28193&doctype=doc&docname=The% 20impact% 20of% 20dividend% 20policy% 20on% 20shareholders% 20value:% 20Evidence% 20from% 20Nigeria](http://www.unilag.edu.ng/opendoc.php?sno=28193&doctype=doc&docname=The%20impact%20of%20dividend%20policy%20on%20shareholders%20value:%20Evidence%20from%20Nigeria).
- Alayemi, S. A. (2013). Relationship between dividend payout and market price of shares: A case study of selected companies in food and beverages companies in Nigeria. *Indian Journal of Commerce & Management Studies, IV (1)*, 116 – 121.
- Anike, E. A. (2014). The impact of dividend policy and earnings on stock prices of Nigeria banks. A Dissertation Submitted to the Department of Banking & Finance, Faculty of Business Administration in Partial Fulfilment of the Requirements for the Award of Master of Science (M.Sc) Degree in Banking and Finance. University of Nigeria,



- Nsukka. Retrieved from <http://www.unn.edu.ng/publications/files/ANIKE,%20ESTHER%20AMUCHE.pdf>.
- Bizauyehu, M. (2015). The impact of credit risk on financial performance of banks in Ethiopia. A thesis in College of Business and Economics. Addis Ababa University, Ethiopia for the award of M.Sc. degree in Accounting and Finance. Retrieved from <http://etd.aau.edu.et/bitstream/123456789/6799/1/Misker%20Bizuayehu.pdf>.
- Black, F. (1976). The dividend puzzle. *Journal of Portfolio Management*, 2(1), 1-22.
- Chenchehene, J. & Mensah, K. (2015). Dividend policy and its effects on shareholders wealth: Evidence from UK retail industry. *International Journal of Liberal Arts and Social Science*, 3(2), 52 – 64.
- Dada, O. D. & Awoyemi, S. O. (2015). An appraisal of the influence of dividend policy on share pricing of quoted companies in Nigeria. *IOSR Journal of Business and Management*, 17(12), 08-16.
- 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.
- Egbeonu, O., Paul-Ekwere, L. & Ubani, G. I. (2016). Dividend policy and share price volatility: A co-integration analysis. *International Journal of Advanced Academic Research*, 2(8), 59 – 75.
- Epps, R. W & Cereola, S. J (2008). Do Institutional Shareholder Services (ISS) corporate governance ratings reflect a company's operating performance? *Critical Perspectives on Accounting*, 19 (1), 1138-1148.
- Ezejiolor, R. A., Echekeba, F. N., Adigwe, P. K. & Onyali, C. (2014). Relevance of corporate dividend policy on the shareholder's wealth. *Scholars Journal of Economics, Business and Management*, 1(10), 493-504.
- Garba, A. (2014). Impact of dividend- per- share on common stock returns: A case study of some selected manufacturing firms listed on the Nigerian stock exchange. *European Journal of Business and Management*, 6(30), 36 – 42.
- Hackston, D., & Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77 – 87.
- Hashemijoo, M. Ardekani, A. M. & Younesi, N. (2012). The impact of dividend policy on share price volatility in the Malaysian stock market. *Journal of Business Studies Quarterly*, 4(1), 111-129.
- Healy, P. M. & Palepu, K. G. (1988). Earnings information conveyed by dividend initiations and omissions. *Journal of Financial Economics*, 21(2), 149-175.
- Inyama, I. O. & Ubesie, C. M. (2016). Effect of consistent dividend payout on business value in Nigeria oil and gas sector. *International Journal of Managerial Studies and Research*, 4 (7), 57-66.
- Iqbal, Z., Waseem, M. A. & Asad, M. (2014). Impact of dividend policy on shareholders' wealth: a study of selected manufacturing industries of Pakistan. *International Journal of Innovation and Applied Studies*, 6(2), 210 - 215.
- Irandoost, R., Hassanzadeh, R. B. & Salteh, H. M. (2013). The effect of dividend policy on stock price volatility and investment decisions. *European Online Journal of Natural and Social Sciences*, 2 (3), 51-59.
- Kenyoru, N. D., Kundu, S. A. & Kibiwott, L. P. (2013). Dividend policy and share price volatility in Kenya. *Research Journal of Finance and Accounting*, 4(6), 115 – 120.
- Kerlinger, F. N. (1973). *Foundations of Behavioural Research*. 2nd edition. Holt, Rinehart and Winston. Retrieved from <http://home.ubalt.edu/tmitch/kerlinger.htm>.



- Khan, F. I. (2010). The impact of dividend policy on shareholders wealth, Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1545749](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1545749)
- Lintner J. (1956). Dividends, earnings, leverage, stock prices, and the supply of capital to corporations. *Review of Economics and Statistics*, 8, 243-269.
- Malombe, G. M. (2011). The effects of dividend policy on profitability of SACCOS with FOSAs in Kenya. Master in Business Administration Degree, University of Nairobi. Retrieved from <http://erepository.uonbi.ac.ke/bitstream/handle/11295/12881/Malombe...pdf?sequence=3&isAllowed=y>
- Miller, M. H. & Modigliani, F. (1961). Dividend policy, growth and the valuation of shares. *The Journal of Business*, 34(4), 411–433.
- Murhadi, W. R. (2008). Study On dividend policy: Antecedent and its impact on share price. Munich Personal RePEc Archive (MPRA) Paper No. 25596. Retrieved from [https://mpra.ub.uni-muenchen.de/25596/1/MPRA\\_paper\\_25596.p](https://mpra.ub.uni-muenchen.de/25596/1/MPRA_paper_25596.p)
- Ojeme, S., Mamidu, A. I. & Ojo, J. A. (2015). Dividend policy and shareholders' wealth in Nigerian quoted banks. *Canadian Social Science*, 11(1), 24-29.
- Omoregie, A. E. & Eromosele, P. E. (2016). Dividend policy and shareholders' wealth: Evidence from some quoted banks in Nigeria. *International Journal of Marketing & Financial Management*, 4(6), 55 – 72.
- Onwumere, J.U.J (2009). *Business and economic research methods*. Enugu: Vougasen Publishers.
- Oppong, F. K. (2015). Dividend policy and firms' performance: A case of listed banks in Ghana. A Thesis Summited to School of Business (Department of Accounting and Finance) in Partial Fulfilment of the Requirement for the Award of M.Phil. Finance Degree; Kwame Nkrumah University of Science and Technology. Retrieved from <http://dspace.knust.edu.gh/bitstream/123456789/8651/1/OPPONG%20FOSU%20KENNEDY.pdf>.
- Ordu, M. M., Enekwe, C. I. & Anyanwaokoro, M. (2014). Effect of dividend payment on the market price of shares: A study of quoted firms in Nigeria. *IOSR Journal of Economics and Finance*, 5(4), 49-62.
- Oyinlola, O. M. & Ajeigbe (2014). The impact of dividend policy on stock prices of quoted firms in Nigeria. *International Journal of Economics, Commerce and Management*, II (9), 1 – 17.
- Ozuomba, C. N., Anichebe, S. A & Okoye, P. V. C. (2016). The effect of dividend policies on wealth maximization – a study of some selected public liability companies. *Cogent Business & Management*, 3, 1 – 15.
- Panigrahi S. & Zainuddin, Y. (2015). Dividend policy decisions: theoretical views and relevant issues. *Reports on Economics and Finance*, 1(1), 43 – 58.
- Pradhan, S. K. (2014). Impact of dividend announcement on share price: Both sector and industry wise analysis. *Journal of Management Research*, 3(1), 159 – 167.
- Priya, S. & Azhagaiah, R. (2008). The impact of dividend policy on shareholders' wealth. *International Research journal of Finance and Economics*, 20, 181-187.
- Priya, V. & Mohanasundari, M. (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.
- Rashid, A. & Rahman, A. Z. M. A. (2008). *Dividend policy and stock price volatility: evidence from Bangladesh*. *Journal of Applied Business and Economics*, 8 (4), 71-81.



- 
- Salih, A. A. (2010). The effect of dividend policy on market value UK empirical study. Durham theses, Durham University. Retrieved from Durham E-Theses Online in [http://etheses.dur.ac.uk/556/1/The Effect of Dividend Policy on Market Value.pdf?DDD45](http://etheses.dur.ac.uk/556/1/The_Effect_of_Dividend_Policy_on_Market_Value.pdf?DDD45).
- Seyedkhosroshahi, S., Sabaei, A. & Vatankhah, P. (2013). Stock market liquidity, firm characteristics and dividend payout. *Journal of American Science*, 9(4s), 172-177.
- Simon-Oke, O. O. & Ologunwa, O. P. (2016). Evaluation of the effect of dividend policy on the performance of corporate firms in Nigeria. *FUTA Journal of Management and Technology*, Maiden Edition, 111-120. Retrieved from <https://journals.futa.edu.ng/index.php/FJMT/article/download/2785/2248>
- Sulaiman, L. A. & Migiro, S. O. (2015). Effect of dividend decision on stock price changes: further Nigerian evidence. *Investment Management and Financial Innovations*, 12(1-2), 330 – 337.
- Ullah, H., Saqib, S, & Usman, H, (2015). The impact of dividend policy on stock price volatility: A case study of selected firms from textile industry in Pakistan. *International Journal of Academic Research in Economics and Management Sciences*, 4(3), 40 – 51.
- Uwuigbe, U., Jafaru, J. & Ajayi, A. (2012). Dividend policy and firm performance: A study of listed firms in Nigeria. *Accounting and Management Information Systems*, 11(3), 442–454.
- Waworuntu, S. R. & Claudy, N. (2017). The study of the company’s dividend policy and the share price in Indonesia. *Man in India*, 96 (12), 5793 - 5801.

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