



DETERMINANTS OF DIVIDEND POLICY OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract

This study examines the dividend policy determinants of deposit money banks listed on the Nigerian Stock Exchange (NSE) for a period of seven years from 2013 to 2019 by examining the effect of seven variables on banks' dividends per share. Ex-post facto research design was adopted and the population of the study comprised of fourteen deposit money banks out of which a sample of nine were selected. Secondary data were collected from annual reports of the sampled deposit money banks. The variables considered in the study include Firm Size, Profitability, Return on Equity, P/B value ratio, Return on Assets, Firm Risk and Growth. Data were analyzed using Panel Data Regression techniques. The results revealed that all the variables considered in the study had effect on dividend per share, whereas profitability has a positive significant effect on dividend per share, return on asset and Risk has a negative significant effect on dividend per share. Furthermore firm size, P/B value ratio, and Growth all had a negative and insignificant effect on dividend per share, while Return on Equity has a positive and insignificant effect on dividend per share. It was concluded that Profitability, Return

on Assets, and Risk has significant effect on dividends per share of listed deposit money banks in Nigeria. Consequently, the study recommends that managers need to focus on measures which could improve the profitability and the financial position of deposit money banks towards maximizing the shareholders' value, and indeed increase dividend payout on sustainable basis.

Keywords: Dividend Policy, Determinants, Banks, Panel Data Analysis, Nigeria

INTRODUCTION

The Nigerian economy is the largest economy in Africa, and it was ranked as the 27th largest economy in the world based on gross domestic products (GDP) in 2019 according to IMF (2019). Having overcome the banking crises which resulted from the world financial crises that occurred between 2008 and 2009, the banking sector has remained one of the most vibrant sectors on the Nigerian Stock Exchange (NSE), and indeed, the most active sector of the Nigerian economy in the last two decades (Masoyi, Abubakar & Adamu, 2016). There were fourteen deposit money banks listed on the Stock Exchange out of the nineteen licensed by the Central Bank of Nigeria (eight with international authorization and eleven with national authorization) as at 31st December 2019. From the banking consolidation policy to the post-financial crises reforms in the Nigerian banking sector as a component of the CBN Financial Sector reforms, the Nigerian deposit money banks had become more fortified against failures. This also called for greater monitoring of the performance and supervision of the banking sector generally. More importantly, it is necessary to identify the different factors that influence the performance of banks, so as to avoid bank failures and optimize the operations of these banks. This is because understanding these factors would help to build and sustain confidence in the banking system, and hence financial performance of the banks. The higher the performance of the banks, the higher the expected dividend payouts to investors, and, invariably the trend will increase the shareholders' value as reflected in share prices. Therefore, a study of the determinants of dividend policy is key to banking sector listed in the stock market, as it could help managers in corporate dividend decisions.

Corporate dividend decisions play a significant role in managerial decisions, and often considered as the fulcrum of financial management decisions. This is because dividend decision involves determining the amount distributed to shareholders as earnings or the amount to reinvest internally. Thus, the decision on dividend payout and retained earnings constitutes the dividend policy of a firm. The term 'dividend policy' was described as "the practice that management follows in making dividend payout decision (Lease et al., 2000 cited in Al-Malkawi, Rafferty & Pilla, 2010). The dividend policy also dictates how the dividend is computed and

when it is paid. It is usually seen as an indicative of a firm's commitment to make some form of return to shareholders on regular basis. Although firms are under no obligation to pay dividends to shareholders, "paying consistent dividends remained of paramount importance to managers" (Frankfurter & Wood, 1997). This is because managers realized the importance of dividend payments in satisfying shareholders expectations, and indeed, increase in dividend payment tend to have impact on share price and hence on firm value (Fisher, 1961; Gordon, 1963; Murhadi, 2010). Importantly, Jabbouri Imad (2016), as cited in Nancy and Sahi (2018), indicate that corporate dividend decision has a huge influence over various other corporate decisions, including investment, finance, and shareholder's wealth.

Theoretically, there are different models for dividend payout or policy, which include the Residual dividend policy, Stable dividend policy, Progressive dividend policy, Regular (Constant) dividend policy and the Zero dividend policy (Ramesh & Pandey, 1994; Nyor & Adejuwon, 2013). Bakera, Powell and Veit (2002) contend that there are no definitive answers to why managers choose one method of cash distribution over the other, which may largely depend on the effects of various market imperfections as they affect firms differently. Depending on specific factors of a firm, such as size, level of maturity, earnings, and cash flow, as well as leverage, the board of directors decide a suitable dividend payout policy, and whether or not to declare dividend to shareholders. Normally, a listed firm develop a framework for its dividend payout policy, which allows for the distribution of a certain percentage of its profit as dividend to shareholders and as the reflection of reward for their investment (Boloupremo & Ogege, 2018). Therefore, apart from investment and financing decisions, the management are also concern with the possible effect of their dividend decisions on share prices (Sharif, Ali & Jan, 2015). Consequently, dividend decisions or policy is important for both the management and shareholders, and hence a balance approach is imperative. Generally, regular or residual dividend policies are considered more prudent methods, even though the nature of the industry to which the firm belongs has an important impact on its dividend policy. A firm in an industry, where earnings are stable, may adopt a consistent dividend policy in contrast to the firm in an industry where earnings are uncertain and uneven.

In theory, dividend decisions involve determining an optimum dividend payout ratio, which relies on several potential factors, such as earnings, profitability, investment opportunities, leverage, cash flow, asset tangibility, business risk, firm maturity, size, previous year's dividend, taxes and liquidity factors. The impact of these factors on dividend payout policy varies across the countries and industries (Abdullahi, 2019). The majority of dividend payments are made to shareholders in form of cash, but they can be made in other forms, such as issuing new shares (scrip dividend) to investors or share repurchase scheme.

Dividend decisions or dividend policy as a major factor in maximizing the shareholders' value remains a frequently researched topic in financial literature, although with inconsistent results (Bakera, Powell & Veit, 2002, Olang, Akenga & Mwangi, 2015). Whereas managers are concerned with the trade-off between dividends and retentions, shareholders always focus on outcomes that will maximize the value of their investments. The desire to achieve optimum dividend payout as in the case of optimum capital structure has continued to elude managers. On optimal dividend policy, Lintner (1962) argues that firms consider the dividend payout ratio without recourse to their investment requirement, whereas Rozeff (1982) declares that often 'investment policy influences dividend policy'.

Glen, Karmokolias, Miller and Shah (1995) explained the differences in dividend behavior in developed and developing countries, particularly that firms in emerging markets tend to give more emphasis on dividend payout ratios than on the level of dividends paid. It was also evident from the study that government play a major role in the dividend decision making process in developing countries usually with the view to protecting minority shareholders and creditors through regulatory restrictions.

The aim of this study is to examine the determinant of dividend policy denoted by Dividends per Share (DPS) for deposit money banks listed on the Nigerian Stock Exchange (NSE). It thus attempts to provide answers to the following question: What is the effect of Profitability, Firm Size, Return on Equity, P/B value ratio, Return on Assets, Firm Risk and Growth in determining dividend payout of deposit money banks listed on the Nigerian Stock Exchange?

Hypotheses

The following hypotheses have been developed for the study:

H₁: Firm Size has no significant impact on the Dividend per Share of Listed Deposit Money Banks (DMBs) in Nigeria.

H₂: Profitability has no significant impact on the Dividend per Share of Listed Deposit Money Banks (DMBs) in Nigeria.

H₃: Return on Equity has no significant impact on the Dividend per Share of Listed Deposit Money Banks (DMBs) in Nigeria.

H₄: P/B value ratio has no significant impact on the Dividend per Share of Listed Deposit Money Banks (DMBs) in Nigeria.

H₅: Return on Assets has no significant impact on the Dividend per Share of Listed Deposit Money Banks (DMBs) in Nigeria.

H₆: Risk has no significant impact on the Dividend per Share of Listed Deposit Money Banks (DMBs) in Nigeria.

H₇: Growth has no significant impact on the Dividend per Share of Listed Deposit Money Banks (DMBs) in Nigeria.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

There had been a flood of theoretical and empirical research on dividend policy (Miller & Modigliani, 1961; Lintner, 1962; Gordon, 1963; Gupta & Walker, 1975; Black, 1976; Jensen, 1976; Bhattacharya, 1979; Rozeff, 1982; Miller & Rock, 1985; Amidu & Abor, 2006; Al-Malkawi, 2007; Yusuf, 2013; Maladjian & El Khoury, 2014; Kumaraswamy, Aktan & Al Halwachi, 2017; Abdullahi, 2019). The financial literature is indicative of a large number of conflicting theories on corporate dividend decisions or policy. These include the classical Miller and Modigliani (MM) theory (1961) built on the premise of perfect capital market assumptions (without taxes and transaction cost), which argues that dividends were irrelevant and had no effects on a firm's share value. The theory postulates that investors can affect their return on a stock irrespective of the stock's dividend, and it posits that in a perfect (efficient) capital market, dividends policy does not affect the shareholders wealth, and also concluded that the firm's value is determined only by its basic earning power and its business risk. The MM theory got empirical supports from a few studies (Black & Scholes, 1974; Miller, 1986; Bernstein, 1996; Miller & Rock 1985), whereas many researchers have disagreed with the theory due to the assumption of perfect capital market which does not exist in reality. Therefore, dividend policy models and theories developed after the MM theory were primarily geared to relax or unravel the market imperfection related to dividend payout due mainly to asymmetric information, taxes, and transaction costs.

In reaction to the MM irrelevant theory researchers (Lintner, 1962; Gordon, 1963; Walter, 1963; Van Horn & McDonald, 1971) advanced the bird-in-the-hand theory or dividend preference theory which argues that dividend matters, because dividend policy affects the value of a firm. The bird-in-the-hand theory is predicated on the assumption that shareholders are "risk averse and prefer certainty". Since a return in form of dividends payments is more certain than capital gains which is risky, investors would prefer dividends than capital gains. The dividend preference theory suggests that firms should set a large dividend payout ratio to maximize firm share value. This is because shareholders often prefer a higher dividend payout policy. Hence, the firm paying high dividend is attractive to investors, which invariably could translate into the firm getting a higher rating from rating agencies as compared to a firm not making any dividend payments. Such a better rating will enable the firm get easy access to capital markets for finance (M'rabet & Boujjat, 2016). However, the bird-in-the-hand theory was

debunked on the premise that the firm's risk is determined by the riskiness of its operating cash flow rather than the way it distributes its earnings (Miller & Modigliani, 1961; Bhattacharya, 1979).

Litzenberger and Ramaswamy (1979) further relax the MM irrelevant theory by introducing tax preference theory, which relies on the significant effect of taxes on dividends. The advocates of the tax preference theory contend that since the tax rate on dividend is higher than the rate on capital gain, investors prefer lower payout firms for tax reasons, because long-term capital gains allow the investor to defer tax payment until they decide to sell the stock (Litzenberger & Ramaswamy, 1982; Miller & Rock, 1985).

Further there is dividend signaling theory, which expounds that dividend payments tend to communicate insider information to the market based on the asymmetric information between insiders (managers and directors) and outsiders (shareholders). The proponents of the dividends signaling theory suggest that changes in dividend payout ratio give a signal to the investors about the future earnings of the firm. A high dividend payout is perceived as management "good signals" that the future earnings will increase to support increase in dividend, and vice-versa (Bhattacharya, 1979; Miller & Rock; 1985). The outcomes of empirical studies on this theory are mixed. Studies have shown that dividend changes are not a reliable signal of a firm's future earnings and profitability (Grullon, Micaely, Bernatzi & Thaler, 2005), whereas some other studies confirm the validity of the signaling theory where dividend increases provide a signal for increased future earnings or profitability (Boldin & Legget, 1995; Hussainey & Aal-Eisa, 2009). Notwithstanding that changes in dividends can be a signal to communicate information to the market, at times the changes in dividend may be an ambiguous signal (Al-Malkawi, Rafferty & Pilla, 2010).

In contrast to the signaling theory, there is a proposition that managers may have incentives not to pay dividends unless they are forced (or given incentives) to pay dividends. This proposition or theory is founded on the agency costs hypothesis of dividends. The theory is called Agency Cost theory (or Free Cash Flow theory), which indicates that dividend policy is determined by agency costs arising from the separation of firm's ownership and control. Distributing earnings as dividends to shareholders reduces the chances of misuse of these funds for non-profitable projects, particularly those that will satisfy the interest of the managers (Jensen & Meckling, 1976; Jensen, 1986; DeAngelo & DeAngelo, 2006). The proponents of the Agency Cost theory emphasize that firms with high dividends payout ratio are more valuable than firms with low dividends payout ratio (Rozeff, 1982; Al-Malkawi, 2007). Dividend payment is likely to force managers to approach the capital markets to raise funds, and hence reduce

agency costs as professionals, bankers and financial analysts will help in monitoring managers' behavior (Easterbrook, 1984).

Notwithstanding the theoretical underpinnings of dividend payout policy of firms, many studies had indicated that there is discrepancy between dividend theory and observed practical application of dividend policy (Black, 1976; Amidu, & Abor, 2006). The foundation of empirical evidence to explain dividend behavior of companies has been attributed to Lintner (1956), who developed a model for the potential dividend payment determinants in the United States of America. The study found that the two main factors that determined dividend payout are the current year earnings and the lagged dividends payment. A classic application of the Lintner (1956) model in emerging markets was in the Indian stock market by Mookerjee (1992), who carried out a time series analysis of data of sampled companies over a period of 33 years (1949 - 1981). The study expressed the behavior of the studied companies' dividends, which indicated that companies in India were really over-focused on the indispensability of dividend payment, no matter how the performance of the company was, even if it needed external borrowing to make good the dividend payment to shareholders. Also, the literature has established that as a result of differences in the business environments, there are several factors, such as stock market volatility and asymmetry information, which influence the dividend payout pattern in emerging markets as compare to developed markets (Imran, 2011). Many studies on the determinants of dividend policy were conducted in emerging markets, and just as in the developed markets, the dividend 'puzzle' is yet to be resolved and still open for further research.

Specific research on determinants of dividend policy in the banking sector was pioneered by Gupta and Walker (1975), who conducted research on a sample of 980 banks for the period 1965–1968. The study showed that there is a positive relationship between dividends and current year earnings, earnings variation from one year to another, cumulative earnings and total assets growth, whereas negative relationship exist between dividends and liquidity position. The significance of the Gupta and Walker (1975) study is overarching fact that the banking institutions operate in uniquely regulated sector compared with business entities in other sectors of the economy. This obvious fact is expected to differentiate the dividend payout policy of the banking institutions from business entities in other sectors.

Gul, Mughal, Bukhari and Shabir, (2012) examined the impact of different firm specific factors on the dividend policy of 18 banks listed on the Karachi Stock Exchange for the period 2006 – 2011. The result showed that there is strong relationship between profitability and firm size with dividend policy, whereas the leverage and firm risk has inverse relationship with dividend policy. The study concluded that banks which pay dividends were more profitable, stable and less risky as compare to banks that do not pay dividends.

In Nigeria, Nyor and Adejuwon (2013) explored what accounts for dividend payout in the Nigerian banking sector for the period of ten years from 2001 to 2010 by examining factors that determine dividend payout. Using multiple regressions, the study revealed that profit after tax, shareholder funds and liquidity account for dividend payout in Nigerian banks.

Maladjian and El Khoury (2014) investigated the determinants of dividend payout ratio of four Lebanese banks listed on Beirut Stock Exchange and found that the lagged dividend payment positively affects the dividend policy, and also revealed that firm size and risk profile have a significant positive relationship with dividend payout, while the profitability and growth have a significant negative relationship with dividend payout.

In another study, Bassey, Atairet and Asinya (2014) examined the determinants of dividend payout of two selected commercial banks in Nigeria for the period 1989 – 2010 using the Ordinary Least Squares (OLS) regression technique. The study revealed that current earnings, lagged dividend and lending rate were the major determinants of cash dividend payout in the two banks, whereas inflation rate and liquidity ratio failed to explain the variation in dividend payout.

Also, Yusuf (2015) considered the impact of performance on dividend payout ratio of some selected deposit money banks in Nigeria for the period 2004 – 2013, and correlation analysis and multiple regressions were adopted in analyzing the data. The results showed that dividend payout ratio is negatively related to banks' leverage and profitability. The study concludes that dividend payout ratio is inversely related to performance of deposit money banks in Nigeria.

In a separate study, Maude, Ojo and Joshua (2015) explored the factors that determine the dividend growth pattern of deposit money banks in Nigeria by examining seven (7) quoted banks on the Nigeria Stock Exchange over a period from 1993 to 2012. The study revealed that all the explanatory variables (inflation, share price and earnings per share) have significant impact on dividend payout. It was concluded that Inflation has the highest determining ability of the Dividend Payout Pattern of Nigeria deposit money banks.

Kumaraswamy, Aktan and Al Halwachi (2017) studied the determinants of dividend policy of banks and other financial institutions listed on Qatar Stock Exchange for a period from 2009 to 2015 by examining the impact on eight factors on banks' dividend policy and the factors that affect a bank's decision to pay out dividends. As hypothesized, using the fixed effects pool panel regression, it was found that the previous year's dividends per share, earnings per share, cash flow per share, firm size and return on average equity are positively related to the current year's dividends per share. Whereas the leverage position, bank's life cycle and growth opportunities were negatively related to the dividend payment.

More recently, Boloupremo and Ogege (2018) attempted to determine the various factors that influence dividend policy in the banking sector from a developing country's perspective by examining thirteen of the twenty-one deposit money banks listed on the Nigerian Stock Exchange over a ten-year period from 2006 – 2015. The study employed the Lintner model to analyze earnings per share, financial leverage, the size of the bank, previous years' dividends and return on assets variables and how they influence dividend payouts. It was found that factors such as previous years' dividend payouts and size of the bank are fundamental in deciding dividend payouts, whereas earning per share, financial leverage and return on the asset are inversely correlated to dividend payments. Thus, the results were inconsistent with the Lintner model (1956) for deposit money banks in Nigeria.

From the above literature review, it is obvious that certain firm specific factors could be key explanatory variables to explain the dividend policy of the deposit money banks in Nigeria. These factors included Firm Size, Profitability, Leverage, Market Capitalization, Return on Equity, P/B value ratio, Return on Assets, Firm Risk, Growth, Liquidity, Age, and Cash Flow per Share.

METHODOLOGY

Research Design

The study adopted ex-post facto research design. The ex-post facto research design was adopted on the basis that the researcher does not have control over the variables mainly because the event has already occurred and cannot be changed by the researcher.

Population and Sample

The Population of the study consists of 14 deposit money banks listed on the Nigerian Stock Exchange as at 31st December 2019, out of which a sample of 9 banks were selected as result of availability of complete data for the sampled period. The study relied on secondary data collected from annual reports and accounts of the sampled deposit money banks for a period of seven years from 2013-2019. The data was analyzed using panel regression via the help of STATA 13 software.

Data

Secondary data were extracted from the audited financial statements of the sample nine out of the fourteen deposit money banks listed on the Nigerian Stock Exchange for the period from 2013 to 2019, and whose annual reports for the period were publicly available (As in Table1). The period of the present study coincides with the period of full adoption of International

Financial Reporting Standard (IFRS) in the Nigerian banking sector, as well as the post-financial crises era. Since the data used are IFRS compliant, the results of the study are to be compatible with other international studies. The sample excluded deposit money banks that have not paid out dividends for at least three years during the study period, as well as one Pan-African deposit money bank listed on the Stock Exchange. The data was analyzed using STATA 13.

Table 1: List of sampled Deposit Money Banks considered in the Study

S/N	Name of the Bank	S/N	Name of the Bank	S/N	Name of the Bank
1.	Access Bank Plc	4.	First City Monument Bank Plc	7.	Sterling Bank Plc
2.	Fidelity Bank Plc	5.	Guaranty Trust Bank Plc	8.	United Bank for Africa Plc
3.	First Bank of Nigeria Plc	6.	Stanbic IBTC Bank Plc	9.	Zenith Bank Plc

Source: Researchers compilation based on availability of Data

Measurement of the Variables

The measurement of the variables is presented in Table 2 as follows:

Table 2: Independent variables definitions and expected relationship with the dependent variable

Variables	Symbol Used	Definition	Expected Sign
Firm Size	FSIZE	Natural Logarithm of Total Assets	Positive (+)
Profitability Measure	EPS	Earnings per Share	Positive (+)
Return on Equity	ROE	Net Income/Shareholder's Equity	Positive (+)
P/B Value Ratio	PBVR	Current Market Value/ Book Value	Positive (+) / Negative (-)
Return on Assets	ROA	Profit After Tax/ Total Assets	Positive (+)
Firm Risk	RISK	Price to the Earnings ratio (P/E ratio)	Negative (-)
Growth Opportunities	REVG	Revenue Growth: (Current Year Revenue – Previous Year's Revenue)/ (Previous Year's Revenues)	Negative (-)

Adapted from Nancy & Sahi, (2018)

The present study empirically attempts to examine seven determinants namely, Firm Size, Profitability, and Return on Equity, P/B value ratio, Return on Assets, Firm Risk and Growth on the dividend policy of the listed deposit money banks in Nigeria. These variables represent the independent variables of the study. The dividend per share is used as a dependent variable in

the study to represent the dividend policy. In line with most studies on dividend policy, this study considered only dividend per share as a proxy for dividend policy the dependent variable.

Model specification

This study employed panel data analysis to determine the impact of the seven independent variables considered over the dividend per share by listed deposit money banks. Two panel data regressions (fixed effects and the random effects) were run. The fixed effects model is appropriate. The regression model fitted for the purpose is thus stated as below:

$$DIV_{it} = C + \beta_1(Firm\ Size)_{it} + \beta_2(Profitability)_{it} + \beta_3(Return\ on\ Equity)_{it} + \beta_4(P/B\ value\ ratio)_{it} + \beta_5(Return\ on\ Assets)_{it} + \beta_6(Risk)_{it} + \beta_7(Growth)_{it} + \epsilon_{it}$$

Where, C is the intercept, β represents the slope associated with all the seven independent variables considered in the study, i represents the cross-sectional unit and t is the time period. ϵ represents the error term.

RESULTS AND DISCUSSION

Descriptive statistics

Table 3 presents descriptive statistics of the dependent and independent variables, which was used to describe the behaviors and conduct analysis for all variables explaining the dividend policy of deposit money banks listed on the Nigerian Stock Exchange.

Table 3: Descriptive Statistics

Parameters	Mean	Median	Std. Dev.	Min.	Max.
Dividend per Share	0.8111	0.5	0.8575	0.1	2.8
Firm Size	8.9688	9.14	0.6015	7.88	9.8
Profitability (EPS)	1.64	1.17	1.6489	0.06	5.95
Return on Equity	0.1327	0.12	0.0830	0.01	0.33
P/B Value Ratio	1.0730	0.72	1.0294	0.13	4.8
Return on Asset	0.3857	0.02	0.0520	0.01	0.27
Firm Risk	14.5024	6.05	32.9603	2.09	250
Growth Opportunities	1.1060	0.08	6.9823	-0.95	54.51

Table 3 shows that the average value of dividend per share by the sampled deposit money banks is 0.8111 with a standard deviation of 0.8575. As far as other variables are concerned the table reveals that while Firm Size has an average value of 8.9688, Profitability has 1.6, Return on equity 0.1327, P/B value ratio is 1.0730, Return on Asset 0.3857, Risk 14.5024 and Growth is 1.1060. The table also reveals, on a comparison between the average values of the variables considered and their Standard Deviation that the difference between them was appropriate to

be considered as non-volatile for almost all the variables except for dividend per share, Profitability (EPS), Return on Equity, and Return on Asset wherein the difference between the two was not very high.

Table 4: Results of bivariate regressions for determinants of dividend policy

Independent Variable	Slope	t-stat (p-value)	F-stat (p-value)	R ²
Firm Size	0.7395	4.74 0.000**	22.45 0.000**	0.2690
Profitability (EPS)	0.4895	21.79 0.000**	474.67 0.000**	0.8861
Return on Equity	8.1158	9.92 0.000**	98.37 0.000**	0.6172
P/B Value Ratio	0.2358	2.31 0.025**	5.32 0.0245**	0.0802
Return on Asset	4.0559	9.85 0.000**	97.10 0.000**	0.6142
Firm Risk	-0.0049	-1.52 0.135	2.30 0.1349	0.0363
Growth Opportunities	-0.0149	-0.96 0.342	0.92 0.3425	0.0148

** Significant values at 5% level of significance.

In order to have an understanding with respect to the individual effect of the independent variables considered in the study over the dependent variable (dividend per share) of deposit money banks, a bivariate regression was applied on the data, and the results obtained were tested using the t-test and the F-test. Further, R² values were calculated with respect to each of the variables considered to explain the proportion of variance in the dependent variable with respect to each of the concerned independent variable. The results are reported in Table 4 above. The table shows that five out of the seven variables considered in the study have a significant positive effect on the dividend per share. The table further indicates that the maximum effect on dividend per share of deposit money banks is from Return on Equity as a unit increase in it leads to 8.1158 increase in the dividend per share, it is followed by Return on Asset with a unit increase in it leading to 4.0559 increase in dividend per share, these was followed by Firm Size, P/B value, and Profitability leading to 0.7395, 0.4895 and 0.2358 increase in dividend per share respectively. The table further represents that the minimum effect was from the variables Risk and Growth indicating that a unit increase in Risk and Growth will lead to 0.0049 and 0.0149 unit decrease in dividend per share respectively. The t-test and F-test applied over these values indicated that all the values obtained were found to be significant

at 5% level of significance except for Risk and Growth. Thus, indicating that the variables considered in the study have a significant influence over the dependent variable i.e. the dividend per share. The R^2 values calculated depicting the proportion of variance explained by each of the variables considered in the study highlights that Profitability (88.6%) explains the maximum variance in the dividend per share followed by Return on Equity (61.7%), Return on Asset (61.4%) and Firm Size (26.9%).

Table 5: Results of multivariate pooled regression model for determinants of dividend policy

Independent Variable	Slope	t-stat (p-value)	F-stat (p-value)	R^2
C	3.0091	2.72 0.009**		
Firm Size	-0.3316	-2.60 0.012**		
Profitability	0.5889	13.27 0.000**	94.6547	0.9234
Return on Equity	-0.8137	-0.607 0.507	0.0000**	
P/B value ratio	0.2164	2.98 0.004**		
Return on Assets	-7.0726	-4.63 0.000**		
Risk	-0.0027	-2.10 0.0040**		
Growth	-0.0017	-0.36 0.72		

** Significant values at 5% level of significance.

Table 5 depicts the results of multivariate pooled regression model for determinants of dividend payout as specified in methodology section. The results indicate that out of the seven variables considered in the study only two variables were having a positive relationship with the Dividend per share i.e. an increase in these variables resulted in an increase in the dividend per share.

The maximum effect on dividend per share was Profitability (0.5889), followed by P/B value ratio (0.2164). Out of the two variables having a positive relationship with dividend per share the value obtained with regard to two variables namely Profitability was found to be significant at 5% level of significance, whereas the value obtained with regard to P/B value ratio was significant at 5% level of significance. The results thus indicate that hypothesis H2, and H4 are rejected. As far as the remaining five variables are concerned i.e. Size, Return on Equity, Return on Asset, Risk and Growth were found to have a negative effect on dividends per share and the values obtained in this regard for Return on Asset were found to be statistically

significant at 5% level of significance, whereas the value obtained with regard to Size and Risk was significant at 5% level of significance. Thus, indicating that the hypothesis H1, H5 and H6 are rejected. Return on equity and Growth were found to have a negative effect on dividends per share and the values obtained in this regard for both variables were found to be statistically insignificant at 5% level of significance. The study failed to reject H3 and H7.

Table 6: Selection of model to examine determinants of dividend policy

Fixed Effect Model		Random Effect Model		Hausman test	
F-test	P-value	F-test	P-value	F-test	P-value
17.06	0.000**	164.94	0.000**	15.77	0.0273**

**Significant values at 5% level of significance.

To further establish the impact of the variables considered in the study over the dividend per share. Panel data analysis was conducted. To decide in the panel data analysis between the applicability of fixed effects model and random effect model. Hausman test was applied. The results of the tests are presented in Table 6 above. As far as the results for Hausman tests are concerned at 5% level of significance, it was found that F-test of 15.77 and corresponding p value of 0.0273 was significant thereby suggesting that the application of fixed effect model was valid and the application of random effect model was rejected.

Table 7: Multivariate fixed effect regression model for determinants of dividend policy

Independent Variable	Slope	t-stat (p-value)	F-stat (p-value)	R ²
C	2.9367	1.68 0.099		
Firm Size	-0.2727	-1.36 0.180		
Profitability (EPS)	1.4033	7.41 0.000**		
Return on Equity	0.0726	0.07 0.945	17.06	0.000**
P/B value ratio	-0.0048	-0.07 0.943		
Return on Assets	-6.9853	-4.65 0.000**		
Risk	-0.0052	-4.31 0.000**		
Growth	-0.0007	-0.20 0.846		

** Significant values at 5% level of significance.

The results of fixed effect regression model thereby applied have been reported in Table 7. The results indicated that Return on Assets had the maximum negative effect on dividend per share of deposit money banks followed by Firm Size, Risk, P/B value and Growth respectively. To establish the level of significance with respect to the level of influence of these variables p-values was used. The results obtained indicated that the values with respect to Earnings per share, Return on Assets, and Risk were significant at 5% level of significance. Table 7 further illustrated that Earnings per share had the maximum positive effect on the dividend per share followed by Return on Equity. The p-value results applied on them revealed that while the values with respect to Profitability (EPS) were significant at 5% level of significance the value of Return on Equity was insignificant. The results thus suggested that Profitability, Return on Assets, and Risk, are significant determinants of dividend per share of listed deposit money banks in Nigeria. Hence, indicating that the hypothesis H1, H3, H4, and H7 are rejected.

CONCLUSION AND RECOMMENDATIONS

The study examined the determinants of dividends payout by listed deposit money banks in Nigeria for a period of seven years from 2013 to 2019. It was found that three out of the seven variables considered in the study had a significant effect on dividends per share of the sampled banks. As hypothesized, the study found that with respect to the individual impact Profitability, Return on Asset, and risk all had a significant impact on dividend per share, whereas firm size, P/B value ratio and Growth had a negative and insignificant impact on dividend per share, return on equity on the other hand had a positive and insignificant impact on dividend per share. Consequently, the study recommends that:

- i. Managers need to focus on measures which could improve the profitability and the financial position of deposit money banks towards maximizing the shareholders' value, and indeed increase dividend payout on sustainable basis.
- ii. Government should create a conducive environment for both investment, production and diversification of the economy since this will go a long way in improving the profitability of deposit money banks and hence increase the dividend per share of deposit money banks in Nigerian.
- iii. The management of the banks should also modernize their services towards customers' satisfaction to increase turn over and profitability as this will go a long way in attracting investors in which the shares prices of the banks are expected to rise and favourable determine the Dividend Payout Pattern of the banks.

SCOPE FOR FURTHER STUDIES

This study is only covered listed deposit money banks in Nigeria and for a period of seven years. Further studies can extend the frontier of knowledge by looking at listed financial institutions or the Manufacturing sector in Nigeria and extending the period of study above seven years.

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