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#### Abstract

The purpose of this study was to examine the relationship between dividend policy and financial performance of deposit money banks in Nigeria. To achieve this, a review of extant theoretical and empirical literature was made and the study is anchored on the signaling theory. The longitudinal survey research design was adopted in this study and data were obtained from the Financial Statements and Annual Reports of eighteen (18) Deposit Money Banks in Nigeria for the period of 2015 – 2019. The data generated for this study were analysed with both descriptive and inferential statistics using the arithmetic mean, standard deviation, minimum and maximum values, and the Auto-Regressive Distributed Lag (ARDL) regression technique. These were computed with the aid of E-Views version 10. The findings of the study revealed that the effect of dividend policy on financial performance of deposit money banks in Nigeria is mixed. While dividend pay-out ratio has a negative significant relationship with financial performance (return on equity), dividend yield does not significantly affect financial performance (return on equity)of deposit money banks in Nigeria. Based on the above findings and the conclusion drawn there from the following recommendations are made: management of deposit money banks should have a good and robust dividend policy in place to determine the percentage of dividend pay-out that would enhance financial performance in term of return on equity; management of deposit money banks should invest more effort to increase dividend yield and improve its impact on financial performance (return on equity) of deposit money banks in Nigeria.

Keywords: Dividend Policy, Financial Performance, Earnings per share, Banks, Descriptive and Inferential Statistics

#### INTRODUCTION

Banks exist not only to accept deposits but also to grant credit facilities. Their intermediation role can be said to be a catalyst for economic growth, hence efficient and effective financial performance of the banking industry over time is an index of financial stability and economic development of any Nation. According to Demsetz and Lehn (1985), financial performance refers to measures used to verify the extent to which resources of the firm are adequately utilized to create an acceptable financial stand. The extent to which a bank performs these functions to the public for productive activities accelerates the pace of a nation's economic growth and its long-term sustainability. A sound financial system is critical to economic growth for any country, and a healthy banking system is a key component of this (Akimade, 2016). During the last global recession in 2008, the banking system was the central protagonist and arguably suffered the most. As many as 465 banks closed in the United States between 2008 and 2012. Likewise, Nigerian banks suffered following the 2016 recession, ultimately leading to the failure of many banks while many others opted for mergers and acquisition (Akimade, 2016). More so, the outbreak of covid-19 pandemic has impacted negatively on the Nigerian banking sector by slowing revenues and increasing loan loss provisions. Revenues, such as fee income from the first half of the year 2020, have declined by 6% compared with the third quarter of 2019 and provision for loan losses have gone up by 200% relative to 2019.

Various efforts have been made by regulators, policy makers, financial experts and professionals, scholars and researchers to boost the performance of Nigerian banks. Researchers are of the opinion that dividend policy of banks could help boost their performance and accelerate economic growth and development of the country. Amidu and Abor (2006) claim that dividend represents a distribution of earnings to the shareholders of a company, and it is the responsibility of the financial manager to ensure that equity and fairness prevails in the apportionment of any benefit to the various shareholders. Dividends are cash

payments which are made to the shareholders against their investment in the business. These dividends can take the shape of cash dividends as well as stock dividends, depending on the firm policy. Dividend decision is one of the financial management decisions of a firm, and it is concerned about whether to retain dividend or pay out dividend to shareholders, and if dividend is to be retained, how much? (Monogbe & Ibrahim 2015). According to Chandra (2002) dividend policy refers to managerial statement that determines the proportion of earning paid to shareholders by way of dividends and what proportion is ploughed back in the firm for reinvestment purpose. Lasher (2000) defined dividend policy as the rationale under which a firm determines what it will pay in dividends. It encompasses both the amount paid and the pattern under which changes in amount occur over time. That is, it entails striking a balance between future growth and payment of current dividends to a firm's shareholders. As noted by Ross et al. (2002) companies view the dividend decision as quite important because it determines what funds flow to investors and what funds are retained by the firm for investment. Dividend policy provides information to stakeholders concerning the company's performance. Italso entails striking a balance between future growth of the firm and payment of current dividend to firm's shareholders. The ability of a bank to pay dividends will depend to a large extent on its financial performance.

The subject matter of dividend policy remains one of the most controversial issues in corporate finance. For more than half a century, financial experts have engaged in modeling and examining corporate dividend policy. Black (1976) hinted that, "The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that don't fit together". The patterns of corporate dividend policies not only vary over time but also across countries, especially between developed, developing and emerging capital markets. Over the years, there has been an emergence of different schools of thought in explaining the importance of dividend payout on future financial performance of firms. Miller and Modigliani (1960) affirms that high dividends increases firm value since there exists natural shareholder for dividend paying stocks and hence many investors invest in stocks to maintain a steady source of cash. One school of thought argues that, if it is cheaper paying dividends in comparison to letting the investors earn benefit in terms of cash by selling shares, then the natural clientele would be willing to pay a premium for the stock and this therefore means that the firm value goes high. On the other hand, there exist a narrative that low dividends will increase value of a firm mainly because dividend income is often taxed, which is severely ignored by the study by Modigliani and Miller. This is also explained by the argument that paying out large dividends crowds out a firm's pool of funds to reinvest for growth. Firms could convert dividends into capital gains by slightly adjusting or changing their dividend payment policies. There exist prior empirical studies that link dividend policy to financial performance. Idewele and Murad (2019) found that a positive and significant relationship exists between dividend payout ratio and financial performancebut a negative and insignificant relationship between dividend yield and financial performance. More so, Amidu and Abor (2006) show that dividend policy influences firm performance measured by its profitability. However, Velnampy et al. (2014) discovered that determinants of dividend policy are not correlated to the firm performance measures of the organization. Results show that dividend policies do not affect companies return on equity and return on assets. Farsio et al (2004) revealed a negative relationship between dividend payout and future earnings (financial performance). These findings are mixed and therefore require further investigation.

Moreover, the available empirical studies on the relationship between dividend policy and financial performance differ from the present study in the operationalization of variables, the methodology adopted, and the scope of the study. For example, Idewele and Murad (2019)'s study covers the period of 2009-2014, thereby creating a gap for a more current study. An attempt to provide an empirical evidence to support the above argument, close the existing gaps in prior studies, and expand the frontier of knowledge in this area of study, is of course the reason for this present research work that tends to investigate the relationship between dividend policy and firm's performance of deposit money banks in Nigeria. The basic hypothesis underlying this study includes:

 $H_{01}$ : Dividend payout ratio does not significantly affect Return on Equity of Deposit Money Banks in Nigeria.

 $H_{02}$ : Dividend yield does not significantly affect Return on Equity of Deposit Money Banks in Nigeria.

## LITERATURE REVIEW

#### **Conceptual Framewok**

#### **Dividend Policy**

Bannock (1998) noted that a dividend is expressed as a percentage of the nominal value of a share or an absolute amount per share. Richard and Stewart (2003) noted the direct compensation and servicing of share capital involved in dividend paid to shareholders, adding that dividend policy is a trade-off between retained earnings and paying out cash as well as issuing new shares. Where there is no cash, a scrip issue or bonus share is given. According to Akimade (2016), dividend policy is the decision arrived by participants involved in the dividend decision process on how and when the amount or percentage will be allocated to shareholders as returns on their equity investment and the portion reserved for precautionary, speculative or transactionary motives. Companies understand that most shareholders have a desire to receive dividends. However, company's decision regarding what to pay as dividend depends on a number of factors. These factors as proposed by Akinsulire (2006) are:

Legal requirement: Company law allow the payment of dividend only out of distributable profits that is; profits arising from the use of the company's property, even though it is a wasting asset; revenue reserves; realized profit on a fixed asset sold, but where more than one asset is sold, the net realized profit on the assets sold; calculated on conventional accounting principles. It is forbidden to distribute dividend out of capital (Section 379–382 of CAMA).

Government regulation: Government, through some guidelines restricts the amount of dividend payable to shareholders by restricting dividend payment to a certain percentage of the profit after taxation. However, from 1988, dividend payment has been deregulated.

Statutory requirement: Some companies are required to transfer a given percentage of profit before tax (PBT)/profit after tax (PAT) to statutory reserves. For example, insurance companies; Life -10% of PBT or 1% of total premium whichever is higher; Nonlife -20% of PBT or 3% of total premium whichever is higher. Banks; 30% of PAT if statutory reserve is less than minimum paid up capital, 15% of PAT if statutory reserve is less than minimum paid up capital, 15% of PAT if statutory reserve.

Liquidity consideration: Regardless of other considerations, a company will be unable to pay a dividend if cash is not available to do so. It may however, sometimes borrow for example, by bank overdraft, for this purpose.

Share valuation: It has become part of the stock market that investors favour a company if its dividends are basically stable over time. A gentle upward movement is to be desired but violent fluctuations in either direction are not. These factors often lead many companies to adopt a very cautious dividend policy.

Internal re-investment opportunities: If external finance is not available or only available by incurring significant transaction costs, then the payment of dividends may mean foregoing worthwhile investment opportunities. Dividend may have to be restricted to provide financing for such investments.

Access to capital market: A company can raise new debt or equity from the capital market if it is not liquid enough to pay its dividend. The greater companies access to capital market, the greater its ability to pay dividend.

#### **Dividend Payout Policy**

Dividend payout among listed firms is guided by dividend policy which is the decision making strategy aiding in deciding the amount of dividends and the timing of the payments. It is said to be an important financial decision that corporate managers encounter (Baker & Powell, 1999). A study conducted by

Zhou and Roland (2005) revealed that high dividend payout firms tend to send a message of higher future profitability but relatively low past earnings growth. When making a decision as to which dividend policy to use, a firm may adopt either of four main dividend policies explained below which are based on various factors that frame a dividend policy of a firm; How available are investment opportunities, predicted earnings changes, tax regimes, flexibility of a firm's financial status, restrictions from a legal perspective and floatation costs are among the factors that affect a company's dividend policy. One of the various dividend policies used is the Stable Dividend Policy; in this case a firm aims at having a balanced dividend payout every year. The payout of dividend rarely does it change even at the times when earnings are volatile every year.

#### **Dividend Yield**

The dividend yield, expressed as a percentage, is a financial ratio (dividend/price) that shows how much a company pays out in dividends each year relative to its stock price. The reciprocal of the dividend yield is the price/dividend ratio. It is used to calculate the earning on investment (shares) considering only the returns in the form of total dividends declared by the company during the year. Historically, a higher dividend yield has been considered to be desirable among many investors. A high dividend yield can be considered to be evidence that a stock is underpriced or that the company has fallen on hard times and future dividends will not be as high as previous ones. Similarly a low dividend yield can be considered to its overpriced or that future dividends might be higher. Some investors may find a higher dividend yield attractive, for instance as an aid to marketing a fund to retail investors, or maybe because they cannot get their hands on the capital, which may be tied up in a trust arrangement. In contrast some investors may find a higher dividend yield fell out of favor somewhat during the 1990s because of an increasing emphasis on price appreciation over dividends as the main form of return on investments. The importance of the dividend yield in determining investment strength is still a debated topic; most recently, Foye and Valentincic (2017) suggest that high dividend yield stocks tend to outperform low dividend yield stocks.

#### **Financial Performance**

Financial performance is a subjective measure of how well a firm can use assets from its primary modeof business to generate revenues and expand its operations (Copisarow, 2000). Financial performance can bemeasured in many different ways, but all these ways should be aggregated. Revenue from operations, operatingincome or cash flow from operations can be used as well as total unit sales. According to Demsetz and Lehn(1985), financial ratios from financial statements are a good source of data to measure financial performance.Liquidity is one of the most outstanding financial ratios used a measure of the firm's ability to meet financialobligations as and when they fall due without disrupting the normal business operations.Liquidity can beanalysed both structurally and operationally. Financial performance can also be measured in terms of netearnings which are divided into two parts, that is, retained earnings and dividends. The retained earnings of thebusiness may be reinvested and treated as a source of long-term funds. The dividend should be distributed to theshareholders in order to maximize their wealth as they have invested their money in the expectation of being made better off financially.

#### **Return on Equity**

Return on equity (ROE) or also called by Return On Common Equity, is often translated as Rentability of Own Capital. Investor to buy the shares will be attracted to this profitability ratio, or part of total profitability that can be allocated to shareholders. As known, shareholders has residual claim on obtained profits. Profit obtained by the company firstly will be used to pay any interest of debts, then preference share, and then (if any) will be given to shareholders. Return on equity (ROE) is the profitability ratio to measure the company ability to generate profit based on share capital owned by the company. Return on equity (ROE) can be calculated as Net Income after tax divided by Total Equity

# **Empirical Literature**

Santosa, Aprilia and Tambunan (2020) examine the relationship between financial performance and firm value with dividend policy as an intervening variable in an emerging market, Indonesia. The samples in this study are large firms listed on the Indonesia Stock Exchange (IDX). The sampling method uses a purposive sampling technique according to research criteria, especially members of the LO45 index. The study used the data analysis by using multiple regression analysis, path analysis, and Sobel test to find the direct, indirect, and intervening effect and significance in this study. The results indicated that profitability and activity have a positive effect, leverage has a negative effect, but liquidity has no effect on the value of the firms. The subsequent analysis shows that profitability and leverage do not affect dividend policy, liquidity has a negative effect, while activity has a positive effect, significantly. Dividend policy has a positive effect on firm value. Liquidity and leverage do not affect the firm value, but profitability and activity effect positively on the firm value through intervening dividend policy. In general, financial performance indicates an influence on firm value and less effect on dividend policy. As an intervening variable, dividend policy weakens the effect of financial performance on firm value. Idewele and Murad (2019) investigates the relationship between financial performance and dividend policy for a sample of fifteen Deposit Money Banks quoted on the Nigeria Stock Exchange 2009 to 2014. Panel data regression analysis was used as the method of analysis, and the model was estimated using the Pooled Least Squares estimation technique. The study revealed that there is a positive and significant relationship between dividend payout ratio and financial performance. On the contrary, there is a negative and insignificant relationship between dividend yield and financial performance.

Monogbe and Ibrahim (2019) conducted a study is to ascertaining the relationship between dividend policy and corporate profitability. Investment and Earning per Shares. Data for the study were extracted from annual report and accounts of twenty five quoted companies in Nigeria. These data were subjected to regression analysis, using Eview software and the findings indicate that; there is a positive and significant association between the firm performance and dividend policy of the sampled firm. The study further shows that there is a strong and positive significant relationship between ROCE, ASSET and dividend policy. Rahan and Wali (2018) investigate that whether the dividend policy makes an impact on the firm performance in Pakistan especially in cement sector. Data used have been collected from annual reports of the sample companies and website of Pakistan Stock Exchange from 2012 to 2016. The results of OLS indicate that there is an insignificant positive relationship between return on equity (ROE) and Dividend per share (D.P.S) which imply that by increasing cost dividend per share, return on equity increases for the selected companies. Furthermore, a significant positive relationship between earning per share (EPS) and return-on-equity (R.O.E) was found. In the case of firm size, significant relationship was found with ROE and financial leverage showed an insignificant relationship with firm performance (R.O.E). Hence this study supports the relevant theories of dividend policy. Enekwe, Nweze and Agu (2015) in a study on the effect of dividend pay-out ratio on the profitability of quoted cement companies in Nigeria, affirm that dividend payout ratio (D.P.R) has positive relationship and dividend payout ratio (D.P.R) has statistically significant with Return on Asset (R.O.A) and Return on Capital Employed (ROCE) while DPR has statistically insignificant with Return on Equity (ROE) of quoted cement companies in Nigeria. Kajolaet al.(2015) did a work on ""dividend payout policy and firm financial performance: evidence from Nigerian listed non-financial firms"". This work analyzed twenty-five nonfinancial firms listed on the Nigerian Stock Exchange from the period of 2004 to 2013. Panel data methodology was employed and pooled Ordinary Least Square (OLS) was used to estimate the coefficients of explanatory and control variable. The return on asset (ROA) served as a surrogate for the dependent variable, profitability, while Dividend Pay-out ratio proxied for dividend policy and was the only explanatory variable. Control variables include firm size, asset tangibility and leverage. Regression result reveals a positive and significant relationship between dividend payout policy (DPO) and financial performance (ROA).

Velnampy et al. (2014) did a research work on dividend policy and firm performance with evidence from the manufacturing companies listed on the Colombo Stock Exchange. The drive for this research was to

find out the correlation between dividend policy and firm performance of listed manufacturing companies in Sri Lanka. The analysis was for a period of 5 years, 2008 to 2012. Here, dividend payout and earnings per share were used as measures of dividend policy while, returns on equity and returns on assets were used as determinants of firm performance. Correlation, regression and descriptive statistics were used to test these variables. After the analyses were run, it was discovered that determinants of dividend policy are not correlated to the firm performance measures of the organization. Regression model showed that dividend policies do not affect companies' ROE and ROA. Gulet al. (2012) did a work on the relationship between dividend policy and shareholders" wealth in Pakistan. They studied the impact of dividend policy on shareholder's wealth, which was the general objective. The specific objectives were; to examine the relationship between wealth of shareholders and dividend payout; the impact of variation in dividend policy on the wealth of shareholders of dividend-paying and non-paying companies and; examine the impact of retained earnings and past performance in the existence of dividend policy on wealth of shareholder's. Seventy-five (75) companies listed in "Karachi Stock Exchange", were used as sample size for this study for duration of six years, from 2005 to 2010 using multiple regression and stepwise regression. Shareholder's wealth was used as the dependent variable, which was measured as market price per share, whereas, the explanatory variable dividend policy is measured as dividend per share. Furthermore, Lagged Price earnings ratio, Retained Earnings and Lagged Market Value of equity were used as explanatory variables. Data was collected from company's annual reports, Karachi Stock Market and State Bank of Pakistan. The findings in this research work were that the difference in average market value (AMV) relative to book value of equity (BVE) is highly significant between dividend-paying companies and non-paying companies. Retained earnings have insignificant influence on market value of equity.

Anijesushola and Jimoh (2012) investigated the link between the financial performance and dividend payout among listed firms' in Nigeria. The elements used were size of firms, ownership structure and the dividend payouts. The period 2004-2009 was utilized as the main sources of data collection for the fifty selected firms. The study found out that there is a significant positive interrelationship between the dividend payout and the performances of firms of the sampled firms in Nigeria. The study exhibited that ownership structure and firm's size has a significant impact of the dividend payout of firms too. Those dividends in Poland have less of a signaling role than in the developed capital markets. Mohammed (2007) examines whether dividend policy influences firm performance in Ghana. The analyses are performed using data derived from the financial statements of listed firms on the GSE during the most recent eight-year period. Ordinary Least Squares model is used to estimate the regression equation. In order to operationalise 'dividend policy'; the study coded: '1' to represent the company has a policy to pay dividend; while '0' to represent the company has a policy not to pay dividends. The results show positive relationships between return on assets, dividend policy, and growth in sales. Surprisingly, study reveals that bigger firms on the GSE perform less with respect to return on assets. The results also reveal negative associations between return on assets and dividend payout ratio, and leverage. The results of the study generally support previous empirical studies. The main value of this study is the identification of how dividend policy affects performance of firms listed on the Ghana Stock exchange. Farsioet al.(2004) argued that no significant relationship exist between dividends and earnings in the long run and studies that support this relationship are based on short periods and therefore misleading to investors. They proposed three circumstances that would render the long-term correlation of dividends and future earnings irrelevant. First, they pointed out that an increase in dividends may lead to a decline in funds that are to be reinvested by the firm. Firms that pay high dividends without considering investment needs may therefore experience lower future earnings. There is thus a negative relationship between dividend payout and future earnings (financial performance).

#### **Theoretical Framework**

There are many theories relating to dividend policy and firm performance, such as dividend irrelevance theory, bird in the hand theory, agency theory, and signaling theory. This study is however anchored on the signaling theory, which states that dividend policy would be considered as a mechanism to transfer

information about a company's future expectation to the investors. Paving dividend in cash gives valuable information to the stockholders as they don't have much information regarding the future earnings of the company as compared to the management. This practice reduces information asymmetry. Therefore, investors can use this information to estimate the share value of a company. According to the information content of dividends or signaling theory, firms, despite the distortion of investment decisions to capital gains, may pay dividends to signal their future prospects. The intuition underlying this argument is based on the information asymmetry betweenmanagers (insiders) and outside investors, where managers have private information about thecurrent and future fortunes of the firm that is not available to outsiders. Here, managers arethought to have the incentive to communicate this information to the market. Miller and Rock (1985) argued that information asymmetries betweenfirms and outside shareholders may induce a signaling role for dividends. They show that dividend payments communicate private information in a fully revealing manner. The most importantelement in their theory is that firms have to pay out funds regularly. An announcement ofdividends increase is taken as good news and accordingly the share price reacts favourably andvice-versa. Only good-quality firms can send signals to the market through dividends and poorquality firms cannot mimic these because of the dissipative signaling cost (for e.g. transaction costof external financing, or tax penalty on dividends, distortion of investment decisions). Therefore, asimilar reasoning applies to recurrent share buy-backs.

# METHODOLOGY

In this study, the dependent variable (financial performance) was measured as return on equity (ROE) while the dimensions used for the independent variable (dividend policy) are dividend payout ratio and dividend yield. The data for these variables were obtained from the annual report and financial statements of eighteen (18) deposit money banks in Nigeria for the period of 2016 – 2019, thereby qualifying the study as a panel data study. This therefore necessitated the use of the longitudinal survey research design in the study. In view of the fact that most panel data like time series data are not stationary, using nonstationary data in the model might lead to spurious regression which cannot be used for precise prediction (Guiarati, 2003). Thus, the prerequisite for co-integration test is the stationarity of each individual panel data over. Therefore, before turning to the analysis of the long-run relationships between the variables, the study examined the unit root properties of each panel data, as non-stationary behaviour is a prerequisite for including them in the co- integration analysis. If the panel data are stationary in their levels, then they are said to be integrated of order zero, i.e., I (0); if they are stationary in their first differences, then they are said to be integrated of order one, i.e., I (1); if stationary in their second differences, then they are integrated of order two, i.e., I (2). The order of integration of the variables was investigated using the Augmented Dickey-Fuller (ADF) tests. The data generated for this study were analysed with both descriptive and inferential statistics using the arithmetic mean, standard deviation, minimum and maximum values, and the Auto-Regressive Distributed Lag (ARDL) Regression technique. These were computed with the aid of E-Views version 10.

#### **Model Specification and Estimation**

The model specification for this study is given in functional form as: FP = f(DPO, DY) ------(i) In econometric form, the model becomes: FP  $\infty_0 + \beta_1 DPOit + \beta_2 DYit + - -\mu i$  ------- (ii) Where: Financial performance (return on equity) FP = Dividend payout ratio DPO = DY = Dividend yield **Regression Constant** x = **Regression Coefficient** = β Stochastic term μ =

In this study, our a priori expectation is that effective dividend policy will bring about increase in financial performance of deposit money banks in Nigeria. In summary, it is expected that  $\beta 1$ ,  $\beta 2$ , > 0. To test the validity of our data and the model specified for this study, a robustness check was conducted as follows:

#### Unit Root Test

This preliminary analysis is conducted to test the presence of a unit root in the panel data series. The Augmented Dickey Fuller (ADF) test was applied and the results are shown in Table 1.

VARIABLE	ADF TEST STAT.	5% CRITICAL VAL.	REMARKS
ROE	-2.861780	-3.065585	Non-stationary
DPO	-4.011127	-3.052169	Stationary
DY	-4.286816	-3.733200	Stationary
ΔROE	-4.315336	-3.065585	Stationary

The empirical results of the Augmented Dickey Fuller (ADF) unit root test at 5% critical levels in Table 1 indicates that Dividend Payout Ratio (DPO) and Dividend Yield (DY) were stationary at level I(0) while Return on Equity (ROE) was stationary only at first differencing I(1). Hence, the variables have a mixed order of integration of zero and one. This conclusion is based on comparison of the Augmented Dickey Fuller statistics and the critical values provided by Mackinnon (1996). Because the variables have different orders of integration, this permits us to conduct the Auto-regressive Distributed Lag (ARDL) model to know if the variables have a long run relationship.

ECM Regression Case 3: Unrestricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C D(ROE(-1)) D(ROE(-2)) D(ROE(-3)) D(DPO) D(DPO(-1)) D(DY) D(DY(-1))	0.662444 -1.325556 -0.057273 -0.635278 -0.989252 1.636374 6.385277 -0.552040	0.065452 0.143213 0.078681 0.095065 0.148776 0.168356 0.617038 0.121155	10.12099 -9.255818 -0.727912 -6.682594 -6.649282 9.719748 10.34827 -4.556468	0.0021 0.0027 0.5193 0.0068 0.0069 0.0023 0.0019 0.0198
CointEq(-1)*	0.457958	0.137940	10.56954	0.0018

#### Table 2: Error Correction Model

The results in Table 2 show that the ECM is negative and statistically significant, showing that an established short-run relationship can be attained. The speed of Adjustment of -0.457958 implies that 45.79 percent of the deviation of ROE from its short run equilibrium can be reconciled per annum.

#### Table 3: Auto Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.270711	Prob. F(2,1)	0.2944
Obs*R-squared	12.78698	Prob. Chi-Square(2)	0.1791

The results in Table 3 shows that there is no serial correlation in the model since the probability value of the F-statistic and the Chi-square of 0.2707 and 0.1791 respectively are greater than 5%.

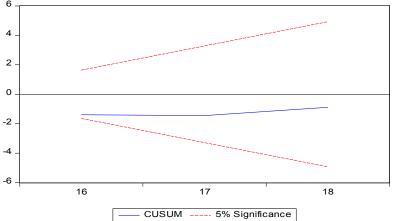
## Table 4: Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

E statistic	1 510666	Deck $E(10.2)$	0.4060
F-statistic	1.310000	Prob. F(10,3)	0.4060
Obs*R-squared	11.68041	Prob. Chi-Square(10)	0.3070
Scaled explained SS	0.471766	Prob. Chi-Square(10)	1.0000

The results of the Breusch-Pagan-Godfrey heteroskedasticity test shows that the null hypothesis is rejected and we then conclude that the residuals are not heteroskedastic since the probability statistic of the F-statistic and the Chi-square statistics are greater than 5%.

 Table 5: CUSUM Test



The results in Table 5 shows that the model is stable since the expected values of the sequence are within the upper critical line and the lower critical line (within +4 and -4).

#### **RESULT AND DISCUSSION**

This section of the study covers data presentation, analysis and interpretations of the results based on the data collected. The first section covers the presentation of five year average data on the relationship between dividend payout ratio and dividend yield on financial performance of deposit money banks in Nigeria. Table 6 below shows the data that are collected from the financial statements and annual reports of banks selected for this study.

able 0. Values of DI O, DI and ROE of Deposit Money Danks in Algeria				
BANKS	DPO	DY	ROE	
Access Bank	0.499	0.088	0.309	
Citi Bank	0.165	0.013	0.143	
Ecobank	0.994	0.981	0.59	
Fidelity Bank	0.865	0.972	0.275	
First Bank	0.149	0.002	0.097	
First City Monument Bank	0.367	0.098	0.026	
Guaranty Trust Bank	0.159	0.023	0.229	
Heritage Bank	0.233	0.033	0.341	
Mainstreet Bank	0.371	0.044	0.831	

Table 6: Values of DPO, DY and ROE of Deposit Money Banks in Nigeria

Polaris Bank Stanbic	0.712	0.099	0.954
Standard Chartered Bank	0.757	0.001	0.436
Sterling Bank	0.198	0.073	0.233
IBTC Bank	0.289	0.064	0.121
Union Bank	0.877	0.097	0.563
United Bank for Africa	0.173	0.066	0.229
Unity Bank	0.331	0.075	0.234
Wema Bank	0.317	0.072	0.436
Zenith Bank	0.770	0.038	0.299
~ ~		1	1

Source: Computed from the Financial Statements and Annual Reports of the Selected Banks

## **Descriptive Analysis of Data**

The descriptive statistics shows the description of the data in the study. The descriptive statistics describes the mean, median, mode, standard deviation and normality test. Table 7 shows the descriptive statistics of the variables of the various banks for the time period.

	ROE	DPO	DY
Mean	0.352556	0.457000	0.157722
Median	0.287000	0.349000	0.069000
Maximum	0.954000	0.994000	0.981000
Minimum	0.026000	0.149000	0.001000
Std. Dev.	0.247875	0.290236	0.299577
Skewness	1.072957	0.565040	2.420851
Kurtosis	3.462150	1.783085	6.974739
Jarque-Bera	3.613900	2.068472	29.43047
Probability	0.164154	0.355498	0.000000
Sum	6.346000	8.226000	2.839000
Sum Sq. Dev.	1.044510	1.432032	1.525692
Observations	18	18	18

#### **Table 7: Descriptive Statistics**

Source: Author's computation using Eviews 10.0 Software

The descriptive statistics of the dependent and independent variables in the model are displayed in Table 7. From 2016 to 2020, the average value of ROE, DPO and DY are 0.352556, 0.457000 and 0.157722respectively. These figures may be compared with the maximum values of ROE, DPO and DY which are 0.954000, 0.994000 and 0.981000respectively. It can be concluded that the means of all the variables are significantly lower than its maximum values. Skewness is a measure of asymmetry of the distribution of series around its mean. The skewness of all the variables is above zero. It indicates a positive skewness. Thus, there is a right long-tailed distribution for the observation of each of the variables. The Kurtosis of a normal distribution is 6. Table 7 further shows that ROE, DPO and DY each have a Kurtosis of less than six, indicating that each of the distributions is platykurtic. The JaqueBera statistics of all the variables show that all the series are normally distributed since the JarqueBera probability values of ROE, DPO and DY which are 3.61, 2.07 and 29.43 are all greater than 0.05.

# **Test of Hypotheses**

In order to test the two null hypotheses in this study, the variables were tested using Autoregressive Distributed Lag (ARDL) modelwith the aid of Eviews 10.0 to determine the extent to which the independent variables (DPO and DY) influence the dependent variable (FP). The Autoregressive Distributed Lag (ARDL) model was used to examine the relationship between dividend policy and financial performance, and the result obtained are presented in Table 8 below.

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
ROE(-1)	1.132402	0.385706	2.935921	0.0607
ROE(-2)	1.268283	0.379639	3.340763	0.0444
ROE(-3)	-0.578005	0.213433	-2.708134	0.0733
ROE(-4)	0.635278	0.356415	1.782412	0.1727
DPO	-0.989252	0.427039	-2.316536	0.1034
DPO(-1)	-1.425584	0.400457	-3.559894	0.0378
DPO(-2)	-1.636374	0.389087	-4.205679	0.0245
DY	6.385277	1.476368	4.324990	0.0228
DY(-1)	0.722815	0.222983	3.241571	0.0478
DY(-2)	0.552040	0.322770	1.710321	0.1857
С	0.662444	0.130565	5.073686	0.0148
R-squared	0.968911	Mean dependent var		0.359214
Adjusted R-squared	0.865280	S.D. dependent var		0.268283
S.E. of regression	0.098471	Akaike info criterion		-1.767125
Sum squared resid	0.029090	Schwarz criterion		-1.265009
Log likelihood	23.36988	Hannan-Quinn criter.		-1.813605
F-statistic	9.349671	Durbin-Watson stat		2.057727
Prob(F-statistic)	0.045894			

 Table 8:Effect of Dividend Policy on Financial Performance

\*Note: p-values and any subsequent tests do not account for model selection.

#### Source: Eviews 10.0 Statistical Software

**HO<sub>1</sub>:** Dividend payout ratio does not significantly affect return on equity of deposit money banks in Nigeria.

Table 8 above shows the Autoregressive Distributed Lag (ARDL) result for the study. According to the results, Dividend Payout Ratio (DPO) has a negative coefficient of -1.636374which is significant with a p-value of 0.0245. The interpretation of the negative coefficients of DPO indicates that a decrease in DPO by a unit will lead to an increase in Return on Equity (ROE) holding every other thing constant. The value of the Adjusted R-Squared of 0.968911 implies that DPO and DY explained about 96.89% systematic variations in the dependent variable (ROE) over the observed years while the remaining 3.11% variations are explained by other determining variables outside the model. The F-statistic shows a significant probability value (0.045894<0.05). This means that the effect of the independent variables (DPO and DY) on the dependent variable (ROE) did not happen by chance. The Durbin-Watson statistic of 2.057727 indicates absence of autocorrelation. Since the probability value of Dividend Payout Ratio (DPO) of 0.0245 is less than the 5% level of significance, the null hypothesis is hereby rejected. This suggests that dividend payout ratio significantly affect return on equity of deposit money banks in Nigeria.

HO<sub>2</sub>: Dividend yield does not significantly affect return on equityof deposit money banks in Nigeria.

According to the Autoregressive Distributed Lag (ARDL) results in Table 8, dividend yield has a positive coefficient of 0.552040which is insignificant with a p-value of 0.1857. The interpretation of the positive coefficients of DY indicates that an increase in DY by one unit will lead to 0.552040 unit increase in Return on Equity (ROE). Since the probability value of dividend yield (DY) of 0.1857 is greater than the 5% level of significance, the null hypothesis is hereby accepted. This suggests that dividend yield does not significantly affect return on equity of deposit money banks in Nigeria.

## **Discussion of Findings**

Given the empirical result of the model, this study found that dividend pay-out ratio has a negative significant relationship with return on equity while dividend yield does not significantly affect return on equityof deposit money banks in Nigeria. Previous studies related to the findings of this study include Santosa, Aprilia and Tambunan (2020), Idewele & Murad (2019), Rahan and Wali (2018), Enekwe, Nweze and Agu (2015), Kajolaet al.(2015), Monogbe and Ibrahim (2015), Velnampy et al.(2014), Gulet al. (2012), Anijesushola and Jimoh (2012), Mohammed (2007), and Farsioet al.(2004).Santosa et al. (2020)found that dividend policy has a positive effect on firm value. In general, financial performance indicates an influence on firm value and less effect on dividend policy. Idewele and Murad (2019) revealed that there is a positive and significant relationship between dividend yield and financial performance. Monogbe and Ibrahim (2015) shows that there is a strong and positive significant relationship between ROCE, ASSET and dividend policy.

Raham and Wali (2018) indicate that there is an insignificant positive relationship between return on equity (ROE) and dividend per share (DPS). Hence this study supports the relevant theories of dividend policy. Enekwe et al. (2015) affirm that dividend payout ratio (D.P.R) has positive relationship and dividend payout ratio (DPR) has statistically significant with return on asset (R.O.A) and return on capital employed (ROCE) while DPR has statistically insignificant with return on equity (ROE) of quoted cement companies in Nigeria. Kajolaet al.(2015) reveal that a positive and significant relationship exists between dividend payout policy (DPO) and financial performance (ROA). Velnampy et al.(2014)showed that dividend policies do not affect companies' ROE and ROA. Gulet al. (2012) revealed that the difference in average market value (AMV) relative to book value of equity (BVE) is highly significant between dividend-paying companies and non-paying companies. Anijesushola and Jimoh (2012) found out that there is a significant positive interrelationship between the dividend payout and the performances of firms of the sampled firms in Nigeria. Mohammed (2007) reported a negative association between return on assets and dividend payout ratio, and leverage.Farsioet al.(2004) revealed a negative relationship between dividend payout and future earnings (financial performance).

# CONCLUSION AND RECOMMENDATIONS

Dividend decision is one of the most critical decisions in corporate finance. It adds to the shareholders' wealth and to the market value of the firm. Management are in a dilemma about whether to pay a large, small or zero percentage of their earnings as dividends or to retain them for future investments. The questions therefore are: should the firm pay out money to its shareholders, or should the firm take that money and invest it for its shareholders? If a firm decides to pay a dividend, what percentage of its earnings should be paid? Given the above, will this affect the share price of the firm? Would the company lose some shareholders if they adopt a particular dividend policy? This has come about as a result of the need for management to satisfy the various needs of shareholders. For instance, shareholders who need money now for profitable investment opportunities would like to receive high dividends now. On the other hand, shareholders who would like to invest in the future will prefer dividend policy on financial performance of deposit money banks in Nigeria is mixed. While dividend pay-out ratio has a negative significant relationship with financial performance (return on equity), dividend yield does not significantly affect financial performance (return on equity) of deposit money banks in Nigeria.

Based on the above findings and the conclusion drawn there from the following recommendations are made:

- i. Management of deposit money banks should have a good and robust dividend policy in place to determine the percentage of dividend pay-out that would enhance financial performance in term of return on equity.
- ii. Management of deposit money banks should invest more effort to increasedividend yield and improve its impact on financial performance (return on equity) of deposit money banks in Nigeria.

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