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Financial Performance and Dividend Payout of Listed Companies in Nigeria

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Abstract:
Purpose: Despite it critical attention received in finance theory, dividend policy remains one of the most controversial issues in corporate finance, hence, financial economists have engaged in modeling and examining corporate dividend policy and earnings as they affect stock prices. However, only few studies were conducted in respect to financial performance and dividend payout. Therefore, the motivation of this study to examine the effect of financial performance on dividend payout of the listed companies in Nigeria.
Design/Methodology: The study adopts ex-post facto research design as data were collected from the annual reports and accounts of the companies for the period of five years (2016-2020). The data collected were analyzed using both descriptive and inferential statistics.
Findings: The result of the analyses revealed that return on assets and return on equity have positive and significant effect on the dividend payout ratio of the listed companies in Nigeria, while return on capital employed has negative but significant effect on the dividend payout ratio of the companies.
Implications: The financial performance of the listed companies in Nigeria has a positive and significant effect on the dividend payout of the companies. Thus, in order for the listed companies in Nigeria to boost their dividend payment, the management of the companies should maximize the utilisation of the capital employed to generate more income that will add value to the companies, while ensuring the effective and efficient management of the resources of the shareholders to boost return on asset and return on equity, since they were found to have positive influence on the dividend pay-out ratio of the sampled firms.

Keywords: Dividend payout ratio, financial performance, Nigeria, return on assets, return on capital employed, return on equity

1. Introduction

Dividend is the amount of residual income received by a shareholder, usually paid out of the company's profit after tax or out of general reserves. It has been adjudged to be the outcome of the financial performance of a company. Despite it critical attention received in finance theory, dividend policy remains one of the most controversial issues in corporate finance, hence, for a very long time, financial economists have engaged in modeling and examining corporate dividend policy and earnings as they affect stock prices (Amidu, 2017).Dividend policy refers to firm decision framework on payout pattern from corporate earnings (Usman &Olorunnisola, 2019). The quantum of such payment has largely conveyed acceptance/rejection information about such share in the capital market. Firm's dividend policy has been identified as a major determinant of investors' attraction to a corporate share in the capital market. The regular and stable dividend payment are considered a desirable policy by management of most firms, hence highly favored by shareholders than the fluctuating ones (Baker, 2019).

However, this cannot be achieved without favorable financial performance of a firm. The financial performance of a firm is the primary element amongst other factors that determine dividend payment inany corporate policy.When there is more profit, it increases the dividends which, in turn, increase the stock price of the firm and vice versa. However, when there is less profit it decreases the dividend payment and the stock price (Khan et al.,2019). The financial performance of a firm does not only constitute a source of cash flow to the shareholders, it also offers information relating to firm's going concern. It projects firm's long term stability, growth prospects, future liquidity, optimal capital structure, and determines future stock price growth (Al-Kuwari, 2019).

The strategies to optimize financial performance are always a difficult problem faced by managers, with each strategic option having a potential to impact dividend policy either positively or negatively. In light of this, decisions regarding whether to pay, when to pay, and how to pay dividends have dominated academics as well as professional debates. Several studies were conducted on the relationship between financial performance and dividend in developed and emerging economies (Tran, 2017). However, some of the previous studies focused on dividend policies and how such

policies affect firms' earnings (Amidu, 2017), without considering the effect of firms financial performance on dividend payout (Nissim&Ziv, 2016). Furthermore, previous studies focused on one sector of the economy or the other without giving it the general outlook of all the listed firms in a single study (Baker, 2019). Therefore, this study using the entire listed companies in Nigeria, examined the effect of firms financial performance on dividend payout in a Nigerian context. To achieve this objective, the study formulated the following hypotheses and tested at 1%, 5%, and 10% significant levels.

- H_{o1}: Return on capital employed has no significant effect on dividend payout ratio of listed companies in Nigeria.
- H_{o2}: Return on assets has no significant effect on dividend payout ratio of listed companies in Nigeria.
- H_{o3}: Return on equity has no significant effect on dividend payout ratio of listed companies in Nigeria.

The significance of this study lays on the contribution of this research to knowledge. Practically, this research will facilitate theNigerian listed companies to gainknowledge and awareness about the variables thatinfluence firm performance, so they can maximize the variables to increase firm performance,which will bring a good deal to strengthen thefinancial status and profitability of the firm. Thisimprovement of the firm financial status andprofitability of the firm will attract more investorstowards investment in the firms. This researchalso aimed at improving the firm value thatencourages further firm growth; that, in turn,leads to employment growth.

Moreover, this research will also be helpful foracademic analysts and researchers in studying thevariables that influence firm performance. Theindividuals may get advantages from this study aswell. The investors, after studying the variables thatinfluence the firm value, provided by this research,can make better investment decisions.

The remaining part of this study is structured as follows: Section 2 presents relevant literature reviewed. Section 3 described the methodology adopted for the study. Section 4 discusses the results of the empirical analyses, while section 5 presents conclusion and recommendations.

2. Literature Review

2.1. Financial Performance

The concept of financial performance of a firm is widely measured by profitability which is the primary goal of all business ventures (John, 2014). Without profit, the business will not survive in the long run. Profitability indicates the earnings generated by the company (Fama& French, 2006). It is from the profit made that a dividend is paid to shareholders, while the remaining keep in a reserve known as retain earnings for re-investment (Arthur &Sheffrin, 2003). When a company earns a profit, it can either re-invest it in the business (retained earnings), or it can distribute it to shareholders (John, 2014). Therefore, financial performance can be measured using return on assets, return on equity, and return on capital employed (Mamaro&Tjano, 2019).

According to Khan et al. (2019), if the firm has a good option for the investment then the firm pays fewer dividends and invests more, such firm has the past history due to the past record the shareholders expect in future for the fewer dividend payouts. Hence, the proportion of profit made paid out as dividend is based on the dividend policy of the organization and is measured using dividend payout ratio (Francis &Njoku, 2019). Adediran and Alade (2013) defined dividend payout ratio as the percentage share of the net earnings distributed to the shareholders as dividends.

Several empirical studies were conducted to examine the effect of firms' financial performance and dividend payout. Some of the empirical studies are reviewed as follows.

2.2. Return on Equity and Dividend Payout Ratio

Return on equity (ROE) is the amount of net income returned as a percentage of shareholders equity (Zhou &Ruland, 2016). It measures firm's profitability by revealing how much profit a company generates with the money shareholders have invested. Thus, expressed as a percentage net income divided by shareholders equity.

Empirical evidence from the studies such as Khan et al. (2019) and Usman and Olorunissola (2019) revealed a positive and significant relationship between return on equity and dividend payout ratio. This means that as the value of equity shareholders increases, also the amount of dividend payout increases significantly. However, the findings of the studies such as Nwaobia et al. (2017 reported a negative relationship between return on equity and dividend payout ratio.

2.3. Return on Assets and Dividend Payout Ratio

Return on assets (ROA) is a financial ratio that shows the percentage of profit that a company earns in relation to its overall resources (total assets) (Arnott&Asness, 2013). It is a key profitability ratio which measures the amount of profit made by a company per naira of its assets, and shows the company's ability to generate profits before leverage, rather than using leverage. The ratio shows the earning power on shareholder's book value investment and is frequently used for industrial comparison. Hence, determine as profit before interest and tax divided by total assets.

Empirically, studies such as Chira (2013), John (2014), Turakpe and Legaaga (2017) and Mamaro and Tjano (2019) reported a positive and significant relationship between return on assets and dividend payout ratio in different industries and countries. This means that increase in the value of return on assets increases the amount of dividend payout. However, the result of the studies such as Ho (2017) shows a negative relationship between return on assets and dividend payout ratio.

2.4. Return on Capital Employed and Dividend Payout Ratio

Return on capital employed (ROCE) is a profitability ratio that measures how efficiently a company can generate profits from its capital employed by comparing net operating profit to capital employed (Stulz, 2015). In other words, return on capital shows investors how many naira's in profit each naira of capital employed generates. Return on capital

employed is an important ratio in that it measures the relationship between the net profit and the capital employed or the total net assets. Therefore, is calculated as profit before interest and tax divided by total capital employed.

Empirical evidence revealed by the studies such as Adediran and Alade (2013), Biza-Khupe and Themba (2016), and Francis and Njoku (2019)indicates a positive and significant effect of return on capital employed on dividend payout ratio. This implies that as value of returns on capital employed increase, dividend payout ratio also increases significantly. However, the results of the studies such as Masdiah and Yusuf (2015) indicates an inverse relationship between return on capital employed and dividend payout ratio.

Based on the review of the related empirical studies presented above, this study hypothesized that:

- H_{o1}: Return on capital employed do not have a significant effect on dividend payout of the listed companies in Nigeria
- H_{o2}: Return on assets do not have a significant effect on dividend payout of the listed companies in Nigeria
- H_{o3}: Return on equity do not have a significant effect on dividend payout of the listed companies in Nigeria

2.5. Theoretical Review

According to Francis and Njoku (2019), several theories were used by previous studies to explain the concept of dividend policy and financial performance of firms. Such theories are Bird-in-hand theory, Signaling theory, Agency theory, Clientele effective theory, Pecking order theory, Trade off theory, etc. However, these theories are basically group into two, such as the dividend relevance group and the dividend irrelevance group. The main theories of the dividend relevance theory are the Walter's model and the Gordon model. These theories argue that dividends are relevant and ascertain that every firm has an optimal dividend policy at a point of time. Firm's dividend policy impacts its value as well as its stock price (Gordon, 1962). Hence, this study adopted Clientele effective theory to explain the concepts of profitability and dividend.

According to Black and Scholes (1974), this theory believes that investors will invest only in companies which havedividend policy consistent with their special desires, requirement and conditions. Thus, a firm that pays no or low dividends should not be penalized for doing so because its investors do not want dividends. Conversely, a firm that pays high dividends should not have a lower value, since its investors like dividends. This argument assumes that there are enough investors in each dividend clientele to allow firms to be fairly valued, no matter what their dividend policy is. Thisis known as clientele effect and it quiet explain the essence of dividend payment and retain profit which are determined by financial performance of a firm.

3. Methodology

The study adopted Ex-post facto research design to define the structure and strategy of the study. The target population consist of all the listed companies in Nigerian as at 31st December, 2020. Out of the one hundred and sixty nine (169) listed companies, stratified sampling techniques was used to select eleven (11)companies based on their magnitude of dividend payment over the period under the study. The required data were collected from the annual reports and account of the companies for the period of five (5) years (2016-2020). The data collected were analyzed using both descriptive and inferential statistics.

The model developed to evaluate the effect of return on equity (ROE), return on assets (ROA), and return on capital employed (ROCE) on dividend payout ratio (DPR), while controlling firms size (FMSZ), and firms leverage (FLEV) of the companies is presented as follows:

$Y = F\ (ROE, ROA, ROCE, FMSZ, FLEV)$………………………………………..equation

$DPR_{it} = \beta_0 + \beta_1ROE_{it} + \beta_2ROA_{it} + \beta_3ROCE_{it} + + \beta_4FMSZ_{it} + \beta_5FLEV_{it}e_{it}$…………..Model

Label	Variables	Descriptions	Sources
DPR	Dividend payout ratio	Dividend per share divide by earning per share	Zhou and Ruland (2016)
ROE	Return on equity	Net income divide by shareholder equity	Huang, et al. (2015)
ROA	Return on assets	Net income divide by total assets	Liu (2014)
ROCE	Return on capital employed	Profit before interest and tax divide by capital employed	Huang, et al. (2015)
FMSZ	Firms size	Natural logarithm of total assets	Baker (2019)
FLEV	Firms leverage	Total assets divide by total liabilities	Usman and Olorunnisola (2019)

Table 1: Variables Identification and Measurement
Source: Researcher (2021)

4. Results and Discussions

The results of the descriptive statistics are presented in Table 2 which analyses the pattern and the property of the data collected.

Variables	Mean	Std. Dev.	Min.	Max.	Skewness	Kurtosis
DPR	0.3294	0.3098	-0.3600	0.9000	-0.5498	3.0837
ROCE	0.2113	0.0569	0.0900	0.3400	0.2174	2.4631
ROA	0.0232	0.0528	-0.1882	0.2265	-0.2489	6.5873
ROE	0.0697	0.0879	-0.1594	0.2048	-0.7473	2.9187
FMSZ	17.9328	2.1659	16.1025	22.6640	1.2574	2.9424
FLEV	0.5309	0.2528	0.0554	1.4530	0.9898	5.4629

Table 2: Descriptive Statistics
Source: STATA 13

The result in Table 2 shows the mean value of dividend Pay-out ratio of 0.3294, maximum value of 0.9000, minimum value of -0.3600, with standard deviation of 0.3098, which is lower than the mean value, indicating a narrow variation between the sampled firms in this study.

In respect to performance measure, the result in Tables 2 indicates thatROCE has a mean value of 0.2113(21.13%), minimum value of 0.09 (9%), maximum value of 0.34 (34%), and the standard deviation of 0.0569. This indicates a narrow variation in returns on capital employed among the sampled firms. On the other hand, ROA has an average score of 0.0232 (2.32%), minimum of-0.1882 (-18.82%), maximum of 0.2265 (22.65%), and the standard deviation of 0.0528. while ROE has an average score of 0.0697 (6.97%), minimum value of -0.1594 (-15.94%), maximum value of 0.2048 (20.48%), and thestandard deviation of 0.0879. This indicate a moderate variation between the sampled firms in terms of return on equity.

However, the control variables such FMSZ has a mean value of 17.9328, minimum value of 16.1025, maximum value of 22.6640, and the standard deviation of 2.1659. This indicates a narrow variation between the sampled firms in this study regarding firm size. While FLEV has a mean value of 0.5309, minimum value of 0.0554, maximum value of 1.4530, and the standard deviation of 0.2528.

In testing the normality of the data collected, the study adopted the statistics of Skewness and Kurtosis. According to Kline (2011), skewness and kurtosis values should be less than three (3) and less than ten (10) respectively, to conclude the normality of a distribution. Thus, the result in Table 2 are assumed the data collected are normally distributed since the value of skewness ranges from -0.7473 to 1.2574, while kurtosis value ranges from 2.4631 to 6.5873.

In order to determine the strength and direction of relationship among the variable of the study, the research adopted Pearson moment correlation to analyses the data, and the result is presented in Table 3.

Variables	DPR	ROCE	ROA	ROE	FMSZ	FLEV
DPR	1					
ROCE	-0.2202	1				
ROA	0.0901	-0.1300	1			
ROE	0.0860	-0.1474	0.7885	1		
FMSZ	-0.0085	-0.0220	-0.0163	0.0908	1	
FLEV	-0.0104	0.0732	0.0477	-0.0028	0.2134	1

Table 3: Correlation Matrix
Source: STATA 13

The result of the statistics in Table 3 are below 0.8, which is a critical level for considering the multicollinearity problem (Gujarati, 2009). Therefore, there is no multicollinearity problem among the variables of the study. As can be seen, the highest correlation is between return on assets and return on equity with positive correlation coefficient of 0.7885.

This is confirmed by the result of variance inflation factor (VIF) presented in Table 4. The value of VIF must be less than 10, and the value of tolerance must be less than one (1) to conclude that there exist no multicollinearity problem(Hair *et al.*, 2014).

Variables	VIF	1/VIF
ROE	2.76	0.3621
ROA	2.74	0.365
FMSZ	1.09	0.919
FLEV	1.07	0.935
ROCE	1.03	0.971
Mean VIF	1.74	

Table 4: Variance Inflation Factor and Tolerance Coefficient
Source: STATA 13

The result in Table 4 shows that there is no multicollinearity problem among the variables as the computed VIF is less than ten (10), and the value of tolerance is less than one (1) (Hair *et al.*, 2014).

However, in order to detect heteroscedasticity in this study, Breusch-Pagan/Cook-Weisberg test isused which gives the chi-square value and its probability at 5% significance level. The result of Breusch-Pagan/Cook-Weisberg test in presented in Table 5.

DVs	Chi2 (1)	Prob> Chi2	Null (Ho)
DPR	16.39	0.0001	Rejected

Table 5: Breusch-Pagan/Cook-Weisberg Test
Source: STATA 13

The result in Table 5 indicates that the model in this study for dividend payout ratio (DPR) has a p-value of 0.0014 whichis significant at the 0.01 level, and thus, the model rejected the null hypothesis as there is an issue of heteroscedasticity.

In handling the problem of heteroscedasticity, the Heteroscedasticity-Consistent Covariance Estimator (HCCE) initiated by White (1980) was employed because it considers the general (unrestricted) alternative hypothesis in which no assumption is made on the residual variances and the result is presented in Table 6.

DVs	t-stat. W	Pr(chi2(103) > W)	Null (Ho)
DPR	43.0497	0.0013	Rejected

Table 6: White Heteroscedasticity-Consistent Covariance Estimator
Source: STATA 13

The result in Table 6 revealed that the model in this study still has a p-value of 0.0013 (1.3%) lower than the thresholdof 0.05 (5%). As a result, the null hypothesis of homoscedasticity for the model is still rejected, because heteroscedasticity is an issue. However, in handling the problem of heteroscedasticity that appeared in the regression model, the Panel Corrected Standard Errors (PCSEs) was employed as suggested and used by previous scholars such as Bailey and Katz (2011) and Reed and Ye (2009), and as such, no further analysis was conducted specifically for model selection, hence, the model specification.

Link test was performed for model specification. However, the link test utilized here is based on the idea developed by Tukey (1949) and the result is presented in Table 8.

DPR	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_hat	1.0585	0.0634	16.68	0.000	0.9312	1.1858
_hatsq	-0.1182	0.0791	-1.49	0.141	-4.5285	0.0405
_cons	0.0052	0.0230	0.09	0.820	-0.0108	0.0513

Table 7: Link Test for Model Specification
Source: STATA 13

Based on the results of link tests for model specification presented in Table 8, the null hypothesis which assume that the model was correctly specified is not rejected because the p-value of _hatsq is not significant (p>0.05), hence, the regression model is said to be correctly specified (Pregibon, 1980).

Since the result of the analyses of Pearson moment correlation, variance inflation factor, and tolerance coefficient indicate the absence of multicollinearity and autocorrelation, the study further conducted regression analyses and the result is presented in Table 8.

Variable	Coef.	t-value	p>t
Constant	0.3484	3.48	0.001***
Independent: ROCE	-0.5096	-1.73	0.084*
ROA	3.7293	7.47	0.000***
ROE	1.5095	3.98	0.000***
Control: FMSZ	-0.0049	-0.88	0.380
FLEV	-0.0323	-2.60	0.547
Observations		55	
No. of groups		11	
R²		0.8808	
Wald chi2 (7)		287.54***	
Prob>chi2		0.0000	

Table 8: Regression Results
Source: STATA 13
*Notes: *** (1%), ** (5%), *(10%) Significance Levels Respectively*

The result in Table 8 shows that, DPR has a R^2 value of 0.8808, indicating that 88.08% of the variation in the dividend pay-out ratio of listed companies in Nigeria is caused by the explanatory variables in this study. In addition, the model as a whole is also found to be significant (Wald chi2 (5) = 287.54, $p < 0.01$), indicating a goodness of fit and validity of the model.

Moreover, the result in Table 8 shows that return on capital employed (ROCE) has a significant negative effect on the dividend pay-out ratio of the listed companies in Nigeria at 10% statistical level of significance (β=-0.5096; p<0.10). This indicates that as a measure of financial performance, an increase in return on capital employed may result to a decrease in the dividend Pay-out ratio of listed companies in Nigeria by 50.96%. This result has contradicted the null hypothesisone of this study which states that return on capital employed (ROCE) has no significant effect on dividend payout ratio (DPR) of listed companies in Nigeria. Hence, concluding that, ROCE has no significant effect on DPR of the firms.

However, return on asset (ROA), has a significant positive effect on dividend pay-out ratio (DPR) of listed companies in Nigeria at 1% statistical level of significance (β=3.7293; p<0.01). This implies that when return on asset increases, it will result to a significant increase in the dividend pay-out ratio of listed companies in Nigeria, hence the null hypothesis is rejected and the study conclude that return on asset (ROA) has apositive and significant effect on dividend payout ratio (DPR) of listed companies in Nigeria.

In view of return on equity (ROE), the result in Table 8 shows that it has a significant positive effect on the dividend pay-out ratio of listed companies in Nigeria at 1% statistical level of significance (β=1.5095; p<0.01). This is an indication that when there is an increase in the return on equity (ROE) of listed companies in Nigeria, it would result to a significant increase in their dividend pay-out ratio. Hence, the conclusion that, return on equity (ROE) has a positive and significant effect on dividend payout ratio (DPR) of listed companies in Nigeria

In respect to control variables, the regression result in Table 8 revealed that both firm size (FMSZ) and firm leverage (FLEV) have insignificant negative effect on the dividend pay-out ratio of listed companies in Nigeria. Specifically, firm size (FSIZE) has β=-0.0048; p>0.10, whereas firm leverage (FLEV) has β=-0.0323; p>0.10.

5. Conclusion and Recommendations

The results of the study revealed that return on capital employed has a significant negative effect on dividend payout ratio, while return on asset and return on equity have significant positive effect on dividend payout ratio of the listed companies in Nigeria. Hence, the study concludes that, financial performance of the listed companies in Nigeria has a significant and positive effect on the dividend payout of the companies.

Therefore, the study recommended that, the listed companies in Nigeria should maximize the utilisation of the capital employed to generate income that will add value to the companies, while ensuring theeffective and efficient management of the resources of the shareholders to boost return on asset and return on equity since they are found to have a positive influence on the dividend pay-out ratio of the sampled firms.

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