Financial Leverage and Dividend Policy: Evidence from Oil and Gas Firms in Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Author OJC wrote the first draft of the manuscript. Author OTO read and approved the final manuscript.

Short Research Article

ABSTRACT

Aims: The study examined the relationship existing between financial leverage and the dividend policy of quoted oil and gas firms in Nigeria.
Study Design: The research work adopted for the study *ex-post facto* research design. Secondary data spanning 2011 to 2018 was sourced and collated from annual reports and accounts of oil and gas firms in Nigeria and Nigeria Stock Exchange factbook.
Place of Study: Department of Accountancy, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.
Methodology: The data was analyzed employing descriptive statistics and the least square regression technique.
Results: The study revealed that a significant relationship exists between long term debt and dividend payout ratio; total debt and dividend payout ratio while no significant relationship exists between short term debt and dividend payout ratio of quoted oil and gas firms in Nigeria
Conclusion: Given the integral role the Oil and Gas sector plays in Nigeria, this paper showed the centrality of the capital structure and dividend policy in ensuring the stability of corporations in the Nigerian Oil and Gas industry.

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1. INTRODUCTION

Oil and Gas sector is an important sector for any thriving economy. Its upstream, midstream and downstream activities catches the interest of both foreign and domestic investors. Therefore, it becomes important to know how this sector finances its operation as well as what it is paying back to its equity investors in the form of dividend. The mix of finance includes both equity financing and debt financing. Seyed and Fatemeh [1] noted that debt financed projects increases firm's obligations and risk while there is a reduced amount of risk and obligation experienced when projects are financed through equity. The more debt financing a corporation uses, the higher its financial leverage. Financial leverage is amount of money or sum of debt which a company requires to finance its needs or a measure of what ratio of equity or debt a company uses to finance its operations. Financial leverage is also described as the extent to which a firm uses fixed-income securities such as debt and preferred equity. As a company increases debt and preferred equities, interest payment increases thereby reducing earnings per share (EPS). As a result, risk to stockholder return is increased [2].

When making financing decision a company should keep its optimal structure in mind to ensure that any increase in financial leverage increases the value of the company and the amount been paid to its shareholders as dividend. Typical situation may arise when capital shortage due to high dividend payout forces the corporate managers to arrange costly working capital investments and debt payments. Alternatively, the financial manager has to issue new stock or raise debt. However, decision of these options and strategies represents a major task faced by the finance managers. In the same light, corporate finance managers fear the loss of liquidity as a result of high dividend payout thereby making less money available for reinvestment and working capital.

Dividend policy therefore remains interesting and elusive since it affects financing decisions, investment decision and growth of a firm. Further, the setting of corporate dividend policy remains a controversial issue and involves ocean deep judgment by decision makers. It is in the light of these that the researchers intends to examine the relationship which exists between financial leverage and the dividend policy components of quoted oil and gas firms in Nigeria.

1.1 Statement of the Problem

An important financial decision which corporations must take is to decide on the percentage of equity and debt that will make up its capital structure as well as decide on what share of corporate profits to be retained for reinvestment and what portion to be paid as dividend.

The Nigerian oil and gas sector is such a capital-intensive sector that an extremely high level of debt can put a strain on a company's credit ratings, weakening its ability to purchase new equipment or finance other capital projects. Poor ratings can also affect its ability to acquire new businesses. Investors in the oil and gas sector should therefore keep an eye on the debt levels on the statement of financial position.

A dazzling number of studies have been carried out in both developing and developed countries in order to establish the relationship which exists between financial leverage and corporations' choice of dividend policy, nonetheless no consensus has been reached [3]. Dividend policy decision has revealed inconsistent results amongst researchers. Some studies have revealed that dividend policy decisions is irrelevant [4] while some studies have demonstrated that dividend policy decisions is germane to the development and growth of companies [5]. With these inconclusive results, the quest for investigating the relationship which exists between financial leverage and dividend policy remains important and empirical study continues. If the issues are left unresolved it may compound into agency problem and generally affect the overall development and growth of Nigerian oil and gas firms. It is therefore imperative to conduct an integrative research on the subject matter thereby breaching the gaps identified.

2. LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Concept of financial leverage

Leverage is the way in which a company finances its operation. That is, a combination of short term liabilities (bank overdraft, trade creditors etc.) and long term capital (ordinary

shares, preference shares, reserves, bank loans, debentures, convertible loan stock etc.) [6]. Seyed and Fatemeh [1] defined financial leverage as a borrowing (debt) or loan which are reinvested in order to get a return which also impacts on dividend. From the definitions provided by most researchers, the amount of debt or equity that a corporation uses to fund its assets is called leverage. Further, financial leverage may be described as the effect of changes in profit before interest and tax (PBIT) on the earnings per share (EPS). Corporations that funds their projects or operations mostly with debt put anxiety on their liquidity. Al-Kuwari [7] confirms that dividend policy is negatively related to leverage ratio. However, Mollah (2011) found a direct relationship between financial leverage and debt-burden level that increases transaction costs. Nonetheless, financing through debt may have a lower cost because of legal protection. Debt financing usually has less risk and consequently may be available at a lower cost to the borrower and offers tax advantages as interest payments are expenses of the company and are allowable for tax deductions as compared to dividend distributions which are not allowable for tax deductions.

2.1.2 Short term debt (STD)

Investopedia (2016) described short term debt as an obligation shown in the current liabilities segment of a firm's statement of financial position. This obligation is composed of any debt payable by the company within twelve months. The obligation is most times made up of short-term bank loans, bank overdraft and trade payables taken out by the firm. The value of this account is of paramount importance when determining a company's financial health. If the account is greater than the firm's current assets, this seems to suggest that the firm may not be in good financial health and do not have sufficient resources to settle its short-term debts. Although short-term debts are due within twelve months, there may be a portion of the long-term debt included in this account. Determinants of short-term debt include: information costs and risks, costs of liquidation, state of development of the financial system, importance of relationship lending, bargaining power, maturity matching, regulations, and type of project (Bush & Lusinyan 2000).

2.1.3 Long term debt (LTD)

These are obligations which are not payable within the next 12 months. In accounting, long-

term debt is generally referred as company's loans and other obligations that will not become due within twelve months of the statement of financial position date. It may be in the form of a loan, debenture, mortgage bonds, or other debts not due for twelve months (Accounting Coach, 2016). There are two basic types of long term debt: bonds and notes: Bonds are financing instruments offered by a borrowing company to a lender (investor). Commercial bonds are often issued with a stated interest rate (the nominal rate) and maturity date printed on the certificate. Notes on the other hand are written promises to pay a sum of money to a lender at a specific time. They are issued for relatively small sums of money that one lender can handle in terms of risk and required capital outlay. The market for notes is such that they are not traded on a daily basis to average investors [8].

2.1.4 Total debt (TD)

Debt represents the creditors' equity (creditors' ownership interest) in the company. Total debt is a concept used most often when viewing company finances from the macro perspective. In the financial world, total debt is often described as the addition of both short term debt (STD) and long term debt (LTD). From the viewpoint of an economist the total debt of a country is determined by combining all the obligations that the government has accumulated by borrowing from other states having subtracted debts issued to the general public. Further, the debt held by all financial institutions is included in the mixture. Finally, household debt and all other business debt is amassed to envisage a clearer picture.

2.1.5 Concept of dividend policy

Dividend policy is referred to as the decision taken by an organization to distribute part or all of its profit to its shareholders in the form of dividend or to reinvest a fraction of its profit back to the business [9]. It is the practice usually adopted by management of firms in making dividend payout decisions. Dividend policy denotes an allocation of profit to company owners and guide for paying certain percentage of profit to investors as dividends. Summarily, it represents how a company divides its profit between retained earnings and dividend. Dividends can take the form of stock, stock repurchases, stock split, regular dividend payment and most importantly cash among others.

2.1.6 Dividend payout ratio

Dividend payout ratio helps us determine a firm's prospects for future growth. They also provide insight into a company's dividend policy. The extant literature on dividend payout ratio provides firms with no generally accepted prescription for the level of dividend payment that will maximize share value. Dividend payout policy is considered to be the most important policy in the financial corporate policies because it is an influential control vehicle to reduce the conflicting interests of the directors and the shareholders, as directors prefer to hold earnings while shareholders are interested in receiving dividends.

Studies have shown that the dividend payout ratio of a firm can communicate important information about the firm. In his research on dividend payout policies, Brav [10] pointed out that management are willing to go the extra mile in order to prevent dividend cuts. Managers would raise external funds, lay off employees, sell assets, or even forgo projects that will yield positive returns before slashing dividends. Naveen [11] posited that the unwillingness to slash dividend is attributable to the negative price

reactions experienced when dividend reductions is announced.

In the current study, dividend pay-out ratio is used as indicator for dividend policy. The ratio indicates the percentage of a company's earnings that is paid out to shareholder in cash. Similar with Kustono [12], this variable is estimated by comparing the dividend or dividend per share (DPS) by the net income or earnings per share (EPS). It is stated mathematically by the formula:

DPR = Dividend/Net Income or DPR = DPS/EPS

The conceptual framework can be represented diagrammatically as follows:

The diagram shows the study variables and their relationships. Dividend policy which is the dependent variable will be represented by dividend payout ratio (DPR) while the independent variable which is the financial leverage is measured by short term debt (STD), long term debt and total debt (TD). Return on asset (ROA) and firm size (FS) are used as the control variables.
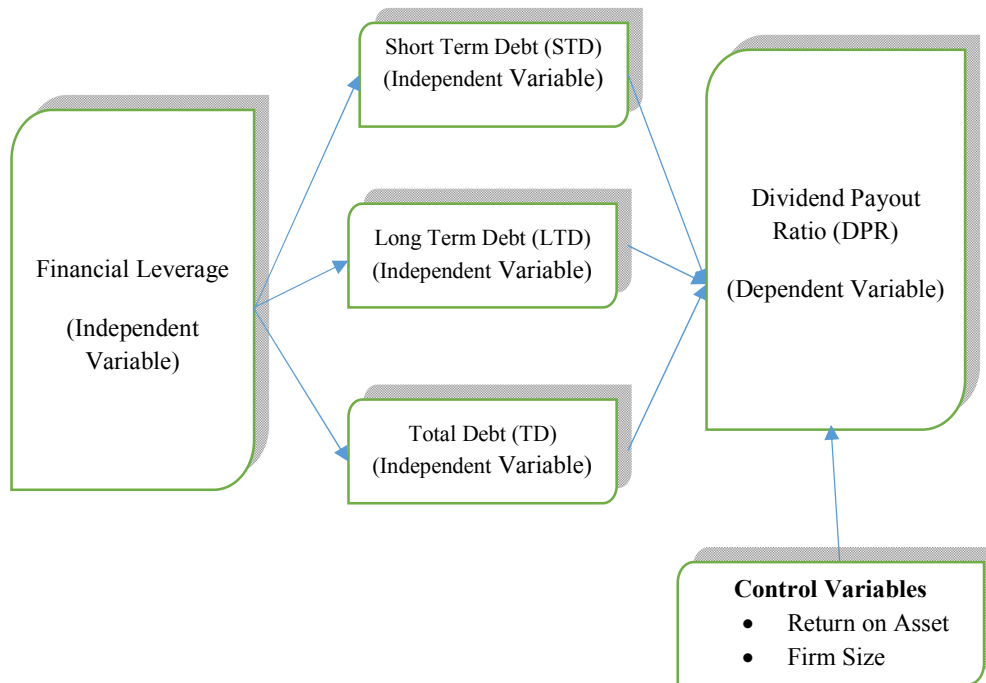

Fig. 1. Schematic representation of Conceptual Framework

The choice of these variables is because they are among the most important metrics for investors in evaluation of dividend stocks as well as debt level.

2.2 Theoretical Review

2.2.1 The tradeoff theory

This is the theory that states that there exists advantages to gain within a capital structure till the optimal capital structure is reached. The classical version of this theory was propounded by Kraus and Litzenberger [13]. Trade off theory argued for the existence of an optimum capital structure, by integrating several imperfections to capital markets disregarded by Modigliani and Miller [14] hypotheses, but incorporating the assumptions of symmetric information and market efficiency. According to the tradeoff theory, the optimal financing mix corresponds with the level of leverage at which the costs and benefits of financing through debts are exactly balanced. A firm can increase its overall value through merits from tax shield from increasing her financial leverage [14], nevertheless higher financial leverage could as well result to a higher expected financial distress cost which leads to decrease in firm's value.

The trade-off theory assumes that a firm chooses how much debt financing and how much equity financing to use by balancing the benefits and costs. An important purpose of this theory is to clarify the fact that firms usually are partly financed with debt and partly with equity. However, this theory does not elucidate the conservative nature of companies when using debt financing and it does not answer the question as to why leverage is consistent in most countries despite having divergent taxation systems. Further, the empirical relevance of this theory has often times been debated. We anchored this research on the trade-off theory because this is mostly the practice, business employ this as it offers an alternative way to increase profits by financing a portion of the business by issuing stock or through loans. It also helps to explore the implication of mix of equity and debt in financing a firms operation.

2.3 Empirical Review

Yusha'u and Adams [15] whose study covered ten years period (2007 to 2016), looked at the effect of financial leverage and dividend policy of selected firms in Nigeria, which primarily deals in consumer's good; this was done using secondary data source after which multiple regression technique was employed for data analysis. The study which sampled seventeen listed companies that deals in consumer goods used the ex-post facto research design; from this research it was deduced that long term debt ratio (LTDR) and total debt ratio (TDR) poses a negative and significant effect on the sampled company's dividend policy.

Dividend payout determinants of some listed companies on the Nigerian stock exchange (NSE) which deals on consumer goods were analyzed by Okoro, Ezeabasili and Alajekwu [16]. Sample of nine consumer goods firms were used for ten years period ranging from 2006 to 2015. The study which used secondary data sources collected from financial statement and websites of the sampled companies employed the use of descriptive statistics as well as multiple regression for its data analysis. It was deduced from the research that the effect of leverage on dividend payout is negative and insignificant.

Ebire, Mukhtar and Onmonya [17] examined the impact of free cash flow on dividend policy of oil and gas companies in Nigeria. The study which covered twelve years period (2003 to 2014) used secondary data sources. Data was analyzed by means of descriptive statistics to provide summary statistics for the variables and correlation analysis was also carried out using Pearson correlation technique. The study found that earnings per share and free cash flow have positive effects on the dividend policy while a negative significant relationship is found between leverage and dividend policy of listed oil and gas companies Nigeria.

Francesca, Alberto and Matteo [18] analyzed the potential impacts of the introduction of a new accounting standard, International Financial Reporting Standard 16 (IFRS 16) –Leases, on financial leverage and performance of entities. The study's aim was to estimate the impacts of the application of IFRS 16 on listed issuers of financial statements and the different impacts that the new standard could have in different activity sectors. The study found that the impact of the application of IFRS 16 will be different depending on the use of operating lease contracts among the different business sectors.

Abdul and Badmus [19] whose study covered ten years period (2000 to 2019), investigated the

relationship between leverage and the performance of three quoted firms which deals in Chemicals and Paints. The proxy used for leverage is Equity and Debt ratio while the proxy used for performance is return on asset. The study found that the impact of equity finance on return on asset is significant and positive while Debt ratio has a negative and insignificant impact on performance. Recommendations followed that firms in Chemical and Paints industries should finance its operation more with equity financing rather than debts.

Okoye, Amahalu, Nweze, Chike and Obi [8], examined the impact of financial leverage on dividend policy of nine quoted conglomerates in Nigeria. The study which covered six years period (2010 to 2015) used secondary data sources. Data was analyzed by means of multiple regression and correlation analysis was also carried out using Pearson correlation technique. It was deduced from the studies that financial leverage has a significant effect on the dividend policy components of listed conglomerates in Nigeria.

Leila and Houshang [20] investigated the effect of ownership structure, financial leverage, profitability, Investment opportunity and firm size on Dividend Policy and performance of firms quoted on Tehran Stock Exchange. The study used multiple regression to determine the controlling determinants of Dividend Policy. The findings showed that managerial ownership and profitability has a significant positive correlation with Dividend Policy. Findings also showed that financial leverage of the listed firms has a significant and negative correlation with dividend payment.

Nawaz, Salman and Shamsi [21] in an attempt to investigate the stochastic relationship which exists between financial leverage and the profitability of companies in Pakistan which deals in cement considered a period of six years (2005 – 2010) and eighteen cement manufacturers for the study. The study applied the ordinary least square regression to determine if a causal relationship exists between the variables. It was found out that financial leverage has a statistically significant impact on profitability of cement firms at 99% confidence interval.

Kalpana [22] using three quoted steel firms in Bombay Stock Exchange (BSE) analyzed the connection between profitability and leverage. Data was analyzed by means of standard deviation and Analysis of variance to provide summary statistics for the variables while correlation analysis was further used to establish the relation of the variables. The study revealed that to a large extent profitability is affected by leverage of company because it causes shareholder's wealth to increase. Also, there exists negative relationship between earnings per share (EPS) and Degree of Combined Leverage, EPS and Degree of Operating Leverage, EPS and Degree of Financial Leverage.

Elangkumaran [23] investigated what impact leverage has on earnings and prices of shares. The study which used a sample of twenty quoted firms in Colombo Stock Exchange (CSE) employed the use of linear regression as well as correlation coefficient for its data analysis. It was deduced from the research that no relationship exists between earnings per share and degree of combined leverage, degree of financial leverage and degree of operating leverage.

From extant literature, conclusive evidence on the relationship between financial leverage and dividend policy lacks as previous investigations have not produced a consistent result. Based on the previous finding, it is reasonable to test the following assertions stated in their null form:

1. There is no significant relationship existing between short term debt and dividend pay-out ratio
2. There is no significant relationship existing between long term debt and dividend pay-out ratio
3. There is no significant relationship existing between total debt and dividend pay-out ratio

3. METHODOLOGY

The type of research design adopted for the study is *ex-post facto* design; the study also employed the least square regression technique in analyzing the data. The study focuses on oil and gas firms listed on the Nigerian Stock Exchange, between the periods 2011 to 2018. The sample size comprised of nine [9] quoted firms in the Nigerian Stock Exchange which primarily deals in oil and gas. The details of the firms included in the sample are shown in the table below:

3.1 Model Specification

The models are specified below in explicit form:

$$DPR_{i,t} = \beta_0 + \beta_1 STD_{i,t} + \beta_2 ROA_{i,t} + \beta_3 FS_{i,t} + \varepsilon_{i,t} \dots\dots\dots\dots \quad (1)$$

$$DPR_{i,t} = \beta_0 + \beta_1 LTD_{i,t} + \beta_2 ROA_{i,t} + \beta_3 FS_{i,t} + \varepsilon_{i,t} \dots\dots\dots\dots \quad (2)$$

$$DPR_{i,t} = \beta_0 + \beta_1 TD_{i,t} + \beta_2 ROA_{i,t} + \beta_3 FS_{i,t} + \varepsilon_{i,t} \dots\dots\dots \quad (3)$$

3.2 Decision Rule

The null hypothesis will be accepted if the P-value (calculated probability) is greater than 5% significant level, otherwise reject.

4. RESULTS

4.1 Descriptive Statistics

This section presents the summary descriptive results of the variables of the study.

The table presents the descriptive statistics of the variables of the study; the mean TD is 199000000, which means that the total debt amount of oil and gas firms in Nigeria is 199000000, the minimum amount is 3333144 and the maximum amount of total debt amount of oil and gas firms in Nigeria is 943000000. The mean LTD is 99476990, which means that the average long term debt of oil and gas firms in Nigeria amounted to 99476990; the minimum

amount is 245202 and the maximum long term debt of oil and gas firms in Nigeria 782000000. The mean STD is 99132833, which means that the average short term debt of oil and gas firms in Nigeria amounted to 99132833; the minimum amount is 1106433 and the maximum short term debt of oil and gas firms in Nigeria 608000000. The mean ROA is -0.018053, which means that the average returns on asset amount of oil and gas firms in Nigeria amounted to -0.018053, the minimum amount is -0.734943 and the maximum short term debt of oil and gas firms in Nigeria 0.132157. The mean FS is 18.53049, which means that the average amount Firm size of oil and gas firms in Nigeria amounted to 18.53049; the minimum amount is 16.50829 and the maximum short term debt of oil and gas firms in Nigeria 21.72636.

4.1.1 Multivariate properties of data

The correlation results, showed evidence of a negative relationship between the TD and ROA while showing a positive relationship between LTD, STD and FS. LTD also showed negative relationship with ROA while showing a positive relationship between TD, STD and FS. STD showed negative relationship with ROA while showing a positive relationship between TD, LTD and FS. ROA showed negative relationship with LTD, TD, STD and FS. Finally, FS also showed

Table 1. Description of firms included in the sample

S/No	Company	Ticker
1	11 Plc.	MOBIL
2	Forte Oil Plc	FO
3	Capital Oil Plc.	CAPOIL
4	OANDO Nig. Plc.	OANDO
5	Total Nig. Plc.	TOTAL
6	MRS Oil Nig. Plc.	MRS
7	Japaul Oil & Maritime Services Plc.	JAPAULOIL
8	Conoil Plc.	CONOIL
9	Eterna Plc.	ETERNA

Table 2. Description of variables

Proxy	Description	Measurement
STD	Short Term Debt	Indicates loans and obligations falling due within twelve months for firm i in period t
LTD	Long Term Debt	Indicates obligations and loans lasting over twelve months for firm i in period t.
TD	Total Debt	Indicates the extent of firm i's leverage in period t.
DPR	Dividend pay-out ratio	Measured as the ratio of dividend per share (DPS) to earnings (net income) per share as at the year end.
DR	Debt ratio	Measure the ratio of total debt (TD) to total asset of firm i for period t
ROA	Return on Asset	Measure the ratio of net income to total asset of firm i for period t
FS	Firm Size	Indicates the natural logarithm of total asset of firm i for period t

Table 3. Summary statistics of independent variables

	TD	LTD	STD	ROA	FS
Mean	1.99E+08	99476990	99132833	-0.018053	18.53049
Median	56175810	12758041	46650968	0.023662	18.07340
Maximum	9.43E+08	7.82E+08	6.08E+08	0.132157	21.72636
Minimum	3333144.	245202.0	1106433.	-0.734943	16.50829
Std. Dev.	2.98E+08	2.11E+08	1.34E+08	0.147299	1.365028
Skewness	1.606056	2.373962	2.056969	-2.643726	0.959477
Kurtosis	3.867393	7.257504	6.528768	11.02221	2.727715
Jarque-Bera	32.74884	120.3128	86.90603	273.0926	11.11305
Probability	0.000000	0.000000	0.000000	0.000000	0.003862
Sum	1.41E+10	7.06E+09	7.04E+09	-1.281747	1315.665
Sum Sq. Dev.	6.21E+18	3.11E+18	1.25E+18	1.518780	130.4310
Observations	71	71	71	71	71

Source: E-views 9.0

Table 4. Correlation matrix of independent variables

	TD	LTD	STD	ROA	FS
TD	1.000000	0.917919	0.780803	-0.217538	0.912850
LTD	0.917919	1.000000	0.468822	-0.270303	0.754123
STD	0.780803	0.468822	1.000000	-0.058649	0.844713
ROA	-0.217538	-0.270303	-0.058649	1.000000	-0.057086
FS	0.912850	0.754123	0.844713	-0.057086	1.000000

Source: E-views 9.0

Table 5. Test of Hypothesis One

Dependent Variable: DPOR
Method: Panel Least Squares
Sample: 2011 2018
Periods included: 8
Cross-sections included: 9
Total panel (unbalanced) observations: 71

Variable	Coefficient	Standard Error	t-Statistic	Prob.
C	-0.421115	2.210010	-0.190549	0.8495
STD	-4.68E-10	1.28E-09	-0.366624	0.7152
ROA	0.988688	0.609483	1.622175	0.1100
FS	0.048877	0.124944	0.391193	0.6970

Effects Specification.			

Period fixed - (dummy variables)			

R-squared	0.082098	Mean dependent var	0.420360
Adjusted R-squared	-0.070885	S.D. dependent var	0.715464
S.E. of regression	0.740388	Akaike info criterion	2.378239
Sum squared resid	32.89047	Schwarz criterion	2.728795
Log likelihood	-73.42749	Hannan-Quinn criter.	2.517644
F-statistic	0.536649	Durbin-Watson stat	2.230856
Prob(F-statistic)	0.857295		

Source: E-views 9.0

negative relationship with ROA while showing a positive relationship between TD, STD and LTD.

4.1.2 Test of hypothesis one

H0_1: There is no significant relationship existing between short term debt and dividend pay-out ratio of quoted oil and gas firms in Nigeria.

The table shows the multiple regression result for hypotheses one. The model showed an R squared value of .082 (R^2 measures the variance proportion of the dependent variable that is explained by the independent variables); and,

Adjusted R squared value of -0.070; thus, the model explains approximately 8.2% variation in the dependent variable. Also, the table revealed a t-statistics value of -0.366624 with the p-value of 0.715 greater than 5% significance level. Hence, there is no significant relationship that exists between short term debt and dividend pay-out ratio of quoted oil and gas firms in Nigeria.

4.1.3 Test of hypothesis two

$H0_2$: There is no significant relationship existing between long term debt and dividend pay-out ratio of quoted oil and gas firms in Nigeria.

The table shows the multiple regression result for hypotheses two. The model showed

Table 6. Test of hypothesis two

Dependent Variable: DPOR
Method: Panel Least Squares
Sample: 2011 2018
Periods included: 8
Cross-sections included: 9
Total panel (unbalanced) observations: 71

Variable	Coefficient	Standard Error	t-Statistic	Prob.
C	-2.637859	1.788475	-1.474921	0.1455
LTD	-1.45E-09	6.80E-10	-2.136991	0.0367
ROA	0.513034	0.629778	0.814626	0.4185
FS	0.173332	0.099049	1.749961	0.0852
Effects Specification.				
Period fixed - (dummy variables)				
R-squared	0.145110	Mean dependent var		0.420360
Adjusted R-squared	0.002628	S.D. dependent var		0.715464
S.E. of regression	0.714524	Akaike info criterion		2.307122
Sum squared resid	30.63263	Schwarz criterion		2.657678
Log likelihood	-70.90284	Hannan-Quinn criter.		2.446527
F-statistic	1.018445	Durbin-Watson stat		2.361983
Prob(F-statistic)	0.439086			

Source: E-views 9.0

Table 7. Test of hypothesis three

Dependent Variable: DPOR
Method: Panel Least Squares
Sample: 2011 2018
Periods included: 8
Cross-sections included: 9
Total panel (unbalanced) observations: 71

Variable	Coefficient	Standard Error	t-Statistic	Prob.
C	-7.045847	2.871492	-2.453723	0.0171
TD	-2.12E-09	7.66E-10	-2.771189	0.0074
ROA	0.259637	0.632664	0.410388	0.6830
FS	0.425906	0.162233	2.625277	0.0110
Effects Specification.				
Period fixed - (dummy variables)				
R-squared	0.184428	Mean dependent var		0.420360
Adjusted R-squared	0.048500	S.D. dependent var		0.715464
S.E. of regression	0.697899	Akaike info criterion		2.260038
Sum squared resid	29.22375	Schwarz criterion		2.610594
Log likelihood	-69.23136	Hannan-Quinn criter.		2.399443
F-statistic	1.356804	Durbin-Watson stat		2.324744
Prob(F-statistic)	0.222510			

Source: E-views 9.0

an R squared value of .145 (measures the variance proportion of the dependent variable which is explained by the independent variables); and, Adjusted R squared value of 0.002; thus, the model explains approximately 14.5% variation in the dependent variable. Also, the F statistic (ratio of the mean regression sum of squares divided by the mean error sum of squares) which is used to check the statistical significance of the model showed a value of 1.018; p value <.10; therefore, the hypothesis that all the regression coefficients are zero is rejected. The table also revealed a t-statistics value of -2.136991 with the p-value of 0.036 less than 5% significance level. Hence, there is a significant relationship which exists between long term debt and dividend pay-out ratio of quoted oil and gas firms in Nigeria.

4.1.4 Test of hypothesis three

H0_3: There is no significant relationship existing between total debt and dividend pay-out ratio of quoted oil and gas firms in Nigeria.

The table shows the multiple regression result for hypotheses one. The model showed an R squared value of .184 (R^2 measures the variance proportion of the dependent variable which is explained by the independent variables); and, Adjusted R squared value of 0.048; thus, the model explains approximately 18.4% variation in the dependent variable. Also, the F statistic (ratio of the mean regression sum of squares divided by the mean error sum of squares) which is used to check the statistical significance of the model showed a value of 1.356; p value <.10; therefore, the hypothesis that all the regression coefficients are zero is rejected. The table also revealed a t-statistics value of -2.7712 with the p-value of 0.0074 less than 5% significance level. Hence, there is a significant relationship which exists between total debt and dividend pay-out ratio of quoted oil and gas firms in Nigeria.

5. DISCUSSION

The current study focused on the relationship that exists between financial leverage and the dividend policy components of quoted oil and gas firms in Nigeria. The current study revealed that no significant relationship exists between short term debt and dividend pay-out ratio of quoted oil and gas firms in Nigeria. Only few studies had been done relative to short term debt as it affects dividend policy. Some of which are Abor [4] that investigated the relationship that exists between

leverage and profitability of listed firms on the Ghana Stock Exchange (GSE) during a five-year period and found a significantly positive relation between the ratio of short term debt (STD) to total assets and ROE. The result from the current study also revealed that there exists a significant relationship between long term debt and dividend pay-out ratio of quoted oil and gas firms in Nigeria. Tangent with this finding is Yusha'u and Adams [15] who looked at the effect of financial leverage and dividend policy of selected firms in Nigeria, which primarily deals in consumer's good. From this research it was deduced that long term debt ratio and total debt ratio poses a negative and significant impact on the sampled company's dividend policy. Other related findings include Okoye, Amahalu, Nweze, Chike and Obi [8]; and Kalpana [22]. On the average, more studies found a negative and significant impact of long-term debt ratio on the dividend policy.

Finally, the result from the hypotheses testing revealed that there is a significant relationship which exists between total debt and dividend pay-out ratio of quoted oil and gas firms in Nigeria. This result agrees with Franklin and Muthusamy [24] who examined the corporate dividend policy for the Indian paper industry and found that that the Indian paper industry employs more leverage for narrating dividend pay-out ratio. Other studies whose results agrees with the current study are; Seyed and Fatemeh, [1]; Nuredin (2012) and Hellström and Inagambaev (2012).

6. CONCLUSION

This research work provided an account of the financial leverage and dividend policy decisions of quoted oil and gas firms in Nigeria. Nine [9] companies of the sector were observed for the period from 2011 to 2018. Findings from the study reveals that the level of financial leverage affects the dividend payment pattern and hence, the dividend policy in sampled firms. Conclusively, this paper showed the centrality of the capital structure and dividend policy in ensuring the stability of corporations in the Nigerian oil and gas industry.

7. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are provided:

Companies should ensure that financial decisions made by management are in

consonance with shareholders wealth maximization by increasing the returns to equity holders. Short term debt should be employed for non-capital intensive project as the maturity period is one year or less.

Companies should not rely mostly on long term debt in financing their operations to avoid low asset turnover. Long term debt should be employed in such capacity that the costs do not outweigh the benefits.

The amount of total debt finance in the financial mix of firms should be at the optimal level if leverage must be applied so as to ensure adequate utilization of firms' asset.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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