



## EFFECT OF FINANCIAL STRUCTURE ON FINANCIAL PERFORMANCE OF FIRMS IN NIGERIA

AKPOKERERE, Othuke Emmanuel<sup>1</sup> Ph.D & ONATUYEH, Aruobogha Edwin<sup>2</sup>Ph.D

Department of Banking and Finance<sup>1</sup>, Accounting<sup>2</sup>, Faculty of Administration and Management, Delta State University of Science and Technology, Ozoro Delta State, Nigeria. P.M.B. 5

Email: [akpokerereemma@gmail.com](mailto:akpokerereemma@gmail.com) / [akpokerereeo@dsust.edu.ng](mailto:akpokerereeo@dsust.edu.ng)<sup>1</sup>

Email: [godwin.onatuyeh@yahoo.com](mailto:godwin.onatuyeh@yahoo.com)<sup>2</sup>

---

### **Abstract**

The study examined effect of financial structure (FS) on financial performance (FP) of listed companies in the Nigeria Exchange Group (NGX). Based on judgmental sampling technique, 10 listed companies were selected as sample of the study. Data for FS (long term debt ratio (LTDR), total debt ratio (TDR), debt to equity ratio (DTER), and short term ratio (STDR)) and FP (return on assets (ROA)) were gleaned from the annual reports and financial statements of the sampled companies for a period of 10 years covering 2011 to 2020. The data were analyzed using descriptive statistics, the panel unit root test, the Pedronic cointegration test, correlation matrices, and multiple regression analysis with the aid of the E-Views 9.0 computer packages. The results of the study showed that LTDR has a positive and inconsiderable effect on FP surrogated as ROA of the listed Oil and Gas Firms (OGFs) and positive and considerable effects on ROA of the listed Consumer Goods Firms (CGFs); TDR has a negative and inconsiderable effect on ROA of the listed Oil & Gas and Consumer Goods Sector Firms (OGCGSFs); DTER has a positive and inconsiderable effect on ROA of the listed OGFs and positive and considerable effects on ROA of the listed CGFs and STDR has a positive considerable effect on FP of the listed OGFs and a negative considerable effects CGFs. The study found that FS affects the FP of the listed OGCGSFs in Nigeria in diverse ways. Thus, the report advises applying STDR in OGCGSFs to short-term business ideas to enhance their significance in FS decisions, which affects ROA. These firms need greater equity capital.

**Keywords:** Financial Structure, Performance, Equity, Assets.

### **Introduction**

Corporate finance involves funding the company's activities. Businesses can use internal or external financing. The company's success or failure depends on internal and external cash sources (Olayemi & Fakayode, 2021). This choice will affect the company's market competitiveness. If a company just has equity and internal money, it may have trouble expanding and seizing market possibilities. So, firms can borrow to grow and enhance their earnings (Opoku-Asante, Winful, Sharifzadeh and Neubert, 2022).

Financial Structure (FS) is the company's long-term financing mix. Companies' sources of finance are debt and equity (Oke & Fadaka, 2021). Equity is the owners' capital, which gives them firm shares. The problem associated with funds not owned by the owner is that annual interest paid (Oke & Fadaka, 2021). Regardless of low sales, low profitability, or any other event affecting the firm's competence and operations, a corporation using borrowed money must meet its financial obligations (Ganiyu, Adelopo, Rodionova & Samuel, 2019; Akpokerere & Obonofiemro, 2022).

A firm's capital structure might be internal, external, or both (Sharon & Celani, 2019; Uremadu & Onyekachi, 2019).

Professionals and experts agree that a company's FS with a high debt share can boost its long-term profitability (Chadha & Sharma, 2015). The ability of high debt ratio to positively affect profitability comes with the risk of bankruptcy if the company's long-term growth is temporarily impeded by environmental pressures (Oke & Fadaka, 2021; Ighoroje & Akpokerere, 2021). Since this is a comparative study, OGFs and CGFs listed on the NEG were compared.

In Nigeria, deposit money banks (DMBs) prefer to grant loans to OGFs over entrepreneurs in general commerce and other riskier sectors. Competition and technological innovation in Oil & Gas and Consumer Goods Sector Firms (OGCGSFs) have made FS decision a vital component of management and a survival requirement. FS decisions may lead to a firm's dissolution, financial difficulty, or bankruptcy (Omukaga, 2017). Abubakar, Maishanu, Abubakar and Aliero (2018), Abubakar (2017), Abata and Migiyo (2016), and Oladeji, Ikpefan and Olokoyo (2015), say that every business needs a mix of loan and equity. Debt capital is cheaper (in terms of inherent risk) than equity capital. There are differing views on how much leverage a company should use. One viewpoint identifies a point at which the trade-off between bankruptcy costs and interest expense tax benefits can be realised (Ahmed, Awais, & Kashif, 2018).

This framework illustrates how debts to equity ratio (DTER) are used to finance company activity. Maximize firm value by balancing risk and rewards in FSs. FS aims to balance firm risks and profits (Ehiedu & Obi, 2022). The company raises equity through issuing common and preferred stocks and debt through loans, bonds, Debentures, etc. The firm's stock holders have a long-term commitment to its growth. The debtor is the firm's creditor and owes interest and principal at regular periods (Ajayi & Zahiruddin, 2016; Onuorah, Ehiedu & Okoh, 2022).

This research intends to add to the field of FS by conducting a comparative analysis on the impact of FS on FP of Nigerian enterprises by comparing firms listed in the OGCGSFs, since Nigeria's economy picked OGCGSFs.

### **Statement of the Problem**

Industrialized and rising nations have studied FS and business FP. Despite finance managers' best efforts to maximise owners' projected value, many organisations face the problem of choosing between shares and debt when funding long-term investment potential. Choosing the right capital mix is tough for most companies. Nigerian OGCGSFs are key economic drivers, yet numerous enterprises have recently gone bankrupt. Width and depth of Nigeria's financial markets affect the appropriate corporate capital mix. OGCGSF firms need long-term, medium-term, and short-term

financing to operate; most finance their activities with financial debt. Most businesses struggle to choose the appropriate financial mix.

OGCGSFs' debt level impacts fixed costs. Interest is a fixed cost of debt/borrowed cash. Also, OGFs that borrow so much from their payables pay significant debt costs, limiting profits/net income. Financial leverage/debt affected FP of OGCGSFs in Nigeria, despite receiving substantial loans from DMBs, OGFs are the most indebted sector to the banking industry. As of February 2018, OGFs debts to DMBs in Nigeria reached N3.58 trillion (Asaolu, 2021). With this scenario, a layman could wonder why DMBs prefer lending to OGFs over genuine sectors of the economy. To the best of our knowledge, only one study has analysed the influence of FS on FP of a firm (Asaolu, 2021), while the others focus on one sector or another. Empirical data on FS and FP in OGCGSFs in Nigeria are varied.

Scholars disagree on the effect of FS on FP in Nigerian OGCGSFs. Bashiru and Bukar (2016) found a negative and considerable coexistence between FS and FP for listed petroleum marketing companies in Nigeria (ROA and EPS). This research aims to improve understanding and narrow the gap. Opoku-Asante et al. (2022) found an adverse coexistence between FS and FP using sectorial analysis. FS and FP's coexistence wasn't affected by debt maturity. Adeoye and Olojede (2022) studied the influence of FS on FP in Nigeria's food and beverage manufacturing industries. They found that debt finance negatively impacted return on capital employed (ROCE), ROA, and earnings per share (EPS). Olayemi and Fakayode (2021) explored the effect of FS on FP of quoted firms in Nigeria. Short-term debt to total asset ratio (SDTAR) and LDTAR have positive but significant effects on ROA, while TDTAR has a negative insignificant influence on ROA and ROE. TDTAR/TDTER lower ROE. TDTAR affects ROA and ROE, but not SDTAR, LDTAR, or TDTER. This study's focused methods and dynamics aim to decrease gaps and opposing opinions. This study examines FS and FP in Nigerian OGCGSFs.

## **Review of Related Literature**

### **Financial Structure (FS)**

FS is a company's debt-to-equity ratio. Ravindra and Rao (2014), referenced in Asaolu (2021), define FS as the combination of long-term sources of money, including reserves and surpluses (i.e. retained earnings). FS seen as firm's mix of securities, known DTER, and FS decisions are one of the most crucial a company can make since they affect its success or failure.

DTER as conceptualized by Kennon (2010) mentioned in Abubakar (2020) and Pandey (2005), cited in Mohsin (2020), distinguished between a company's FS and FS, saying the FS indicates the various strategies used to acquire funds and the FS represents the proportionate relationship between LTDR. Abor (2005) defines FS as the mix of DTER utilised to finance a company's activities. FS refers to how a

corporation funds its assets through debt, equity, and hybrid securities (Saad, 2010). In this context, hybrid securities include DTER components, have a fixed or floating rate of return, and can be converted into the underlying company's stock. Long-term and short-term debts, common equity, and preferred equity make up a company's FS (San & Heng, 2011; Odita & Ehiedu, 2015).

FS is DTER. It can also relate to how an organisation operates through stock, debt, or hybrid instruments; a company's FS is the composition of its obligations when equity and debt are used. Asaolu (2021) categorises a company's FS as equity capital, preference capital, and debt capital. They distinguish between contributed capital and retained profits, which are gains from prior years that the corporation preserved to improve the balance sheet, grow, acquire, and expand. Debt capital is long-term debt used by a corporation to finance its investment choices while paying back principle and interest, while preference capital is a mixture of debentures and equity shares without the benefits.

### **Financial Performance (FP)**

Financial Performance (FP) is the monetary measurement of a company's operations (Erikie & Osagie, 2017), measured with ROI, ROA, value produced, and other measures reflect these results. FP measures a firm's capacity to generate income from its main operation. This word is also used to compare similar companies in the same industry or sectors in aggregate (Odita, Ehiedu & Kifordo, 2020).

Frich (2013) defines performance as a portion or all of an organization's actions throughout time, in terms of cost efficiency, management responsibility, and so on. Performance is measured by the quality of the findings and the presentation. Company performance determines success, circumstances, and compliance (Ehiedu & Priscilla, 2022). A company's success depends on how well its primary operations produce revenue. Each stakeholder group uses different indicators to evaluate a company's performance (Dev and Rao, 2016).

As expected by Nwude and Anyalechi (2018), Osuji and Odita (2012), and others, return on assets (ROA) was used to measure financial success. For this study, Net Profit/total asset was used to compute ROA (Nwude and Anyalechi, 2018).

### **Theoretical Review**

#### **Pecking Order Theory (POT)**

Donaldson's POT of FS is a popular business leverage theory. It contradicts the notion that corporations should combine debt and equity in order to reduce their capital expenditures. The theory proposes that a firm has a clearly defined order of preference for long-term investment finance. Priorities for a corporation should be retained earnings, debt, and then outside equity. Corporations will borrow less as they get more prosperous, according to him, because they will have enough internal capital to invest (Uremadu and Onyekachi, 2019).

According to Olarewaju (2019), the adaption of POT by Myers and Majluf (1984) effectively captures the impact of asymmetric knowledge on the mispricing of new assets. Investors believe managers comprehend price-sensitive information well. Investors believe expensive managers issue riskier assets. Investor perceptions underprice new stock issuance. Existing stockholders can face considerable losses from underpricing. Firms rely as a last resort on retained earnings, debt, and outside equity financing to lessen knowledge asymmetry (Olawaju, 2019). This study uses POT since it incorporates all important corporate FS components (STDR, LTDR, DTER and TDR). The POT states that organisations should make the best FS selection available to improve performance.

### **Empirical Review**

Asaolu (2021) studied the effects of FS on the OGFs and Manufacturing sectors in the U.S. From 2010 through 2019, the study uses secondary NYSE/NASDAQ data and analyzed with Panel least square estimate and sectoral analysis. Debt structure increases business success, while leverage lowers firm performance for all firms analysed. Tangibility, interest and dividend growth, directors' shares/inside ownership, and non-debt tax shield affect the outcome. Tax shielding efficiency improves average performance across both industries.

Egwurube, Lateef, and Onipe (2020) studied the influence of FS on FP in Nigerian enterprises. The study used certified annual reports from 71 chosen organisations from 2009 to 2018. FP factors included LTDR and STDR. The study used dynamic system GMM and the results indicated that LTDR has a positive, minor impact on ROA, while STDR has a negative, considerable impact. Higher long-term and short-term debt in the FS affects the FP of NGXs listed enterprises.

Abubakar (2020) examined the influence of financial leverage (FL) on FP from 2005 to 2016 using secondary data from seven publicly traded Nigerian OGFs and the NGXs daily official lists. The effect of FL variables such as STDR, LTDR, and TDER on FP measured by return on equity was determined using a random effects panel estimator (ROE). STDR and LTDR had no considerable effect on FP while TDER has a negative considerable effect on ROE. Increased FL in the FS of publicly traded Nigerian OGFs affects ROE. OGFs should replace at least 90% of their FS (DTER) via incentive issues, right issues, and a higher proportion of retained earnings.

Oyakhire (2019) studied FS's impact on OGFs FP in Nigeria from 2014 to 2018. All listed OGFs on the NEG were analysed. Multiple regression was used to examine the FS-FP relationship. ROE and ROA are determined using debt ratio (DR). FS and FP are related, according to the research. The paper suggests oil and gas CEOs employ short-term debt management to boost FP.

Ogiriki, Andabai, and Bina (2018) used OLS to study FL and its effect on Nigerian enterprises' performance from 1999 to 2016, using LTDR, ROA, and ROE as dependent and explanatory variables. ROA and ROE both positively affect companies' LTDR, the study found. The study found that FL affected Nigerian companies' performance and advocated managing long-term loans wisely.

**Literature Gap:** The empirical evidence on the link between FS and FP of businesses is varied. In other words, academics disagree about the impact of FS on the FP of Nigerian businesses. The contradictions in literatures indicated a significant gap in the empirical research on FS and FP of listed firms. Hence, this study seeks to add information and close the gap to the smallest possible extent; this now serves as a yardstick for this research.

### **Research Methodology**

The research was conducted using the ex-post facto research design technique. The design involved the collection of secondary data from annual reports and accounts of 10 companies in the OGCGFs evaluated using E-View 9.0. This research design has been used in the previous studies of Okonkwo, Adigwe, Ezu and Oko (2020) and Oyakhire (2019).

The study made use of judgmental sampling technique because in drawing the sample of 10 firms out of the 13 firms in the OGFs while a sample of 10 firms was drawn from out of 28 consumer goods sectors listed in the NEG. It was done purposively by the researcher due to the availability of annual reports and accounts of the 20 firms in the OGCGFs.

Descriptive statistics was to analyse the data, followed by the panel unit test, which was conducted to ascertain the stationarity of the data sets while Pedroni Residual Cointegration Test was used to ascertain the long-term relationship in the data set. The correlation matrix was used to ascertain multicollinearity in the data and OLS method by using E-VIEW 9.0 statistical computer software was used to analyze data in order to establish the kind of relationship that exist between the independent and the dependent variables.

The OLS model was adopted from the study of Alamgir, Abdullah and Khalid (2019); The model which specifies that FP (proxy with Return on Assets (ROA) is significantly influenced variables of capital structure {Long Term Debt Ratio (LTDR), Total Debt Ratio (TDR), Debt to Equity Ratio (DTER) and Short-Term Debt Ratio (STDR)} is formulated as follows:

$$ROA = f(LTDR, TDR, DTER, STDR)$$

$$ROA = \beta_0 + \beta_1 LTDR + \beta_2 TDR + \beta_3 DTER + \beta_4 STDR + E$$

Where; E = Error Term,  $\beta_0$  = Intercept,  $\beta_1$ – $\beta_4$  = Coefficient of the Independent Variables and the a priori expectation is  $\beta_1, \beta_2, \beta_3, \beta_4$ , is greater than 0.

**Table 3.1: Measurement of Variables**

Variables	Formula	Expected Signs
ROA	Net Profit/Total Asset	+/-
LTDR	Long Term Debt/Total Asset	+/-
TDR	Total Debt/Total Asset	+/-
DTER	Total Debt/Total Equity	+/-
STDR	Short Term Debt/Total Asset	+/-

Source: Computation Basis for the Variables, 2023.

**Result and Discussions**

**Table 4.1: Descriptive Statistics**

OGFs					
	ROA	LDTR	TDR	DTER	STDR
Mean	6.356028	0.235799	0.680851	2.356007	0.511944
Median	0.030517	0.110413	0.696838	2.058642	0.539965
Maximum	13.35961	1.801022	1.375801	15.90025	1.072479
Minimum	10.30597	0.000671	0.056357	-13.04063	0.069330
Std. Dev.	37.83394	0.297789	0.212858	2.959737	0.243454
Observations	100	100	100	100	100

CGFs					
	ROA	LDTR	TDR	DTER	STDR
Mean	0.074136	0.183401	0.547700	1.668332	0.402378
Median	0.069874	0.151373	0.529767	1.126609	0.343097
Maximum	0.297832	1.882400	4.384140	47.92299	2.501740
Minimum	-0.340632	0.006876	-0.504471	-2.982845	-0.013399
Std. Dev.	0.095528	0.212679	0.501113	4.846010	0.384559
Observations	100	100	100	100	100

Source: E-VIEW Version 9.0 Output, 2023.

ROA averaged 6.3560 for the OGFs, with a high of 13.3596 and a minimum of 10.3060. The standard deviation (SD) is 37.8339. ROA volatility is 3783.39%. The ROA for CGFs was 0.0741, with a maximum of 0.2978 and a minimum of -0.3406; the SD is 0.0955. ROA volatility is 9.5%. The OGFs had the most volatility, 3783.39%. Minimum LTDR is 0.0007, maximum is 1.810, average is 0.2338, and SD is 0.2978. LTDR volatility is 29.78%. The CGFs LTDR have a minimum of 0.069, maximum of 1.8824, average of 0.1834, and SD of 0.2127. LTDR volatility is 21.27%. This shows that OGFs have a much higher LTDR than CGFs (29.78%). TDR OGFs had a minimum of 0.0564, a maximum of 1.3758, an average of 0.6809, and a SD of 0.2129. This reveals that TDR volatility is roughly 21.29%, compared to CGFs with a minimum of -0.5045, maximum of 4.3841, average of 0.5477, and SD of 0.5011. This reveals that TDR volatility is 50.11 percent, which means TDR in CGFs is much higher than in OGFs. DTER OGFs recorded a minimum of -13.0406, maximum of 15.900, average of 2.9597, and SD of 47.9230. DTER volatility is 4792.30%, compared to CGFs with lowest of -2.9828, maximum of 47.9230, average of 1.6683, and SD of 4.8460. DTER volatility is 484.60%. Inference: DTER in CGFs

is much higher than in OGFs. STDR OGFs had a minimum of 0.0693, a maximum of 1.0724, an average of 0.5119, and a SD of 0.2435. This reveals that STDR volatility is roughly 24.35%, compared to CGFs with a minimum of -0.0134, maximum of 2.5017, average of 0.4024, and SD of 0.3846. STDR volatility is 38.46%. Inference: STDR in CGFs is much higher than in OGFs. According to SD, ROA is the most volatile variable in OGFs and DTER in CGFs.

**Panel Unit Root TEST (PURT)**

The summarized results for Levin, Lin & Chu Test (LLCT), Im Pesaran and Shin W-Test (IPSWT), Augmented Dicker-Fuller’s (ADF) and PP Fisher Test (PPFT) are presented in the Table 4.2a below;

**Table 4.2:**

		<b>PURT</b>		
<b>Variables</b>	<b>Method</b>	<b>Statistics</b>	<b>Probability</b>	<b>@Ist Diff.</b>
<b>ROA</b>	LLCT	-13.2194	0.0000	1(1)
	IPSWT	-5.73364	0.0000	1(1)
	ADF	73.9746	0.0000	1(1)
	PPFT	91.5354	0.0000	1(1)
<b>LDTR</b>	LLCT	-8.16974	0.0000	1(1)
	IPSWT	-4.65259	0.0000	1(1)
	ADF	63.2308	0.0000	1(1)
	PPFT	87.2838	0.0000	1(1)
<b>TDR</b>	LLCT	-12.0562	0.0000	1(1)
	IPSWT	-6.54780	0.0000	1(1)
	ADF	83.5567	0.0000	1(1)
	PPFT	112.491	0.0000	1(1)
<b>DTER</b>	LLCT	-12.4482	0.0000	1(1)
	IPSWT	-8.05029	0.0000	1(1)
	ADF	95.3220	0.0000	1(1)
	PPFT	114.552	0.0000	1(1)
<b>STDR</b>	LLCT	-10.5586	0.0000	1(1)
	IPSWT	-6.27968	0.0000	1(1)
	ADF	80.5769	0.0000	1(1)
	PPFT	122.730	0.0000	1(1)
<b>ROA</b>	LLCT	-6.24749	0.0000	1(1)
	IPSWT	-2.81823	0.0024	1(1)
	ADF	45.0933	0.0011	1(1)
	PPFT	94.0442	0.0000	1(1)
<b>LDTR</b>	LLCT	-5.85313	0.0000	1(1)
	IPSWT	-1.78392	0.0372	1(1)
	ADF	36.9519	0.0119	1(1)
	PPFT	77.6351	0.0000	1(1)
<b>TDR</b>	LLCT	-11.4614	0.0000	1(1)
	IPSWT	-3.23164	0.0006	1(1)
	ADF	50.7451	0.0002	1(1)
	PPFT	73.1452	0.0000	1(1)
<b>DTER</b>	LLCT	-4.37271	0.0000	1(1)
	IPSWT	-1.99186	0.0232	1(1)
	ADF	40.1714	0.0048	1(1)



<b>STDR</b>	PPFT	97.5381	0.0000	1(1)
	LLCT	-0.99149	0.0107	1(1)
	IPSWT	-0.60064	0.0240	1(1)
	ADF	28.5740	0.0065	1(1)
	PPFT	62.3716	0.0000	1(1)

Source: E-Views 9.0 Output (2023).

Table 4.2 summarises LTDR, TDR, DTER, and STDR PURT and ROA for NGX OGCGSFs. The null hypothesis claims data is not stationary. if LLCT, IPSWT, ADF, and PPFT findings are lower than the crucial value at any significance level to reject the null hypothesis. Table 4.2 shows that all LLCT, IPSWT, ADF, and PPFT probability values for the variables of ten companies each in the OGCGSFs are less than (0.05)5%. Thus, the null hypothesis that the data is steady, regularly distributed, and suited for multiple regression is rejected.

### Pedroni Panel Cointegration Test (PPCT)

This gives us further justification to claim that the variables were of I(1) order, supporting the use of PPCT. This is presented below:

Table 4.3:

### PPCT Results

OGFs					
	Panel Statistics		Group Statistics		
Panel	Statistics	Probability	Group	Statistics	Probability
v-Statistic	-0.433495	0.0293	rho-Statistic	3.502333	0.9998
rho-Statistic	1.958174	0.9743	PP-Statistic	-5.814478	0.0000
PP-Statistic	-17.96553	0.0000	ADF-Statistic	-3.205148	0.0007
ADF-Statistic	-8.315307	0.0012			
CGFs					
v-Statistic	-1.176033	0.0074	rho-Statistic	4.379847	1.0000
rho-Statistic	2.521666	0.9987	PP-Statistic	-3.290764	0.0005
PP-Statistic	-2.467531	0.0364	ADF-Statistic	-0.151970	0.0396
ADF-Statistic	-1.420275	0.0422			

Source: E-VIEW, 9.0 Outputs, 2023.

Table 4.3 panel and group data reveal statistical significance at the 5% level (0.05) for v, PP, ADF, and PP plus ADF. Thus, panel v, panel PP, group PP, and panel and group ADF statistics reject the null hypothesis that there is no cointegration between variables. Thus, the PPCT indicate a long-term association between variables. Since the ADF has a probability smaller than 0.05, the data are steady and suitable for multiple regression, addressing the unit root test problem.

Table 4.4: Correlation output

### OGFs

	ROA	LDTR	TDR	DTER	STDR
ROA	1.000000				
LDTR	-0.127675	1.000000			
TDR	0.091437	-0.035311	1.000000		
DTER	0.058245	-0.151705	0.231319	1.000000	

STDR	0.286145	-0.398436	0.639339	0.189205	1.000000
------	----------	-----------	----------	----------	----------

**CGFs**

	ROA	LDTR	TDR	DTER	STDR
ROA	1.000000				
LDTR	-0.242963	1.000000			
TDR	-0.463052	0.720154	1.000000		
DTER	-0.478682	0.814242	0.803847	1.000000	
STDR	-0.500074	0.357442	0.698406	0.547790	1.000000

Source: E-VIEW Version 9.0 Output, 2023.

Since the correlation values are less than 0.7, the correlation matrix in Table 4.4 demonstrates no multi-co linearity among OGCGSF variables. TDR, DTER, and LDTR have multicollinearity, as do DTER, STDR, and TDR.

**Table 4.5: Regression Result**

<b>OLS for OGFs</b>					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
C	-19.36941	13.16397	-1.471396	0.1446	
LDTR	3.897540	14.53646	0.268122	0.7892	
TDR	-30.30605	24.42025	-1.241021	0.2178	
DTER	0.334731	1.311818	0.255166	0.7992	
STDR	62.62886	22.96872	2.726702	0.0077	
R-squared	0.097223				
Durbin-Watson stat	1.966610				
Prob(F-statistic)	0.049531				
<b>OLS for CGFs</b>					
C	0.097229	0.015737	6.178543	0.0000	
LDTR	0.176131	0.068929	2.555238	0.0122	
TDR	-0.021452	0.032831	-0.653393	0.5151	
DTER	-0.011261	0.003375	-3.336385	0.0012	
STDR	-0.061781	0.030373	-2.034084	0.0447	
R-squared	0.354664				
Durbin-Watson stat	0.933337				
Prob(F-statistic)	0.000000				

Source: E-VIEW Version 9.0 Output, 2023.

Here, the findings of the study are addressed and backed by pertinent literature.

**LTDR and ROA**

The p-value of LTDR are 0.7892 and 0.0122 for the OGCGSFs respectively, which is more than the set value of 0.05 for the OGFs but lesser in CGFs. The coefficients of LTDR are 3.8975 and 0.0122 for the OGCGSFs respectively; this suggests that LTDR has a favourable trend with the corresponding ROA of the OGCGSFs in Nigeria. A change of one percent (1%) in LTDR would result in gains in ROA of 389.75% and 1.22% for the OGCGSFs, respectively. The results of this study support those of Oke and Fadaka (2021), Kithandi and Katua (2020), Adegboyega, Jayeola, Kajola, and Asaolu (2019), they established positive trend between LTDR and ROA, but they are in opposition to those of Abubakar (2020), Zachary, James, and James (2019),

Olarewaju (2019), and others, which established adverse trend between LTDR and ROA.

### **TDR and ROA**

The p-value of TDR is 0.2178 and 0.5151 for the OGCGSFs respectively, which is more than the set value of 0.05 for the OGCGSFs. The coefficient of TDR are -30.3061 and -0.0215 for the OGCGSFs respectively, which implies that TDR has a negative trend with ROA of the OGCGSFs in Nigeria. The ROA of the OGCGSFs would fall by 3030.61% and 2.15%, respectively, for every one percent (1%) change in TDR. This conclusion is consistent with that of Oke and Fadaka (2021), Alamgir, Abdullah, and Khalid, (2019), established adverse trend between TDR and ROA, but at odds with those of Abubakar (2020), Okonkwo, Adigwe, Ezu, and Oko (2020), Aziz & Abbas, (2019), and Adegboyega, Jayeola, Kajola, and Asaolu (2019), established positive trend between TDR and ROA.

### **DTER and ROA**

The p-value of DTER are 0.7992 and 0.0012 for the OGCGSFs respectively, which is more than the set value of 0.05 for the OGFs which the CGFs is lesser than 0.005. The coefficient of DTER are 0.3347 and -0.0113 for the OGCGSFs respectively, which implies that DTER has a positive trend with ROA of the OGFs and a negative trend for CGFs in Nigeria. A change of 1% in DTER would result in a 33.47% rise in ROA for OGFs and a 1.13% fall in ROA for CGFs, respectively. This is consistent with the conclusions reached by Okonkwo, Adigwe, Ezu, and Oko (2020), established positive trend between DTER and ROA.

### **STDR and ROA**

The p-value of STDR are 0.0077 and 0.00447 for the OGCGSFs respectively, which is less than the set value of 0.05 for the OGCGSFs. The coefficient of STDR is 62.6289 and -0.0618 for the OGCGSFs respectively, which implies that STDR has a positive trend with ROA of the OGFs and a negative trend for CGFs in Nigeria. A change of 1% in STDR would result in a 6262.89% increase in ROA for OGFs and a 6.18% decrease in ROA for CGFs, respectively. This result is consistent with that of Abubakar (2020), Kithandi and Katua (2020), Olarewaju (2019), and Alamgir, Abdullah, and Khalid (2019), whom established considerable influence between STDR and ROA, but it is not consistent with that of Adegboyega, Jayeola, Kajola, and Asaolu (2019), whom established inconsiderable influence between STDR and ROA.

### **Conclusion and Recommendations**

Both internal and external capital are used to fund the operations of businesses. The management of the company must quickly choose which strategy is best for the business at a given time. LTDR has a positive and inconsiderable effect on ROA of listed OGFs and positive and considerable effects on ROA of listed CGFs in Nigeria.

TDR has a negative and inconsiderable effect on ROA of listed OGCGSFs in Nigeria. DTER has a positive and inconsiderable effect on ROA of listed OGFs and positive and considerable effects on ROA of listed CGFs in Nigeria. The study found that FS affect listed OGCGSFs in Nigeria in diverse ways. The report recommends;

- i). To optimise their impact on FS decisions, which have a propensity to effect their ROA, STDR should be applied to short-term business proposals in OGCGSFs in Nigeria. These businesses ought to depend more heavily on equity financing.
- ii). Similarly, to increase the OGCGSFs' earning potential and produce a fair return on the debt, LTDR should be applied to their long-term business strategies. Again, the first line of defence should be equity funding.
- iii). TDR and LTDR had a considerable detrimental impact on FP. Businesses in the OGCGSFs can perform at their best using a careful balance of debt to total assets and debt to common equity. In order to accomplish the organization's overall goal, businesses should always strive to achieve the ideal combination.
- iv) To enhance the FP of their businesses, OGCGSFs listed on the NGX should increase the equity component of the DTER mix in their FS.

## **References**

- Abata, M. A., & Migiro, S. O. (2016). FS and firm performance in Nigerian-listed companies. *Journal of Economics and Behavioral Studies* 8(3), 54-74.
- Abdul, J. & Badmus, O. (2017). Effect of Leverage on Firm Performance in Nigeria: A Case of Listed Chemicals and Paints Firms in Nigeria. *Global Journal of Management and Business Research: DAccounting and Auditing*, 17(2), 15-25.
- Abor J. (2005). The effect of FS on profitability: an empirical analysis of listed Firms in Ghana, *Journal of Risk Finance*, 15(6), 438-447.
- Abubakar, A. (2017). Effects of financial leverage on FP of non-financial quoted companies in Nigeria. *FUDMA Economic and Development Review (FEDER)*, 1(1), 37- 53.
- Abubakar, A. (2020). Financial leverage and FP of oil and gas companies in Nigeria. *Open Journals of Management Science (OJMS)*, 1(1), 28-44.
- Abubakar, A., Maishanu, M. M., Abubakar, M. Y., & Aliero, H. M. (2018). Financial leverage and FP of quoted conglomerates firms in Nigeria. *Sokoto Journal of Management Studies*, 14(1), 85-100.
- Ahmed, F., Awais, I., & Kashif, M. (2018). Financial leverage and firms' performance: Empirical evidence from KSE-100 Index, *Etikonomi Jurnal Ekonomi*, 17(1), 45-56.
- Ajayi, O. D. & Zahiruddin, B. G. (2016). The Impact of FS on Firm Performance: Empirical Evidence from Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 7(4), 23-30.
- Akpokerere, O. E. & Obonofiemro, G. (2022). Board characteristics: Implications on financial performance of deposit money banks in Nigeria. *Journal of Finance & Accounting Research*, 4(4), 144-161.
- Asaolu, A. A. (2021). FS and Firm Performance: A comparative Study of Oil & Gas and Manufacturing Sectors in the United States of America. *Business and Management Studies*, 7(1), 29-44.

- Bashiru, M. & Bukar, M. (2016). The impact of FS on FP of listed firms in Nigerian Oil and Gas industry. *International Journal of Public Administration and Management Research (IJPAMR)*, 3(4), 38-44.
- Chadha, S., & Sharma, A. (2015). Determinants of FS: An empirical evaluation from India. *Journal of Advances in Management Research*, 12(1), 3-14.
- Dev, R. & Rao, M. (2016). Explaining firm FS: the role of agency theory vs transaction cost economics. *Strategic Management Journal*, 17, 713- 728.
- Ehiedu, V. C. & Obi, C. K. (2022). Efficient Market Hypothesis (EMH) and the Nigerian Stock Exchange In The Midst Of Global Financial Crisis. *International Journal of Academic Management Science Research (IJAMSR)*, 6(8), 263-273.
- Ehiedu, V.C., & Priscilla, I. (2022). Firm specific determinants and its implication on listed oil and gas firms profitability in Nigeria. *International Journal of Advanced Economics*, 4(7), 142-158.
- Eriki, P. O. & Osagie, O. G. (2017). Capita) structure and bank's performance in Nigeria, *Management Sciences Review*, 5(1), 7-22.
- Firch, R. (2013). The market for corporate control: the scientific evidence, *Journal of Financial Economics*, 11, 5-50.
- Ighoroje, E. J. & Akpokerere, O. E. (2021). Liquidity management and the performance of deposit money banks in Nigeria. *IOSR Journals of Economics and Finance*, 12(I), 20-34.
- Kennon, J. (2010). An introduction to FS: why FS matters to your investments. [Online] Available: [www.about.com](http://www.about.com) (July 20, 2010).
- Mohsin, A. (2020). Impact of leverage on FP: Evidence from Pakistan food and fertilizer sector. *Journal of Critical Reviews*, 7(13), 473-482.
- Muchugia, L. (2013). The effect of debt financing on firm profitability of commercial banks in Kenya. Retrieved May 1, 2015, from <http://erepository.uonbi.ac.ke/handle/11295/59837>.
- Muritala, T A. (2012). An Empirical Analysis of FS on Firm's Perfomance in Nigeria. *InternAdvaational Journal of Advances in Management and Economics*, 1(5), 116-124.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-221.
- Odita A.O., & Ehiedu V.C. (2015). Operationalization of NGOs activities: proposing an Esocial network model for NGOs activities in Edo State. *Advances in Social Sciences Research Journal*, 2(4), 96-109.
- Odita A.O., Ehiedu V.C., & Kifordo A.A. (2020). Globalization: conflicts of opportunities, challenges and constraint factors in Nigerian business environment. *Journal of Advanced Research in Dynamical and Control Systems*, 12(7), 1983-1994.
- Ogiriki, T., Andabai, P. W., & Bina, P. A. (2018). Financial leverage and its effect on corporate performance of firms in Nigeria (1999-2016), *Research Journal of Finance and Accounting*, 9(4), 2222-2847.
- Oke, O. M. & Fadaka, F. B. (2021). FS and firm performance: Evidence from Nigerian consumer goods manufacturing firms. *Academy of Accounting and Financial Studies Journal*, 25(2), 1-10.
- Okonkwo, U. C., Adigwe, P. K., Ezu, G. K. & Oko, E. O. (2020). Effect of FS on FP of Oil and Gas Companies Quoted on the Nigerian Stock Exchange. *The International Journal of Business & Management*, 8(4), 293-304.
- Oladeji, T., Ikpefan, A. O & Olokoyo, F. O. (2015). An Empirical analysis of FS on performance of firms in the petroleum industry in Nigeria. *Journal of Accounting and Auditing: Research & Practice*, 4(7), 184-202.

- Olarewaju, O. R. (2019). Dynamic relationship between FS and quoted manufacturing firms' performance in Nigeria. *International Journal of Economics, Finance and Management Sciences*, 7 (3), 82-87.
- Olayemi, O. O. & Fakayode, O. P. (2021). Effect of FS on FP of quoted manufacturing companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 9(5), 73-89.
- Omukaga, K. O. (2017). *Effect of FS on FP of firms in the commercial and service sector in the Nairobi securities exchange for the period 2012-2016*, (Master's thesis, United States International University, Africa).
- Onuorah, A.C., Ehiedu, V.C., & Okoh, E. (2022). Covid-19 crises and stock market volatility in Nigeria: A Garch model approach. *International research Journal of Management, IT & Social sciences. Scientific & Literature*, 9(3), 317-327.
- Opoku-Asante, K., Winful, E. C., Sharifzadeh, M. & Neubert, M. (2022). The relationship between FS and FP of firms in Ghana and Nigeria. *European Journal of Business and Management Research*, 7(1), 236-244.
- Osuji, C. C. & Odita, A. (2012). Impact of FS on the FP of Nigerian non financial firms, *Arabian Journal of Business and Management Review (OMAN Chapter)*, 1(12), 43-61.
- Oyakhire, V. A. (2019). FS and FP of oil and gas companies in Nigeria (2014–2018). *International Journal of Finance and Commerce*, 1(3), 01-05.
- Pandey, I. M. (2005). *Financial management 9th Edition*, Indian Institute of Management, Ahmedabad Alka-Publishing. House P.VT. LTD.
- Ravindra, P. S. & Rao, T. (2014). An analysis on financial and FS of oil and gas industry - a case study of ONGC Videsh Limited. *International Journal of Advanced Research in Management and Social Sciences*, 3(6), 158-171.
- Saad, N. M. (2010). Corporate governance compliance and the effects of FS. *International Journal of Economics and Financial*, 2(1), 105-114.
- San, I. & Heng, A. (2015). Another look at FS and Corporate Performance in Emerging Markets: The Case of Nigeria. *Asian Journal of Business Management*, 7(1), 1-12.
- Shalini, R. & Mohua, B. (2017). An empirical study on the FS of oil and gas companies in India. *International Journal of Management*, 5(9), 1-7.
- Sharon, Z., & Celani, J. N. (2019). FS of small, medium and micro enterprises: major factors for a developing economy. *Problems and Perspectives in Management*, 17(2), 124-133.
- Uremadu, S. O., & Onyekachi, O. (2019). Impact of FS on corporate performance in Nigeria: A quantitative study of consumer goods sector. *Current Investigations in Agriculture and Current Research*, 5(4), 697-705.