CAPITAL STRUCTURE AND CORPORATE PERFORMANCE OF LISTED PHARMACEUTICAL COMPANIES IN NIGERIA

Olaoye, Clement Olatunji¹ Abiodun Rafiat Ayeni-Agbaje² Alabadan, Dinatu Nna ³ Adedeji, Ayodeji Quadri⁴

^{1,2,4}Ekiti State University, Nigeria³Federal University of Oye, Oye-Ekiti, Nigeria

*corresponding author: dr.dipoolaniyan@yahoo.com

Citation: Olaoye, C.O., Ayeni-Agbaje, A.R., Alabadan, D.N. & Adedeji, A.Q. (2021). Capital structure and corporate performance of listed pharmaceutical companies in Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences, 2*(1), 440-443

ABSTRACT

This study examined capital structure and corporate performance of listed pharmaceutical companies in Nigeria. The study specifically analyzed the impact of short-term debt (STD), long term debt (LTD) and Firms Size (FZ) on return on equity (ROE). The study focused on five pharmaceutical companies listed on the Nigeria stock exchange. Secondary data were collected from annual reports of sampled pharmaceutical companies over a period of six years (2012-2017) and were analyzed using descriptive analysis, correlation analysis, pooled OLS estimator, fixed effect estimator, and random effect estimator and Hausman test. The most consistent and efficient estimator revealed that short term debt exerts insignificant positive effect on return on equity, with coefficient estimate of 0.094800 (p=0.0946> 0.05), effect of long-term debt is negative and significant, with coefficient estimate of -0.302446 (p=0.0094< 0.05), and firms size exert insignificant negative impact on return on equity, with coefficient estimate of -0.026763 (p=0.3892> 0.05). The study concluded that using large proportion of debt significantly influence the performance of pharmaceutical companies in Nigeria. The study recommends that firms should consider the mixture of equity and debt for better performance of the organization, since they are major determinants of corporate performance.

Keywords: Capital structure, corporate performance, returns on equity

INTRODUCTION

The pharmaceutical sector all over the World plays a pivotal role in the economic growth and development of any given nation due to its strong relationship to health and labour productivity. According to the Pharmaceutical Manufacturers Group of Manufacturers Association of Nigeria (PMG-MAN, 2018), Nigeria is responsible for

producing 60% of pharmaceutical drugs for the Economic Community of West African States (ECOWAS). The ECOWAS countries have an estimated population of nearly 300 million and a market size of US\$3.5 billion for health products (Farouk, 2014 and Ugbam & Okoro, 2017).

However, Pharmaceutical business is relatively a profitable and promising one in Nigeria, it is worth noting the factors influencing this industry and examining its profitability. In the process of investing, firm normally trade off the present benefits for the future benefits and use the present finances to be able to fulfill their own commitments to the financial suppliers in the future.

The trouble affecting entities in Nigeria lies within financing; either to source equity or debt assets (Ajibola, Wisdom and Qudus, 2018). Financing is a most important element in any firm. It is backbone of any firm. So financing managers need to make decision on capital structures (debt, equity) that are best for their firm. Capital structure is the relationship between debt and equity and it is most critical issue that has effect on performance (Lawal, 2014). Capital structure decision is one of the most sensitive issues for any organization because it directly relates to competitive environment. Capital structure is the combination or mixture of company's equity and debt, which ensures financial stability, profit generation, growth, and expansion. Abor (2005) viewed the capital structure of a company as the precise mixture of debt and equity used in financing the firm's operations.

Capital structure means the approach a firm uses in financing their assets through the mixture of debt, equity or hybrid securities (Saad, 2010). Hybrid securities in this context mean a group of securities that combine the elements of both debt and equity, which have fixed or floating rate of return, and the holder has the option of converting it into the underlying company's share. Capital structure is a mixture of a company's debts (long-term and short-term), common equity and preferred equity (San & Heng, 2011). The capital structure has a very important role in small as well as large companies. The relationship between capital structure and corporate performance has been studied extensively according to literature (Enekwe, Agu, & Eziedo, 2014; Waseem, Khurram, & Kashif, 2015; Mohammed 2016).

However, there is no consensus about the effect of capital structure on corporate performance. Considering the extensive literature on the impact of capital structure on corporate performance in the developed countries and developing countries, little literature exists in the context of Nigeria especially in the pharmaceutical companies.

This study therefore extend the empirical literature on capital structure in Nigeria by examining the effect of capital structure on corporate performance of pharmaceutical companies in Nigeria, for the period of 8 years (2012 -2020) especially those listed on the Nigeria Stock Exchange. The existing literature on firms performance (Sichizya, 2015; Kakanda, Bello and Abba, 2016; Ibrahim, Mohammed, Abdul-Azeez, and Abdul-Nasiru, 2017) have used ROA and ROE as the common financial performance measures. In this study, ROE is used as a measure of corporate performance which serves as the dependent variable. The capital structure explanatory variables are ratios of short-term debt to total equity and long-term debt to total equity, while controlled by firms size.

LITERATURE REVIEW

Capital structure

Capital structure is generally considered as the mixture of debt and equity that makes up the firm's total capital, it uses for its business. It could also be seen as the arrangement of capital from different sources so that the long-term funds needed for the business are raised. Thus, capital structure refers to the proportions or combinations of equity share capital, preference share capital, debentures, long-term loans, retained earnings and other long-term sources of funds in the total amount of capital which a firm should raise to run its business. A firm's capital structure is typically expressed as a debt-to-equity or debt-to-capital ratio. Debt and equity capital are used to fund a business's operations, capital expenditures, acquisitions, and other investments. There are trade-offs firms have to make when they decide whether to use debt or equity to finance operations, and managers will balance the two to find the optimal capital structure. The problem of choosing between equity and debt are faced by many firms, most especially in funding their long-term investment opportunities.

Equity is taken to mean ordinary shares plus retained earnings, while debt is taken to mean all fixed interest-bearing stock. Gajurel (2005) described it as the "different sources of funds that make up a firm"s capital". According to Abor (2005) capital structure is the particular blend of equity and debt and equity a firm uses to finance its operations. According to Akinsurile (2008) Capital structure is described as the components of debts and equity, used by a company to finance its operations, and which usually consist of ordinary share capital, preference share capital and debt capital. In the same vein, Lambe (2014), Akinyomi and Olagunju (2013), Salawu (2009) opined that capital structure is the mixture of diverse securities utilized by a company in financing its profitable ventures. The common term in the above authors' definitions is that capital structure reflects each component of finance from equity to debt that a company uses in financing its operations.

The debt and equity combination that maximizes the value of the firm is the firm's

optimal capital structure (Ross, Westerfield & Jaffe, 2008), and choosing a firm"s capital structure remains a vital strategic choice that corporate managers have to make (Gatsi and Akoto, 2010). In order to optimize the capital structure, a firm can issue either more debt or equity. The new capital that's acquired may be used to invest in new assets or may be used to repurchase debt/equity that's currently outstanding, as a form of recapitalization. At the optimal capital structure, the incremental tax benefit obtains from debt is the same as the incremental costs of financial distress.

Corporate Performance

Corporate performance is a composite assessment of how well an organization executes on its most important parameters, typically financial, market and shareholder performance. It is an integral's annual financial and operational performance measures and specific objectives established by top Executive and approved by the Committee.

Performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage (Iswatia & Anshoria, 2007). According to Iswaita & Anshoria (2007), there are two kinds of performance, financial performance and non-financial performance; and financial performance emphasizes on variables related directly to financial report (Iswatia & Anshoria, 2007) also established that financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. The term is also used as a general measure of a firm's overall financial health over a given period of time and can be used to compare similar firms across the same industry or to compare industries or sectors in aggression (Stewart, 2009). Company performance is very essential to management as it is an outcome which has been achieved by an individual or a group of individuals in an organization related to its authority and responsibility in achieving the goal legally, not against the law, and conforming to the morale and ethic.

Empirical Review

Enekwe, Agu, and Eziedo (2014) investigated the effect of financial leverage on financial performance of the Nigeria pharmaceutical companies over a period of twelve (12) years spanning (2001 – 2012) for the three (3) selected companies. He employed three (3) financial leverage for the independent variables such as: debt ratio (DR); debt-equity ratio (DER) and interest coverage ratio (ICR) in determining their effect on financial performance for Return on Assets (ROA) as dependent variable. The ex-post facto research design was used for this study. The secondary data were obtained from the financial statement (Comprehensive income statement and Statement of financial position) of the selected pharmaceutical companies' quoted on the Nigerian Stock Exchange (NSE). Descriptive statistics, Pearson correlation and regressions were employed and used for the study. The results of the analysis showed that debt ratio (DR) and debt-equity ratio (DER) have negative

relationship with Return on Assets (ROA) while interest coverage ratio (ICR) has a positive relationship with Return on Assets (ROA) in Nigeria pharmaceutical industry. The analysis also revealed that all the independent variables have no significant effect on financial performance of the sampled companies.

Emori and Nneji (2015) investigated the effect of capital structure on corporate performance in Nigerian in which twenty companies operating in the environment were randomly picked and data on their capital structure and profit were picked out from their annual reports for the period under investigation (i.e. 2012-2013). Panel unit root test and the panel least squares regression analytical techniques were used to expose the influence of capital structure on corporate performance. Their study revealed that capital structure negatively influenced corporate performance.

Waseem, Khurram, and Kashif, (2015) examined effect of Capital Structure on Profitability: An empirical study of non-financial firms listed in Karachi Stock Exchange (KSE) in Pakistan. This study revealed relation between capital structure and profitability of listed Companies of Pakistan on Karachi Stock Exchange (KSE) during ten-year period, from 2004 to 2014. Regression analysis was used to expose the impact functions relating to return on equity (ROE) with measures of capital structure. Their study found that there was negative relation with the short-term debt, long term debt and total debt.

Sichizya (2015) examined effect of capital structure on profitability of manufacturing companies listed in Daares salaam stock exchange in Tanzania. The period was from 2009 to 2013 in which 30 observations were obtained. Panel data were used to analyzed using fixed effect regression statistical technique to test the relationship between capital structure variables and return on asset (ROA) and random effect used was to test the relationship between capital structure variables and return on equity (ROE). Other statistical methods of partial correlation and summary of descriptive statistics were also used to analyze the study. The results revealed the mixed results, a negative relationship between debt to equity ratios and return on equity. Debt to asset ratios indicated a positive relationship with return on equity when random effect regression used. Other results indicated a positive relationship between ROA and all capital structure variables using fixed effect regression method. Both, correlation and regression models indicated a positive relationship between debt to assets ratios and company profit in terms of ROE and ROA, while only debt to equity ratios showed a negative relationship with ROE as indicated by both methods (regression and correlation models).

Mohammed (2016), assessed the effect of capital structure on the financial performance of listed Consumer goods companies in Nigeria. Descriptive statistics, correlation, and hierarchical multiple regression analyzes were carried out to test the hypotheses developed in the study. The study found that there is a positive and significant relationship between firm's capital structure and corporate financial

performance. The study specifically found that short-term debt (STD) has no significance positive effect on return on equity (ROE) while Long-term debt (LTD) has positive relation and significant effect on ROE.

Kakanda, Bello and Abba (2016) examined effect of capital structure on performance of listed consumer goods companies in Nigeria. The study used ex-post facto research design to examine the relationship between independent and dependent variables while controlling for other variables. Descriptive statistics, correlation, and hierarchical multiple regression analyzes were carried out to test the hypotheses developed in the study. Secondary data was utilized from the annual financial reports of the sampled firms from the year 2008 – 2013, which was obtained from African Financial website and official website of Nigerian Stock Exchange. The study found that there is a positive and significant relationship between firm's capital structure and corporate financial performance. The study specifically found that short-term debt (STD) has no significance positive effect on return on equity (ROE) while Long-term debt (LTD) has positive relation and significant effect on ROE.

Ibrahim, Mohammed, Abdul-Azeez, and Abdul-Nasiru (2017) examined the relationship between capital structure and commercial banks performance in Ghana, 2010-201. Panel data was employed, which include Ordinary Least Squares regression model. To estimate the functions relating to bank performance (measured by Return on Equity) with measures of capital structure. The findings show statistically significant relationship between commercial banks' performance and all the capital structure measures (the ratios of short-term debt to total capital, long-term debt to total capital, and total debt to total capital). Whereas total debt and banks' performance are positively correlated, short-term debt and long-term debt are inversely related to banks' performance.

Abata, Migiro, Akande and Layton, (2017) examined the influence of capital structure on firm performance of listed firms in South Africa between January 2000 and December 2014 through the application of generalized method of moment analysis. The study measured the relationship among Tobin Q, long term debt to total assets, total debt to total assets, total debt to total equity, return on equity and return on asset. The results revealed that total debt to total equity and total debt to total assets were inversely related to both Tobin Q and return on asset, while long term debt to total assets were related positively to return on asset and Tobin Q respectively.

Akingunola, Olawale, & Olaniyan, (2017) studied the association between the decision on capital structure and organization's financial performance in Nigeria between 2011 and 2015. Regression analysis technique was employed for the measurement of debt equity, short term debt, long term debt, asset tangibility, growth, size, ROE and ROA. Short- and long-term debt have positive significant effect on ROE and ROA for the study period.

Aramvalarthan, Kannadhasan, and Babu, (2018) investigated the effect of leverage on

the performance of pharmaceutical firms in India, 1999-2015. investigated the dependence among capital structure and corporate in India 1999-2015 with the application of panel data method in measuring the link between return on equity, firm size, tangibles and capital structure. The result shows that financial leverage has a positive significant effect on the financial performance of the firm.

Kirmi, (2018) studied the relationship between capital Structure and profitability of listed petroleum and energy firms in Kenya with descriptive and causal research design techniques in measuring the impact of short and long-term debt on return on asset from 2012 to 2016. The findings from the study established a high positive association between short term debt and return on asset and an average negative association between long term debts and return on asset and a weak positive association between total debt and return on asset.

Kimoro, Muturi and Gekara, (2019) investigated the effect of profitability on capital structure selection for commercial banks operating in Kenya with multiple regression approach in measuring the link between the firm's capital structure selection and level of profitability. The study found that firm profitability had significant impact on the capital structure selection and exhibited a negative and linear correlation with capital structure selection. The study further found a moderating significant effect of ownership on the capital structure selection.

Uremadu and Onyekachi, (2019) studied the effect of capital structure on corporate performance in Nigeria. The study employed return on asset, long term debt to asset ratio, total debt to equity ratio with special focus on consumer goods industrial sector of the economy with multiple regression analysis. The results from the research found a negative and insignificant impact of capital structure on corporate performance of the consumer goods firm sector of Nigeria.

Aziz and Abbas, (2019) investigated the relationship of different debt financing on firm's performance in fourteen economic sectors of Pakistan from 2006 to 2014 using regression method. Their findings indicated that debt financing have negative but also significant impact on firm performance in Pakistan.

Ganiyu, Adelopo, Rodionova and Samuel, (2019) examined the association between capital structure and firm performance in Nigeria with a generalized method of moment technique for the measurement. The study employed total leverage ratio, long term leverage, short term leverage, asset tangibility, growth opportunity, risk, ownership, age, size and return on equity as variables. The research found a significant relationship between capital structure and firm financial performance.

Dang, Bui, Dao and Nguyen, (2019) investigated capital structure and its relationship with firm financial performance concentrating on Food and Beverage firms in Vietnam. Explanatory variables measured as ROE, ROA and EPS which stand as indicators of firm performance. Whereas, explained variables were short term debt ratio, debt ratio and long term debt ratio which stand as indicators of firm's capital structure. Via the unbalanced panel data of 605 observations from 61 listed firms in the industrial sub-sector, some significant analyses have been revealed. It was indicated that financial leverage has a strong influence on firm financial performance; debt ratios positively and significantly influenced earnings per share and return on equity but influenced return on asset negatively.

However, from the body of literature, it could be seen that the widely debated how composition of firm's capital influences firm's financial performance are yet to be concluded. To the best of our knowledge, no study has ascertained the effect of capital structure on firm performance in pharmaceutical sector in Nigeria. The study therefore employed recent data from the pharmaceutical sector to find out the relationship between capital structure and firm performance in Nigeria.

METHODOLOGY

The relationship between capital structure on corporate performance of listed pharmaceutical companies in Nigeria was considered. A panel regression model was used which is specified as follows:

ROE_{it}=
$$\delta_0 + \delta_1$$
 STD_{it}+ δ_2 LTD_{it}+ δ_3 FZ_{it}+ μ_{it} -----(1)

From the model, the subscript i represents individual pharmaceutical companies', t denotes the sample period from 2012-2020, and the δ_0 , δ_1 , δ_2 , δ_3 symbol listed pharmaceutical companies in Nigeria refers to the intercept. ROE is the dependent variable which represents performance of pharmaceutical companies. Short-term debt to total equity, long-term debt to total equity and firm's size, are represented by STD, LTD and FZ respectively. μ_{it} refers to the error term, and β_1 to β_5 represent the model coefficients.

However, this study focused on five pharmaceutical companies in Nigeria, including Fidson Healthcare Plc, Glaxosmithkline Consumer Nig Plc, Pharma-Deko Plc, Ekocorp Plc and May & Baker Nigeria Plc. Secondary data used in the study sourced from the annual reports of firms for a period of 8 years, spanning from 2012 to 2020. Data collated were analyzed using descriptive analysis, correlation analysis, pooled OLS estimator, fixed effect estimator, and random effect estimator and Hausman test.

DATA ANALYSIS AND PRESENTATION

Variables	Observations	Mean	Maximum	Minimum	Std. Dev.
ROE	30	0.126956	0.785372	0.015968	0.155470
STD	30	0.855034	1.924321	0.083364	0.523975
LTD	30	0.309821	0.809949	0.000000	0.240698
FZ	30	7.249723	9.369932	6.257534	0.906432

Table 4.1 Descriptive Statistics

Source: Data Analysis (2020)

Presented in table 4.1 above showed the descriptive statistics of the dependent and explanatory variables used regarding effect capital structure on corporate performance of pharmaceutical companies in Nigeria for the period of 8 years spanning 2012-2020. The performance of pharmaceutical companies measured by ROE has a mean value of 0.126956 (12.69%) with a maximum value of 0.785372 and a minimum of 0.015968. This means that performance of pharmaceutical companies for the period considered is low. The standard deviation stood at 0.155470, which means that the proportion of return on equity (ROE) related to the companies in the sample, is not much different. The mean values of the capital structure components (short-term debt and long-term debt) are estimated at 0.855034 (85.50%) and 0.309821 (30.98%), respectively. The findings from descriptive statistics in relation to STD and LTD is consistent with that of Kakanda, Bello and Abba (2016). This is an indication that some of the sampled companies use more of short-term debt than long-term debts. Coherently, the standard deviations for both short-term debt (STD) and long-term debt (LTD) are 0.523975 (52.39%) and 0.240698 (24.06%). This means that the proportions of STD and LTD in relation to the sampled companies are widely varied. This is a confirmation of the aforementioned statement where some companies prefer the use of the short-term loan, others prefer long-term loan in financing their operations. In relation to the control variables (F_SIZE), their mean values are 7.249723 respectively. While standard deviations is 0.906432 as shown in table 4.1.

	ROE	STD	LTD	FZ
ROE	1.000000			
STD	0.266807	1.000000		
LTD	-0.390120	0.253177	1.000000	
FZ	-0.299181	-0.422066	0.017722	1.000000

Table 4.2 Correlation Matrix

Source: Data Analysis (2020)

Correlation result presented in table 4.2 revealed that there is positive correlation between return on equity (ROE), and variables including short term debt expect long term debt and firms' size. Specifically, correlation coefficient reported in table 4.2 stood at 0.266807, -0.390120, -0.299181 for ROE and STD, ROE and LTD, ROE and FZ respectively.

The table also revealed positive correlation between all pairs of explanatory variables except STD and FZ with -0.422066. Specifically reported correlation coefficient stood at 0.253177 between STD and LTD, 0.017722 for LTD and FZ respectively. Correlation coefficient reported in table 4.2 revealed that there is no high tendency for multicollinearity among the explanatory variables, given the low magnitude of correlation for pairs of most of the explanatory variables.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.333625	0.246888	1.351322	0.1882
STD	0.094800	0.055484	1.708601	0.0994
LTD	-0.302446	0.109514	-2.761695	0.0104
FZ	-0.026763	0.031033	-0.862390	0.3964
R-square=0.31459,	Adjusted	R-square=0.235	51, F-statisti	cs=3.9779,

Table 4.3: Pooled OLS Estimations

R-square=0.31459, Prob(F-stat)=0.01855

Source: Data Analysis (2020)

Pooled OLS estimation result presented in table 4.3 revealed that short term debt exerts insignificant positive impact on return on equity, with coefficient estimates of 0.094800(p=0.0994> 0.05), the impact of long term debt on return on equity is negative and significant with coefficient estimate of -0.302446 (p=0.0104> 0.05), while the control variable stipulate that firms size exerts insignificant negative impact on return on equity with coefficient estimate of -0.026763 (p=0.3964> 0.05). Reported R-square statistics for the estimation showing the effect of capital structure on return on equity stood at 0.3145 which reflect that capital structure measured in terms of short-term debt and long term debt within the fiscal year alongside control variable-firm's size can only explain about 23% of the systematic variations in return on equity of the sampled companies.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.244169	0.131090	1.862608	0.0759
STD	0.033719	0.043846	0.769023	0.4501
LTD	-0.132242	0.082020	-1.612328	0.1211
FZ	-0.014493	0.017353	-0.835199	0.4126
R-square=0.	47080, Adjı	isted R-squa	re=0.30242,	F-statistics=2.7960,

Table 4.4: Fixed effect Estimations

Prob(F-stat)=0.03054

Source: Data Analysis (2020)

Table 4.4 reported estimation result showing the effect of capital structure on return on equity. Result showed that both long term debt firms size exerts insignificant negative impact on return on equity with coefficient estimates of -0.132242 (p=0.1211> 0.05) and -0.014493 (p=0.4126 > 0.05) respectively. While short term debt exerts insignificant positive impact on return on equity with coefficient estimates of 0.033719 (p=0.4501> 0.05). The result also revealed that about 30% of the systematic variation in return on equity can be explained by capital structure measured in terms of short term debt, and long term debt, when the model is controlled for firm's size.

Table 4.5: Random Effect Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.333625	0.243150	1.372093	0.1818
STD	0.094800	0.054644	1.734863	0.0946
LTD	-0.302446	0.107857	-2.804145	0.0094
FZ	-0.026763	0.030563	-0.875645	0.3892

R-square=0.31459, Adjusted R-square=0.23551, F-statistics=3.9779, Prob(F-stat) =0.01855

Source: Data Analysis (2020)

Random effect estimation result presented in table 4.5 revealed that short term debt exerted insignificant positive effect on return on equity, with coefficient estimate of 0.094800 (p=0.0946> 0.05), effect of long-term debt is negative and significant, with coefficient estimate of -0.302446 (p=0.0094< 0.05), and firms size exert insignificant negative impact on return on equity, with coefficient estimate of -0.026763 (p=0.3892> 0.05). The adjusted R2 of 0.2355 indicates that about 23% of the variation in ROE (measure of pharmaceutical companies' performance) can be

explained by the explanatory variables included in the model. The values F=3.97, p= 0.0185 show that the overall regression model is statistically significant, which explains the fact that the independent variables used in the regression estimation are significant factors explaining pharmaceutical companies' performance.

Table 4.6: Hausman Test

Correlated Random Effects - Hausman Test					
Equation: Untitled					
Test cross-section random effects					
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.		
Cross-section random	4.663489	3	0.1982		
Source: Data Analysis (2020)	· · · · ·				

Source: Data Analysis (2020)

Table 4.6 presents the result of Hausman test. Meanwhile, the result shows the chi-square value of 4.66 alongside a probability value of 0.1982. The result shows that there is no enough evidence to reject the differences in coefficients of fixed effect estimator and random effect estimation is not significant. It stands that the random effect estimation presented in table 4.5 is the most suitable estimation for the analysis of the effect of capital structure into short term debt, long term debt, and firm's size respectively.

CONCLUSION AND RECOMMENDATIONS

This study provides an attempt to examine capital structure and corporate performance listed pharmaceutical companies in Nigeria. The study finds that short-term debt has no significant effect on capital structure, whereas, long-term debt has significant negative effect on the performance of the listed pharmaceutical companies in Nigeria. For the control variables, firms size shows a negative but insignificant relationship with performance. Specifically, the results show that capital structure has a significant impact on firm's performance. This is consistent with the studies by Kakanda, Bello and Abba (2016) that found a negative relationship between short-term debt and ROE. It is also in consensus with Ibrahim, Mohammed, Abdul Azeez and Abdul-Nasiru (2017) in their study on Commercial Banks Performance in Ghana: Does Capital Structure Matter? Which affirmed that short-term debt has negative but statistically significant on return on equity, while long-term debt (LTD) and return on equity are negatively related but statistically significant. In a nutshell, using large proportion of debt significantly influence the performance of pharmaceutical companies in Nigeria. The study recommends that firms should consider the mixture of equity and debt for better performance of the organization, since they are major determinants of corporate performance.

REFERENCES

- Abata, M. A., Migiro, S. O., Akande, J. O., & Layton, R. (2017). Does capital strucutre impact on the performance of South African listed firms? *Economica*, *13* (6), 334-350.
- Abor, J. (2005). The Effect of Capital Structure on Profitability: Empirical Analysis of Listed Firms in Ghana. *Journal of Risk Finance, 6*(5), 438-45.
- Ajibola A., Wisdom O., & Qudus, O. L. (2018). Capital structure and financial performance of listed manufacturing firms in Nigeria. *Journal of Research in International Business and Management*, 5(1), 81-89
- Akingunola, R. O., Olawale, L. S., & Olaniyan, J. D. (2017). Capital structure decision and firm performance: Evidence from non-financial firms in Nigeria. *Economica*, 13 (6), 351-364.
- Akinsurile, O. (2008). Financial Management. Lagos: Eltoda Ventures Ltd. 6th Edition.
- Akinyomi, O.J, & .Olagunju, A. (2013). Determinants of capital structure in Nigeria. Int J Innov Appl Stud 3: 999-1005
- Aramvalarthan, S., Kannadhasan, M., & Babu, A. (2018). Capital structure and corporate performance. *International Business Management*, *12* (3), 262-267.
- Aramvalarthan, S., Kannadhasan, M., & Babu, A. (2018). Capital structure and corporate performance: A study of Indian pharmaceutical companies. *International Business Management*, 12 (3), 262-267.
- Aziz, S., & Abbas, U. (2019). Effect of debt financing on firm performance: A Study on nonfinancial sector of Pakistan. *Open Journal of Economics and Commerce, 2* (1), 8-15.
- Dang, Y. T., Bui, N. T., Dao, A. T., & Nguyen, H. T. (2019). Impact of capital structure on firm performance: Empirical evidence from listed food and beverage companies in Vietnam. *International Journal of Economics, Commerce and Management*, 7 (2), 567-577.
- Enekwe, C.I., Agu, C.I., & Eziedo, K. N. (2014). The Effect of Financial Leverage on Financial Performance: Evidence of Quoted Pharmaceutical Companies in Nigeria. Journal of Economics and Finance (IOSR-JEF). 5(3)

- Emori, E. G & Nneji, I. J. (2015). Effect of Capital Structure on Corporate Performance in Nigeria. *Journal of Economics and Sustainable Development*. *6*(14).
- Farouk Gumel (2014). Investment Opportunities in the Pharmaceutical Sector-Nigeria/Pakistan.
- Gajurel, P. D. (2005). Capital structure management in Nepalese enterprises. Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.
- Ganiyu, Y. O., Adelopo, I., Rodionova, Y., & Samuel, O. L. (2019). Capital structure and firm performance in Nigeria. *African Journal of Economic Review, 7* (1), 31-56.
- Gatsi J.G., & Akoto, R. K. (2010). Capital structure and profitability in Ghanaian banks.
- Ibrahim N. Y., Mohammed M.A., Abdul-Azeez M., and Abdul-Nasiru I.A. (2017) Commercial Banks Performance in Ghana: Does Capital Structure Matter? *International Journal of Accounting and Financial Reporting*,7(1)
- Iswatia, S., & Anshoria, M. (2007). The Influence of Intellectual Capital to Financial Performance at Insurance Companies in Jakarta Stock Exchange (JSE), Proceedings of the 13th Asia Pacific Management Conference, Melbourne, Australia.
- Kakanda. M.M., Bello, A.B., & Abba, M. (2016) Effect of Capital Structure on Performance of Listed Consumer Goods Companies in Nigeria. *Research Journal of Finance and Accounting*, 7(8), 211-219.
- Kirmi, P. N. (2017). Relationship between capital structure and profitability: Evidence from listed energy and petroleum companies in Nairobi security exchange. *Journal of Investment and Management, 6* (5), 97-102.
- Lambe, L. (2014). Corporate capital structure and firm's market value in Nigeria. *Res J Financ Account.* 5:16-31.
- Lawal, B.A. (2014). Effects of capital structure on firm's performance: empirical study of manufacturing companies in Nigeria. *Journal of finance and investment analysis, 3,* 39-57.
- Pharmaceutical Manufacturers Group of Manufacturers Association of Nigeria. (2018).

- Mohammed, G. (2016). Capital Structure and Financial Performance of Insurance Industries in Ethiopia. *Global Journal of Management and Business Research: C Finance*, 16(7) Version 1.0
- Ross, S., Westerfield, R. & Jaffe., J. (2008). *Corporate Finance, 8th Edition*.New York McGraw-Hill Irwin.
- Saad, N. M. (2010). Corporate Governance Cpmpliance and the Effects to capital Structure. *International Journal of Economics and Financial*, *2*(1), 105-114.
- Salawu, R.O. (2009). The effect of capital structure on profitability: An empirical analysis of listed firms in Nigeria. *Int J Bus Financ Res.* 3: 121-129.
- San, T. O., & Heng, B. T. (2011). Capital Structure and Corporate Performance of Malaysian Construction Sector. International Journal of Humanities and Social Science, 1(2), 28.
- Sichizya .S .F. (2015) The Effect of Capital Structure on Profitability of Manufacturing Companies Listed in Dar Es Salaam Stock Exchange. (Master's Thesis, Open University Tanzania).
- Stewart, W. D. (2009). Marketing accountability: Linking marketing actions to financial results. *Journal of Business Research 62* (2009) 636–643.
- Ugbam, C.O., & Okoro, E. A. (2017). A Strategic Study of the Nigerian Pharmaceutical Sector: Organizational Leadership, Market-share, and Competitive Performance. *International Journal of Business, Humanities and Technology, 7*(1).
- Uremadu, S. O., & Onyekachi, O. (2019). Impact of capital structure on corporate performance in Nigeria: A quantitative study of consumer goods sector. *Current Investigations in Agriculture and Current Research, 5* (4), 697-705.
- Waseem, J.M., Khurram, S., & Kashif, F, (2015) examined effect of Capital Structure on Profitability: An empirical study of non-financial firms listed in Karachi Stock Exchange (KSE) in Pakistan. Academy of Contemporary Research Journal V IV(III), 6-10,