# CAPITAL STRUCTURE AND PERFORMANCE OF QUOTED MANUFACTURING COMPANIES IN NIGERIA

O.I. Fatogun<sup>1</sup> & S.B. Balogun<sup>2</sup>

<sup>1&2</sup>Department of Accountancy, Federal Polytechnic, Ilaro, Ogun State, Nigeria olukunle.fatogun@federalpolyilaro.edu.ng +2348134151142

Abstract This study evaluates the impact of capital structure on performance of quoted manufacturing companies in Nigeria for a period of 15 years between 2003 and 2017. Scientific sampling procedures were employed to carefully select 10 manufacturing companies across 6 real sectors of Nigerian manufacturing industry with balanced panel data obtained. The study employed Panel (OLS) Regression techniques such as Fixed Effect Model and Random Effect Model at 5% level of significance. The study found no significant relationship between measures of capital structure and performance of listed Nigerian manufacturing for the period under review. Besides, the non-significance of Hausman test revealed that RE was more appropriate. The study re-affirms the claim of M-M Approach that capital structure does not matter when it comes to firm's performance in terms of operating efficiency and stock market efficiency. The study recommends that management should be careful when using debt as its source of financing its activities. Again, the management should seek to finance their activities with retained earnings and use debt as a last option.

Keywords: Capital Structure, Debt-to-equity, Total Asset, Financial Performance.

#### **INTRODUCTION**

Corporate organization financial choices towards accomplishing expressed destinations and guaranteeing organization advancement frequently incorporate choices on capital structure. Capital structure is the arrangement of an organization value capital and debt capital to back its operations. Value capital alludes to the stake of the proprietors (shareholders as respects corporate substances) in a business organization. As per Pandey (2010), value capital incorporates paid-up share capital, share premium and hold, and held profit. On the opposite side of the coin, debt capital infers financial assets owed by an organization to the untouchables. Incomprehensibly, firms pay enthusiasm on debt when they are financed by debt and announcing or paying profits to the value shareholders from their benefit and in some cases the produced and undistributed held income.

Regardless, the significance of debt and equity capital legitimize the rationale why they are going about as the principle financing choices utilized by every one of the organizations (Aransiola & Oluwadetan, 2015; Zuraidah, Norhasniza & Shashazrina, 2012). The utilization of the two wellsprings of assets is introduced on the need to improve the exhibition of firms as far as expansion of riches for the two firms (expanded income and market esteem) and the suppliers of assets (capital additions). Henceforth, financial directors are relied upon to pick the best choice for an offered assets to be supported and find some kind of harmony between ideal capital structure that expansion returns and limit cost.

The thought circumstance for any corporate organization with regards to financing choice is to decide ideal capital structure among debt and equity capital. Utilized organizations have extra capital accessible to back its operations and developments contrasted with an unleveraged business exclusively subject to equity (Taiwo, 2012 as demonstrated in Amusa and Saka, 2017). This suggests the utilization of debt capital along equity capital gives more supports accessible to progress in organization operations. Be that as it may, the regularly clashing exact outcomes

from the examinations on the connection between capital structure and execution of cited producing organizations most particularly in Nigeria expedites concern the ideal blend of debt and equity capital among corporate substances in the nation.

It is in this respect that the current research study aimed at revaluating such relationship to provide new empirical evidence using two different approaches, firm operational performance Page | 2 perspective and firm stock market performance.

In order to pursue the broad objective of this study, the following null hypotheses was synthesized:

- H<sub>01</sub>: Total debt-to-equity has no significant impact on return on assets of quoted manufacturing companies in Nigeria.
- H<sub>02</sub>: There is no significant relationship between total debt-to-equity and market capitalization on total book value of assets of quoted manufacturing companies in Nigeria.
- H<sub>03</sub>: Total debt-to-total asset has no significant effect on asset returns of quoted manufacturing companies in Nigeria.
- H<sub>04</sub>: Total debt-to-total assets do not significantly affect market stock market performance of quoted Nigerian manufacturing firms.
- H<sub>05</sub>: Company dimension has no significant direction on firms' stock market performance.

#### **Literature Review**

Capital is any type of wealth utilized to create more wealth. Entrepreneurs, business visionaries or corporate organizations need three unique sorts of capital. In corporate organization, capital signifies long haul assets of the organization. These things are found on the left hand side of the association's announcement of financial position (recently known as asset report) barring current liabilities. As needs be, these things are gathered into equity capital and debt capital. An equity capital which may comprise of three head components, for example, normal shares, inclination shares and held income is long haul reserves contributed by the proprietors of an organization or the firm. A fundamental distinction between equity capital and debt capital is that cases on pay and assets by providers of equity capital are subjected to those of providers of debt capital and in the treatment of annual tax, profits installments because of the providers of the previous are not tax deductible (Owolabi & Inyang, 2012). Inside equity capital itself, normal shares are commonly the most costly type of long haul reserves. Different types of equity are inclination shares and held profit.

The capital structure is the manner by which the organization makes up its subsidizing, and originates from the equity or debt capital in the short or potentially long haul. Despite the wellspring of financing, a positive return is expected in view of the use of assets (Babalola, 2014). Along these lines, money chiefs are relied upon to pick the best choice for an offered assets to be financed and find some kind of harmony between accessible choices that can lessen cost and increment profit for the shareholders. As per surviving writing, financial influence of the organization can be determined as the ratio of perpetual outsider assets (debt) and claim assets (equity). The higher the extent of debt in the capital structure of the composition, the more utilized an organization is, at the end of the day, the higher its debt ratio (Idode, Adeleke, Ogunlowore & Ashogbon, 2014; Machado, do-Prado, Viera, Antonialli & dos-Santos, 2015).

The arrangement of the capital structure isn't restricted to having, or not, debt capital financing the company's speculations; the procedure is progressively unpredictable; and there are different issues to consider, for example, the deadline for installment of the debt, the qualities of

the debt and agreements, the exchange costs associated with the procedure and the data asymmetry. Financing choices for the most part encourage the endurance and development of a business venture, which requires the need to channel endeavors of business towards acknowledging productive choice, which will secure the shareholders intrigue. Capital structure choice is in this manner considered as one of the powerful instruments of the executives to deal

with the expense of capital. A considerable piece of astute corporate stewardship and the board Page | 3 endeavors to locate the proper capital structure in term of dangers and return result for shareholders.

# **Composition of Capital Structure**

### **Total Debt to Total Assets**

The total debts to total assets measure the measure of the total assets gave by lenders in connection to the total assets of a firm. By and large, loan bosses would lean toward low ratio for all debts on the grounds that the lower the ratio the more prominent is the pad against lenders misfortunes in case of liquidation. Total debt to total assets is a debt ratio that characterizes the total measure of debt comparative with assets. This empowers correlation of debt to be made crosswise over various organizations. The higher the ratio the better level of debt and thus high financial hazard is included. This is an expansive ratio that incorporates long haul debt and transient debt (borrowings development inside one year) just as all substantial and impalpable assets (Akinsulire, 2014).

#### **Total Debt to Total Equity**

Total debt to total equity ratios measure the extent of banks subsidize in connection to shareholders support. Banks might want this ratio to be lower; in light of the fact that the lower the ratio the higher the level an of association's financing that is being given by shareholders and the bigger the pad (edge of insurance) in case of contracting resource esteems or inside and out misfortunes. This a proportion of how a lot of providers, loan specialists, lenders and obligors have focused on the organization versus what shareholders have submitted (Kurfi, 2003). Total debt to total equity alludes to the ratio of debt to equity capital of an organization. Because of the installment of premium and reimbursement of chief measure of the debt, a huge piece of the association's income would diminish (Magpayo, 2011). The debt to equity ratio shows the level of an organization's financing that originates from leasers and speculators. A higher debt to equity ratio shows that more leasers financing (bank advances) is utilized than speculators financing (shareholders).

#### Short Term Debt to Total Assets

This estimates how relative transient debts to total resource of a firm are to be reimbursed inside a bookkeeping period. A few researchers contended that the shorter the debt the better the firm is in improving its presentation. The momentary debt to total assets ratio is a proportion of the financial influence of the organization. It determines what level of the assets is financed by momentary debt. Transient debt will be debt due for reimbursement inside or under a year and is excluded in the long haul liabilities figure on the announcement of financial position. It incorporates loan bosses and gatherings (Akinyomi, 2013).

Transient debt to total assets ratio is the ratio that speaks to the financial situation of the organization's capacity to meet its current financial prerequisites. It shows the level of organization assets that are financed with credits and other financial commitments that last over a year. The momentary debt ratio is determined by partitioning current liabilities by total assets. Both of these numbers can without much of a stretch be found to be determined sheet. A lower debt ratio as a rule suggests an increasingly steady business with the capability of life span in light of the fact that an organization with lower ratio additionally has momentary debt.

#### Long Term Debt to Total Assets

Long haul debt to total assets estimates the overall load of long haul debt to the capital structure (long haul financing) of a company's long haul debt to-total assets. Long haul debt to total assets ratio is the ratio that speaks to the financial situation of the organization's capacity to meet its financial necessities. As this ratio is determined yearly, decline in the ratio would mean that the organization is faring admirably, and is less subject to debts for their business needs (Kurfi, 2003). The higher the degree of long haul debt, the more significant it is for an organization to have positive income and unfaltering income. It is extremely useful for the executives to check its debt structure and decide its debt limit (Akinsulire, 2014). The long haul debt to total assets ratio is a proportion of the financial influence of an organization.

#### **Financial Performance**

An association's financial presentation is of significance to speculators, partners and the economy on the loose. Speculators are keen on the profits for their venture. A business that is performing admirably can bring better reward to their financial specialists. Financial execution of a firm can build the pay of its staff, rendering quality item or administrations to its clients and making more generosity in nature it works. An organization that has great execution can produce more returns which can prompt future open doors that can thusly make business and increment the abundance of individuals. Company's presentation is the capacity of a firm to accomplish its goals assets (Iorpev & Kwanum, 2012).

The thought of financial execution is utilized to portray execution of an element with the legitimate status of an organization. The idea of financial execution is a dubious issue in fund because of its multidimensional importance. In breaking down a company's financial exhibition, accentuation ought to be made in planning a sufficient depiction of the idea of a financial presentation. Estimating of firms' financial presentation is one of the administration vital capacities planned for fulfilling the enthusiasm of shareholders and different partners in an organization.

# **Theoretical Review**

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

Pecking Order Theory (POT, from this time forward) was created on the decision of capital structure money by Myers in 1984. As per Ferreira and Brazil (1997) as messaged in Machado et al (2015), the POT, which is otherwise called the theory of Hierarchy of Funding Sources is planned for clarifying an order of gathering pledges sources firms use. The standard of the methodology is that the organization utilize interior financing, (for example, held income) first in financing its needs. On the off chance that outer financing is required, obligation is given with most secure security gave first before the equity. In any case, the firm ought to consider equity just when the association's obligation limit is depleted. This methodology attempts to appoint an order of the subsidizing sources, in which the underlying alternative would act naturally financing, following by the protections for exchange (obligation) they hold. At long last, there is the utilization of equity shares (Ferreira & Brasil, 1997).

The handiness or pertinence of this methodology exudes from the model ramifications. To start with, the firm will fund its needs out of held income. Next, extra financial prerequisites are met with obligation, in this way, expanding the obligation level. The firm will utilize obligation fund up till the moment that the obligation limit of the firm is completely used, the firm would then be able to give equity. Along these lines, firms don't seek after obligation level but instead the measure of debs dictated by its financial necessities (Onaolapo & Kajola, 2010). As indicated by the pecking-order model if a firm is beneficial, it will utilize less obligation. This is on the grounds that a firm that makes benefits will produce incomes inside lessening the requirement for outer financing particularly obligation. The more the incomes produced by beneficial firms the higher the obligation limit.

#### **Empirical Review**

A lot of researches have been carried out in the subject area in both developed and developing countries.

Amusa and Saka (2017) applied random effect model to break down ten years multivariate board information acquired from Karachi Stock Exchange (KSE) 100 file recorded protections in Pakistan. The discoveries of the examination demonstrate that capital structure shows a negative association with the Returns on Assets which suggests that recorded firms while expanding the general capital base may likewise think about full usage of the extra assets. Return on equity is affected by the influence proportion of debt to capital where a negative relationship is available that demonstrates increment in influence may lessen the returns produced by the firm on its equity. What's more, the capital structure of the business was likewise found as noteworthy factors affecting Tobin's Q contrarily related. The discovering suggests that an expansion in capital structure for recorded firms convert into an augmentation of book estimation of assets that the firm pick in its money related records.

Lawal, Edwin, Monika and Adisa (2014) study gives observational proof of connection among leverage and corporate execution of 14 significant and differing business areas in Czech Republic. The cross-sectional investigation of the distributed information demonstrates that leverage (Debt proportion) has a generously negative impact on corporate performance when the arrival on equity (ROE) is utilized as a pointer of corporate execution in the Czech Republic over

the period secured by the examination. The consequences of the investigation relapse examination affirmed negative connection between the organization profitability and the utilization of debt in majority of business divisions (Agriculture, fishery, and ranger service; Construction, Wholesale and retail exchange, fix of engine vehicles and bikes; Professional, logical and specialized activities; Administrative and bolster administration exercises). The investigation found inverse relationship in one business area just (Mining and quarrying) where positive connection between the organization profitability and leverage was affirmed. The investigation insists that corporate leverage and execution fluctuates crosswise over enterprises.

Dahiru (2016) explored the effect of capital structure on money related execution of recorded assembling firms in Nigeria. The examination utilized Generalized Least Square (GLS) numerous relapse to investigate the auxiliary information separated from the yearly reports and records of the 31 tested firms for the period 2009 to 2014. The investigation found that all out debt to add up to assets and long haul debt to add up to assets have noteworthy negative effect on the budgetary exhibition of recorded assembling firms in Nigeria while momentary debt to add up to assets has critical positive effect on Nigerian assembling firms' money related execution. From the above referred to writing, the specialist found that ongoing investigation giving proof on impact of capital structure on money related execution of assembling organizations in Nigeria is as yet inaccessible. Subsequently, the present examination planned for giving such ongoing proof.

#### Methodology

This research study adopts a descriptive survey research design. In addition, the study employs both descriptive and inferential statistics to analyze secondary data obtained to investigate the impact of capital structure on financial performance of listed companies in Nigerian manufacturing sector.

The total number of companies in the 6 selected real sectors of Nigerian manufacturing segment is eighty-nine (89) quoted companies as put forward by Nigeria Infopedia (2019). The study adopts multi-stage sampling method. Out of this figure, 45 companies have reports on their financial activities published up till 2015 and beyond. The secondary data on all key variables were obtained from Annual Reports of 10 selected manufacturing companies quoted on the Nigerian Stock Exchange.

The study employed Panel (OLS) Regression technique. The use of this technique was based on the number of cross-sections (manufacturing firms) selected for the study and the nature of data obtained. More importantly, Panel Regression tends to provide reliable estimates given many number of observations. The technique has two forms, namely, Random Effects Model (RE) and Fixed Effects Model (FE). These two models were used to estimate equation (2), (3), (4) and (5). The use of these methods was to account for heterogeneity among the units of the analysis and provide ground for comparison with previous studies in this field. Hausman specification test will be conducted to detect the most appropriate model between FE and RE models. In addition, necessary tests were conducted most especially heteroscedasticity and autocorrelation to avoid spurious regression and as well not violating Ordinary Least Square (OLS) assumptions. All analyses were conducted at 5% level of significance.

# **Model Specification**

This study employs two multivariate simultaneous models to empirically validate the relevance of capital structure to firms' financial performance.

 $\begin{array}{c} \textbf{ROA}_{it} = \alpha + \beta_1 DEQ_{it} + \beta_2 DTA_{it} + \mathcal{E}_{it} \qquad (1) \\ \textbf{Page | 7} \quad \textbf{Tobin's } Q_{it} = \alpha + \beta_3 DEQ_{it} + \beta_4 DTA_{it} + \beta_5 SIZ_{it} + \mathcal{E}_{it} \qquad (2) \end{array}$ 

Where; ROA = Return on Asset; DEQ = Total Debt to Equity ratio; DTA = Total Debt to Total Asset  $\alpha$  = constant;  $\varepsilon$  = error term; t = Time dimension; *i* = individual firm; for *i* =1, 2..., N cross-section units and periods *t* = 1, 2....T

# **Data Presentation and Results**

# Table 1: Panel Model Results (Fixed Effect Model and Random Effect Model)

Dependent Variable. KOA								
Panel	Fixed Effect			Random Effect				
Model								
Variable	Coefficien	Std.	Prob.	Coefficien	Std.	Prob.		
	t	Error		t	Error			
Constant	10.71281	3.037304	0.0006	11.72788	3.574062	0.0013		
DEQ	-0.005808	0.057673	0.9199	0.013578	0.055562	0.8073		
DTA	0.084731	0.066663	0.2059	0.045618	0.062099	0.4638		
R <sup>2</sup>	0.202978			0.184455				
Adjusted R2	0.139448			0.179090				
Prob. (F-	0.000682			0.004455				
statistics)								
Akaike Info	8.254276							
Schwarz	8.495127							
Breuch-				Chi2 (2)= 2.6;				
Pagan				Prob > chi2 = 0.3487				
Durbin-	1.675181			1.828962				
Watson								
Hausman	chi2(2) 2.603990							
Test	Prob > chi2 = 0.2720							
No. of Obs	150			150				

**Dependent Variable: ROA** 

Source: Author's Computation from E-View 7 Output, 2019

Table 1 presents Fixed Effect (FE) and Random Effect (RE) for the impact of capital structure on performance of manufacturing companies listed on the Nigerian Stock Exchange. In both models, Total Debt-to-Equity ratio (DEQ) was found insignificant at 5% level in influencing performance of manufacturing companies. The coefficient of DEQ was larger in RE indicates than in FE model. Beta value measures the degree to which predictor (DEQ) variable affects the dependent variable (ROA). The beta coefficients when FE and RE are employed are -0.005808 and 0.013578respectively. The result implies that a unit (1%) change in Total Debt-to-Equity ratio will lead to a fall in Return on Asset of Nigerian manufacturing companies by 0.58% (-0.005808)

 $\times$  100) share for FE and 1 unit (1%) change in Total Debt-to-Equity ratio will lead to an increase in Return on Asset of Nigerian manufacturing companies by 1.36% (0.013578  $\times$  100) using RE.

However, both coefficients were found to be insignificant at 5% levels. This result implies that either decrease or increase effect of total debt-to-equity ratio has no significant impact on return on asset of manufacturing companies in Nigeria when both FE and RE are employed.

# Page | 8 employed.

Furthermore, the coefficient of DTA (total debt-to-total asset ratio) was larger in FE than in RE model. The beta coefficients when FE and RE are employed are 0.084731 and 0.045618. The result implies that a unit (1%) change in Total Debt-to-Total Asset ratio will lead to an increase in Return on Asset of Nigerian manufacturing companies by 8.473% (.084731 × 100) for FE and 1 unit (1%) change in Total Debt-to-Total Asset ratio will also cause an increase in Return on Asset of Nigerian manufacturing companies by 1.36% (0.013578 × 100) using RE. However, both coefficients were found to be insignificant at 5% levels. This result implies that either decrease or increase effect of total debt-to-total asset ratio has no significant impact on return on asset of manufacturing companies in Nigeria when both FE and RE are employed.

Although the levels of variation explained by proxies of capital structure in return on asset of manufacturing companies are low (FE – 20.2%; RE – 18.4%) but the probability values of F-tests of DEQ and DTA for both FE and RE signify that the two factors of capital structure are relevant to explain variation in return on asset of manufacturing companies in Nigeria. The F – statistics measures overall joint significance of both models. Meanwhile, R<sup>2</sup> in FE (20.2%) is relatively higher than RE but F statistics in both models is highly significant at 5% level.

In this analysis, Hausman Test was performed to determine the model that is more efficient. The results of Hausman test are chi2 (2) is 2.60 and Prob > chi2 is 0.2720. This implies that Random Effect (RE) is more efficient than Fixed Effect (FE) (Gujarati, 2005; Baltagi, 1998; Hausman, 1978). These two methods differ mostly on inferential aspect. With fixed-effects model, a researcher can only make inference about a group of measurements while inference can be made about the population through sample drawn when using random effect. In this case, Hausman test reveals that random effect is appropriate. Moreover, panel data according to Gujarati is subject to problems that plague cross-sectional data (e.g. heteroscedasticity) and time series data (e.g. autocorrelation). In other words, these problems need to be addressed. The non-significance of Breusch-Pagan / Cook-Weisberg test for heteroskedasticity in the Table (Random Effect) indicates acceptance of null hypothesis of constant variance for the model. Lastly, Durbin-Watson statistics of 1.828 reveals that there is no serial correlation among the disturbance terms of study preferred Random Effect model.

## Table 2: Panel Model Results (Fixed Effect Model and Random Effect Model)

Panel	Fixed Effect			Random Effect			
Model							
Variable	Coefficient	Std. Error	Prob.	Coefficient	Std. Error	Prob.	
Constant	3.287765	1.17609	0.4499	1.369009	1.380009	0.7244	
DEQ	-2.275137	5.68057	0.9147	-6.793615	6.334111	0.7279	
DTA	5.564663	6.08854	0.6469	3.393873	7.392831	0.4018	
SIZ	2.145549	6.46036	0.0075	8.078813	1.049008	0.0000	
R <sup>2</sup>	0.299640			0.167160			

#### Dependent Variable: TOBIN'S Q

	Adjusted							
	R2	0.220710			0.141549			
	Prob. (F-				0.000000			
	statistics)	0.001053						
	Akaike Info	45.21295						
Page   9	Schwarz	45.29323						
	Breuch-				Chi2 (2)= 39.43;			
	Pagan				Prob > chi2 = 0.4970			
	Durbin-	1.751941			1.800177			
	Watson							
	Hausman	an chi2(2) 0.695886						
	Test	Prob > chi2 = 0.8742						
	No. of Obs	150			150			

Fatogun, O. I. & Balogun, S. B. (2019). Capital Structure and Performance of Quoted Manufacturing...

Source: Author's Computation from E-View 7 Output, 2019

Table 2 presents Fixed Effect (FE) and Random Effect (RE) for the impact of capital structure on market capitalization to total book value of assets of quoted manufacturing companies in Nigeria. Tobin's Q measures market capitalization to total book value of assets of quoted manufacturing companies in Nigeria. The output of FE indicates that, except SIZ, both DEQ and DTA have large beta coefficients than in RE model. Here, beta values measures the degree to which predictor variables (DEQ, DTA and SIZ) affects the dependent variable (TOBIN'S Q). The beta coefficients when FE was employed are -2.2751 (DEQ); 5.5646 (DTA) and 2.1455 (SIZ). When RE was employed the beta values are -6.7936 (DEQ); 3.3938 (DTA) and 8.0788-(SIZ) respectively. For both models, DEQ and DTA were again found insignificant at significant at 5% levels of significance. However, SIZ as a variable measuring manufacturing company size was significant at preferred level of significance for both FE and RE Models. The result indicates increase or decrease in capital structure does not have significant impact on market capitalization to total book value of assets of quoted manufacturing company size was significant at preferred level of significance for both FE and RE Models. The result indicates increase or decrease in capital structure does not have significant impact on market capitalization to total book value of assets of quoted manufacturing companies in Nigeria. According to the study findings, only company size matters.

The joint probability of F- tests of DEQ, DTA and SIZ for both FE and RE revealed that selected variables are important and essential to explain variation in market capitalization to total book value of assets of quoted manufacturing companies in Nigeria. The F – statistics measures overall joint significance of both models. However, R<sup>2</sup> in FE (29.9%) is relatively higher than RE but F statistics in both models is highly significant at 5% level.

Again, for selection of appropriate model, Hausman test was conducted. The results of Hausman test are; chi2 (2) = 0.69 and Prob > chi2 is 0.8742. This implies that Random Effect (RE) is more efficient than Fixed Effect (FE). In this case, Hausman test reveals that random effect is more appropriate to predict the impact of capital structure on performance of listed Nigerian manufacturing companies using Tobin's Q. Moreover, the non-significance of Breusch-Pagan / Cook-Weisberg test for heteroskedasticity in Table 2 (Random Effect) indicates acceptance of null hypothesis of constant variance for the model. Lastly, Durbin-Watson statistics of 1.80 reveals that there is no serial correlation among the disturbance terms of study preferred Random Effect model.

# **Test of Hypotheses**

The findings from analysis of model one implies the acceptance of the proposed hypothesis as the predictor (Total debt-to-equity) was not significant at 5% level of significance in preferred model of the study, Model One Random Effect. In other words, the performance of manufacturing companies in Nigeria is not significantly affected by the total debt-to-equity (capital structure). Hence, the first null hypothesis which states that the Total debt-to-equity has no significant impact on return on assets of quoted manufacturing companies in Nigeria is accepted.  $H_{01}$  is accepted.

Similarly, as regards hypotheses two, the findings from analysis of model two implies the acceptance of the proposed hypothesis as the predictor (Total debt-to-equity) was not significant at 5% level of significance in the study preferred model, Model Two Random Effect. In other words, the performance of manufacturing in Nigeria measured by market capitalization to total book value of assets has no significant relationship with total debt-to-equity (capital structure). Hence, null hypothesis which states that the Total debt-to-equity has no significant relationship with market capitalization to total book value of assets of quoted manufacturing companies in Nigeria is accepted.  $H_{02}$  is accepted.

As regards hypothesis three, the findings from analysis of model one implies the acceptance of the proposed hypothesis as the predictor (Total debt-to-total asset) was not significant at 5% level of significance in preferred model of the study, Model One Random Effect. In other words, the performance of manufacturing companies in Nigeria is not significantly affected by the total debt-to-total asset (capital structure). Hence, null hypothesis which states that the Total debt-to-total asset has no significant impact on return on assets of quoted manufacturing companies in Nigeria is accepted.  $H_{03}$  is accepted.

Concerning hypothesis four, the result from analysis of model two implies the acceptance of the proposed hypothesis as the predictor (Total debt-to-total asset) was not significant at 5% level of significance in the study preferred model, Model Two Random Effect. In other words, the performance of manufacturing companies in Nigeria, measured by market stock market performance indicator Tobin's Q, is not significantly affected by the total debt-to-total asset (capital structure). Hence, null hypothesis which states that the Total debt-to-total assets do not significantly affect market stock market performance of listed Nigerian manufacturing firms is accepted.  $H_{04}$  is accepted.

Finally, the findings from analysis of model two implies the rejection of the proposed hypothesis as the predictor (Company Dimension/Company Size) was found significant at 5% level of significance in the study preferred model, Model Two Random Effect. In other words, the performance of manufacturing companies in Nigeria, measured by market stock market performance indicator Tobin's Q, is significantly affected by company dimension. Hence, null hypothesis which states that the Company dimension has no significant direction on firms' stock market performance of listed Nigerian manufacturing firms is rejected. H<sub>05</sub> is rejected.

This study employed two important measures of a manufacturing firm performance in terms of operating efficiency (return on asset) and stock performance (Tobin's Q) as recently applied in literature. The use of these measures was premised on the need to evaluate the relevance of capital structure to firm's performance. This effort is required to further arrive at the effectiveness of capital structures composition towards improving performance of manufacturing companies in developing countries such as Nigeria. The results suggest that the manners manufacturing companies in Nigeria combine their capital structure have no significant impact

on their performance. However, further finding reveals that company dimension has positive and significant impact on manufacturing firm's stock performance. In other words, the researcher reaffirms the claim of M-M Approach that capital structure does not matter when it comes to firm's performance in terms of operating efficiency and stock market efficiency.

#### Page | 11 Recommendations

In line with the findings of the study, the following recommendations were made;

Firstly, management should be careful when using debt as its source of financing its activities. Therefore, management should seek to finance their activities with retained earnings and use debt as a last option.

Secondly, firms should keep control over their debt capital. Because huge level of debt capital has insignificant impact on performance of manufacturing companies. By controlling the limit of debt capital, firms can achieve the desired level of performance.

Thirdly, identifying weaknesses of investments may be best one to improve the firm's financial performance, because findings have shown that capital structure is non-significant to fir's performance.

Fourthly, political changes are very important factor in the share market. It also determines the firm performance. Therefore, stable economic and political atmosphere should be possible to increase the financial performance of the listed companies.

# References

- Amusa, N. A. & Saka, K. A. (2017) Effects of the Central Bank of Nigeria's Monetary Policies on Performance of Deposit Money Banks in Nigeria. *Journal of Academic Staff Union of Polytechnics, JASUP 2*(1), 79 - 85
- Aransiola, S. Y. & Oluwadetan, A. (2015). Capital structure and profitability: A critical analysis of quoted manufacturing companies in Nigeria. *American Journal of Economics, Finance* and Management, 1(5), 369-376.
- Akinsulire, C. O. (2014). Financial management. ET-TODA Venture Ltd: Lagos.
- Akinyomi, O. J. (2013). Effect of Capital Structure on Firms Performance: Evidence from Nigerian Manufacturing Company. International Journal of Innovative Research and Studies (9), 783 – 795
- Babalola Y. A. (2014). Triangulation Analysis of Capital Structure and Firms' Performance in Nigeria. East Ukrainian National University [Vol. Dahl] 91034. Lugansk, Ukraine
- Ferreira, L. D. S., & Brasil, H. (1997). Pecking Order Hypothesis. REPEC Brasilia 2(1), 384 401
- Idode, P.E, Adeleke, T.M., Ogunlowore, A.J, & Ashogbon, O.S. (2014). Influence of Capital Structure on Profitability Empirical Evidence from Listed Nigerian Banks. *Journal of Banking*, *16* (11), 22-28.
- Iorpev, L. & Kwanum, I. (2012) Capital Structure and Firm Performance: Evidence from Manufacturing Companies in Nigeria. International Journal of Business and Management, 2(5).

Kurfi, A.K. (2003). Principles of Financial Management. Benchmark Publishers Ltd, Kano.

Lawal,B.A, Edwin,T.K, Monica,W.K & Adisa,M.K (2014). Effects of Capital Structure on Firm's Performance: Empirical Study of Manufacturing Companies in Nigeria. *Journal* of Finance and Investment Analysis, 3 (4), 39-57

- Machado, L.K, do Prado, J.W, Vieira, K.C, Antonialli, L. M and dos Santos, A.C. (2015) The Relevance of the Capital Structure in Firm Performance: A Multivariate Analysis of Brazilian Publicly Traded Companies. *REPEC Brasilia* 9(4), 384-401
- Magpayo, C. L. (2011). Effect of Working Capital Management and Financial Leverage on Financial Performance of Philippine Firms. College of Business, De La Salle, University, 2401 Taft Avenue 1004 Manila.
- Onaolapo, A. A., & Kajola, S. O. (2010). Capital structure and firm performance: evidence from Nigeria. *European Journal of Economics, Finance and Administrative Sciences, 25*, 70-82
- Owolabi, S. A. & Inyang, U. E. (2012). Determinants of Capital Structure In Nigerian Firms: A Theoretical Review. *e-Canadian Journal of Accounting and Finance*, 1 (1), 7-15
- Pandey, I. (2005). Financial Management. New Delhi: Vikas Publishing House

- Pandey, M. (2010). Capital structure and the firm characteristics: evidence from an emerging market. Working paper, Indian Institute of Management Ahmad-bad.
- Rasa, N. & Jurgita, S. (2012). The Relationship of Corporate Governance Decision on Capital Structure and Company's Performance: Evidence from Lithuanian Food and Beverages Industry Companies. *Journal of Economics and Management*, 17(2), 480-486
- Taiwo A. M. (2012) An Empirical Analysis of Capital Structure on Firms' Performance in Nigeria. *International Journal of Advances in Management and Economics, 1*(5), 116-12
- Zuraidah, A., Norhasniza M. A. & Shashazrina R. (2012). Capital Structure Effect on Firms Performance: Focusing on Consumers and Industrials Sectors on Malaysian Firms. *International Review of Business Research Papers*, 8 (5), 137-155.