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Original Research Article

Capital Structure and Firm Financial Performance

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Abstract

Capital structure is important in the business affairs of any going concern entity as is it the overall source of finance used by a company in financing its operations and has been considered as one of the most important factors in firm financing policy due to its crucial role in corporate performance. The study sought to examine the effect of capital structure on the financial performance of firms in Nigerian manufacturing sector. The population of the study was all the listed manufacturing companies listed on the Nigerian Stock Exchange, a sample of 10 listed companies was selected. The research design adopted was ex-post facto using four models to analyse the impact of capital structure on firms' performance. The study used balanced panel data of 100 observations from the 10 listed companies for the periods ranging from 2007 - 2016. Descriptive statistics and regression were used as tools of analysis. The study reveals that there are statistically significant and non- significant effects of capital structure on performance variables. Finally, the study recommends that manufacturing companies should adopt balanced capital structure strategy that will optimise company's performance and corporate value.

Keywords: *Capital Structure, Shareholders' Wealth, Firms Performance, Profitability, Manufacturing Companies.*

JEL Classification Codes: *L250, L290*

1.0. *INTRODUCTION*

The capital structure of a firm has an important tool in the survival of the firm because it goes a long way in determining its growth, development and sustainability over time. The capital structure is the overall sources of finance used by a company in financing its operations ranging from retained earnings to equity and debt finance. Capital structure has been considered as one of the most important factors in firm financing policy due to its crucial role in corporate performance (Gambo, Ahmad & Musa, 2016). According to Akintoye (2016) Capital structure decision is important for any business establishment arising from the need to maximize the wealth of business stakeholders and because of the fact that such decision has a significant impact on the firms' ability to compete in the competitive atmosphere (Gambo, Ahmad & Musa, 2016, Salawu, 2009).The capital structure is a framework which depicts how equity and debt are employed for financing the firm's operations to yield optimum returns for the stakeholders to maximise firms returns given a level of risk (Dada & Ghazali, 2016). The performance of management is often measured regarding profitability which reflects managers' ability to earn optimum returns on assets at their disposal over a period. Profitability according to Owolabi and Obida (2012) is the ability of a business to make returns higher than the cost of financing their core operations to ensure the continued survival of the company. This implies that profitability is the ability of a company to make a profit from its operating, investing and financing activities to maximise the values and wealth of the shareholders. Often, listed companies in the Nigerian do found it difficult to make a profit; this does affect their performance which may be attributed to inadequate finance or where the finance is available at a cost too expensive (Akintoye, 2016; Lambe, 2014; Akinyomi & Olagunju, 2013; Salawu, 2009).

The problem of capital structure, therefore, arises from determining the quantum of each source of finance that will yield optimum return with little risks (Akintoye, 2016; Dada & Ghazali, 2016; Gambo et al., 2016).From the above, it is apparent that the exact effect of capital structure on performance is yet to be established and it is calling for further investigation within the Nigerian context. Also, most of the studies have not adopted recent data in their studies and where researchers have considered recent data, they have not included variables that relate to shareholders wealth like dividend per share and market price per share in recent years. These constitute the gaps to be filled by this study. This study, therefore, is organized into five sections, section one gives brief introduction to the reason for the study, in section two, extant literature was reviewed, we present the methodology adopted in section three, the results and discussion of findings were done in section four while section five presents the summary and recommendation of the study. The primary objective of this study is to investigate the impact of capital structure on the performance of listed Manufacturing firms in Nigeria, while the specific objectives are to:

2.0. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Numerous definitions exist on capital structure. Nirajini and Priya (2013) define capital structure as the way in which an organisation has financed a combination

of long-term capital (ordinary shares and reserves, preference shares, debentures, bank loans, convertible loan stock and so on) and short-term liabilities such as a bank overdraft and trade creditors. Also, Lambe (2014), Akinyomi and Olagunju (2013), Salawu (2009); Brealey and Myers (2003) opined that capital structure is the mix of different securities utilized by a company in financing its profitable ventures. What is common to the above definition is that capital structure reflects each component of finance from equity to debt that a company uses in financing its operations. There are numerous measures adopted by a firm in gaging its financial performance and arising from this; there is lack of consensus as to the measure or variable which should be used in measuring the performance of the firm. Different measures that can be used in measuring performance and which have been used by different authors on capital structure and performance include the return on asset, return on equity, and earnings per share. The measures are used to determine the contributions of the managers towards the growth and sustainability of the company. Performance is usually measured regarding profitability. Profitability according to Owolabi and Obida (2012) is the ability of a company to make profits from all its operations (operating, investing and financing activities). For a firm to make a profit, it must be able to generate revenue more than the direct and indirect costs incurred in generating the revenue. The wealth maximisation of shareholders is the ability of a company to witness growth and stable dividend payment or capital gain arising from appreciation in the market value of the company's shares. The shareholder's wealth is very important as it determines the investment decisions of the shareholders and as such proper attention should be paid to it by management (Olowe, 2018).

Empirical Review

Empirical review entails and appraisal of other authors studies on a subject matter with the aim of identifying gaps and filling them appropriately. Literature is replete with capital structure and performance but has often produced conflicting findings. This section groups the literature into studies done in developed and developing countries as well as in Nigeria

Empirical Evidence from Developed Countries

A study by Jaworska and Nehrebecka (2015) was achieved by using correlation analysis to conclude that debt has a negative relationship with profitability. Also, a study by Iavorskyi (2013) revealed that negative relationship exists between leverage and performance in Ukraine. Fosberg and Ghosh (2006) utilised regression analysis to establish the relationship, carried out separately on America Stock Exchange (AMEX) companies and New York Stock Exchange (NYSE) companies. Results concluded that the there is little or no relationship between profitability and the amount of debt in the AMEX firms' capital structure. Nonetheless, the strong negative relationship was proved to exist in the case of NYSE firms.

Empirical Evidence from Developing Countries

Ali, Zia and Razi (2012) analysed the impact of capital structure on the profitability of companies in the petroleum sector of Pakistan while controlling for the size of the company. They carried out a regression analysis on the data of

12 randomly selected companies for a period of 10years. They found that there is a significant and positive impact of capital structure on the profitability of the petroleum sector. The study by Getahun (2016) corroborated the findings by Ali et al. (2012) by finding among others that leverage has a significant impact on performance. Salamba (2015) conducted a study using the primary and secondary source to obtain data and utilising regression as analytical technique discovered that capital structure had a negative impact on SMEs profitability in Tanzania. This finding is consistent with that of Salim and Yadav (2012) which revealed that firm performance, which is measured by return on asset (ROA), return on Equity (ROE) and earnings per share (EPS) have negative relationship with short-term debt (STD), long-term debt (LTD), total debt (TD), an independent variable.

Empirical Evidence in Nigeria

In Nigeria, the study of Gambo et al. (2016) was limited to debt finance by using descriptive, correlation and regression analysis and discovered that there is a statistically significant effect between long and short-term liability on Return on Assets (ROA) and Return on Equity (ROE). Similarly, a study by Odi (2014) which employed quantitative research design and regression analysis and ordinary least square in carrying out this study. The results of the study revealed that capital structure of firms in Nigeria has a long run relationship with the growth and development of Nigerian economy. Moreover, Study by Gambo et al. (2016) which utilised descriptive statistics, correlation and regression as analytical technique reveals that there is statistically significant effect between long and short-term liability on Return on Assets (ROA) and Return on Equity (ROE). Also, David and Olorunfemi (2010) used panel data analysis to analyses capital structure and corporate performance in Nigeria petroleum industry. They found that a positive relationship exists between earning per share and leverage ratio on the one hand and positive relationship between dividend per share and leverage ratio on the other hand. Olokoyo (2013) examined the impact of leverage on firm's performance in Nigeria using fixed-effect estimation, random-effect estimation and a pooled regression model. The author found that all the leverage measures have a positive and highly significant relationship with the market performance measure (Tobin's Q).

However, a study by Nwude, Itiri, Agbadua and Udeh (2016) revealed from the regression estimations showed that debt structure has a negative and significant impact on the performance of Nigerian quoted firms within the period under review. The findings by Oladeji, Tolulope, Ikpefan and Olokoye (2015) also conclude that a negative relationship exists between leverage and firm performance. With the above reviews, it is evident that the area of interest to this study has not be considered by scholars in this field hence the aim of this study to examine the effect of capital structure on the financial performance of firms in Nigerian manufacturing sector.

3.0. RESEARCH METHODS

Theoretical Framework and Model Specification

The tradeoff theory model is traceable to the debate over the M&M's theorem(When the corporate tax was added to the original irrelevance

proposition of M&M, a benefit for debt is observed that serves to shield earnings from taxes (Getahun, 2016). This theory states that the optimal capital structure is the trade-off between the benefits of debt (the interest tax shields) and the costs of debt (the financial distress and agency costs) (Getahun, 2016; Brigham, Foster & Houston, 2004).

Unlike the trade-off theory, the pecking order theory does not assume an optimal level of capital structure. It states that companies prioritise their source of financing, from internal financing to equity financing, according to the principle of the least resistance, preferring to raise equity as a financing means of last resort. So, the pecking order theory claims that internal funds are used first, and only when all internal finances have been depleted, firms will opt for debt. When it is not sensible to issue any more debt, they will eventually turn to equity as a last financing resource (Olowe, 2018). Pecking Order Theory is also known as Asymmetric Information Theory which is based on minimum effort principle, and a well-known theory in analysing the financial behaviour of firms was propounded by Myers & Majluf (1984). They suggested that firms will not seek external finance at the capital markets until the reserve of retained earnings is exhausted. Then, then the debt market is called on first, and only as a last resort will companies raise equity finance. In contrast to the Trade-off Theory which considers interest tax shields and the potential threat of bankruptcy to be only of secondary importance. Gearing ratios are adjusted when there is a need for the external fund which results from the imbalance between internal cash flow, net of dividends, and real investment opportunities. Only firms whose investment needs exceeded internally generated funds would borrow more debt. Myers (1984) concludes that each firm's debt ratio, therefore, reflects its cumulative requirement for external financing and that profitable companies with limited growth opportunities would always use their cash surplus to reduce debt rather than repurchasing shares. According to the theory, a firm with high profitability will not need external fund. However, a firm prefers external financing over share issue since it does not perform sufficient fund-raising and debt is less costly compared to share (Lambe, 2014; Odi, 2014; Nirajini, &Priya, 2013; Salawu, 2009).

Model Speciation

Arising from the theoretical and literature review, the models for this study are specified below:

$ROA_{it} = \beta 0 + \beta 1lEQit + \beta 2LTDit + \varepsilon it$ ---------- (1)

$EPS_{it} = \beta 0 + \beta 1lEQit + \beta 2LTDit + \varepsilon it$ ---------- (2)

$DPS_{it} = \beta 0 + \beta 1lEQit + \beta 2LTDit + \varepsilon it$ ---------- (3)

$MPS_{it} = \beta 0 + \beta 1lEQit + \beta 2LTDit + \varepsilon it$ ---------- (4)

Where:

ROA = Return on Asset of Frimi in period t, EPSit = Earnings Per Share of Firm i in period t,

DPS = Dividend Per Share of Firm i in period t, MPSit = Market Price Per Share of Firm i in period t, LEQit = Log of Equity of Firm i in period t, LTDit = Log of Total Debt of Firm i in period t, εt = the error term

The models above are consistent with the models of (Lambe, 2014; Odi, 2014; Nirajini, &Priya, 2013; Salawu, 2009).

Research Design

This study employed ex-post facto research design. The population of study consists of all one hundred and eighty-six (186) (Equities - *Main Board)* Companies listed on the floor of Nigeria Stock Exchange as at December 31, 2017. Equities are listed under 12 industry sectors including (i) Agriculture; (ii) Conglomerates; (iii) Construction/Real Estate; (iv) Consumer Goods; (v) Financial Services; (vi) Healthcare; (vii) ICT; (viii) Industrial Goods; (ix) Natural Resources; (x) Oil and Gas; (xi) Services; and (xii) Utilities. (NSE Q4 2016 Fact Sheet). Of all these industry sectors, only companies under "Consumer Goods" sub-sector is considered in this study while others were excluded. This is because companies operating under "Consumer Goods" sub-sector have some characteristics of manufacturing with sample frame of 20 companies. Ten (10) of the listed manufacturing companies in Nigerian were selected as sample of the study. Data were collected from annual reports and accounts of the sampled companies for the period of ten years (10) years from 2007 – 2016.

The data were analysed using E-views 9 where a summary of descriptive statistics and multiple regressions results were obtained and analysed to determine the effect of capital structure on firm financial performance in the listed Nigerian companies. This study used two sets of variables; dependent and explanatory variables. The dependent variables were returned on the asset, earnings per share, dividend per share and market price per share while the independent variables are a log of equity and log of total debt. Descriptive and inferential statistics were used to analyse the results and finding from the data analysis were presented in tables. This enabled the researchers to explain the physical attributes of the data collected while the hypotheses were tested at 5% significance level using both t-statistics and F-statistics.

4.0 RESULTS AND DISCUSSION

Table 1: Descriptive Statistics

	LTD	LEQ	ROA	EPS	DPS	MPS
Mean	16.14538	16.43700	0.620362	9.217115	8.718333	137.8359
Median	16.78599	17.14591	0.125924	4.420000	3.485000	45.12500
Maximum	18.90233	19.47067	15.99676	95.00000	95.00000	1201.000
Minimum	9.419953	8.523374	-0.023288	-1.340000	0.010000	1.200000
Std. Dev.	2.194669	2.139660	2.158969	16.54624	16.64714	235.3727
Skewness	-1.572411	-1.407206	5.686257	3.701498	3.720266	2.917129
Kurtosis	5.057810	5.305790	37.50005	17.32734	17.35567	11.34556
Jarque-Bera	45.90456	43.02215	4288.660	845.2502	849.7021	336.9827
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	1259.340	1282.086	48.38824	718.9350	680.0300	10751.20
Sum Sq. Dev.	370.8761	352.5173	358.9083	21080.90	21338.79	4265825.
Observations	100	100	100	100	100	100

The table1 on the descriptive statistics show that all the variables have a positive mean. Log of total debt is 16.14538, a log of equity is 16.43700, return on asset is 0.620362, earnings per share are 9.217115, dividend per share is 8.718333 and market price per share is 137. 8359. Market price per share has the highest maximum value of 1201 and ROA has the lowest maximum value of 15.99, a log of total debt has the highest minimum value of 9.419953 while earnings per share have the lowest minimum value of -1.340000. The highest standard deviation value is the market price per share of 235.3727, and the minimum standard deviation is a log of total debt with a value of 2.139660. Based on the descriptive statistics, most of the variables have positive descriptive statistical values.

Table 2: Augmented Dickey-Fuller Unit Root Test

Variables	ADF Unit Statistics	Mackinnon Critical Value			Test for Unit Root
		1%	5%	10%	
LTD	6.471205	-3.474567	-2.880853	-2.577147	Stationary at a level
LEQ	10.00777	-3.474567	-2.880853	-2.577147	Stationary at a level
ROA	7.881670	-3.474567	-2.880853	-2.577147	Stationary at a level
EPS	4.068033	-3.474567	-2.880853	-2.577147	Stationary at a level
MPS	4.986496	-3.475500	-2.881260	-2.577365	Stationary at a level

The above Table 2 gives the unit root test results of the set of data used in the regression analysis. All variables used in the regression analysis are jointly significant at a level. Individually, the log of total debt (LTD) has an absolute ADF statistics of 6.471205 which is greater than the MacKinnon critical values of -3.474567, -2.880853 and -2.577147. The log of equity (LEQ), return on asset (ROA), earnings per share (EPS), and market price per share(MPS) also have ADF of 10.00777, 7.881670, 6.750735, 4.068033 and 4.986496 respectively (in absolute terms) which are greater than their respective levels of significance.

Arising from the result of the unit root test, we conduct ordinary least square of fixed and random effect as analytical techniques.

Table 3. Correlated Random Effects - Hausman Test
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	11.271706	2	0.0036

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LTD	-0.000000	-0.000000	0.000000	0.0008
LEQ	0.000000	0.000000	0.000000	0.0746

Sources: Researchers' Result, (2018)

Table 4. Correlated Random Effects - Hausman Test
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.537619	2	0.0140

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LTD	-0.000000	-0.000000	0.000000	0.0044
LEQ	-0.000000	-0.000000	0.000000	0.0943

The probability of the Hausman test with a probability of 0.0140 which is significant at 5% reveals that fixed effect is appropriate for analysis.

Table 5 Determination of the effect of Equity on Profitability (fixed effect estimation)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.117211	3.636139	2.507388	0.0146
LEQ	-0.140874	0.165005	-0.853758	0.3963
LTD	-0.382852	0.169796	-2.254783	0.0274

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.162655	Mean dependent var	0.620362
Adjusted R-squared	0.037678	S.D. dependent var	2.158969
S.E. of regression	2.117905	Akaike info criterion	4.468767
Sum squared resid	300.5300	Schwarz criterion	4.801123
Log-likelihood	-163.2819	Hannan-Quinn criteria.	4.601815
F-statistic	1.301482	Durbin-Watson stat	2.014509
Prob(F-statistic)	0.247908		

From Table 4.2 fixed effect estimation, the log of equity has no significant effect on return on asset. The probability of log of equity being 0.3963. Which is greater than 5% v, we, therefore, accept the hypothesis that equity has no significant effect on profitability when it is measured by return on asset. While the log of debt has a significant effect on return on asset. the probability of the log of debt being 0.0274 which is lesser than 5% level of significance, we, therefore, fail to accept the null hypothesis that debt has no significant effect on profitability when it is measured by return on asset

Table 6. Correlated Random Effects - Hausman Test on of the influence of Equity on Shareholders' Wealth Maximization

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	11.271706	2	0.0036

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LTD	-0.000000	-0.000000	0.000000	0.0008
LEQ	0.000000	0.000000	0.000000	0.0746

The probability of the Hausman test with a probability of 0.0036 which is significant at 5% reveals that fixed effect is appropriate for analysis

Table 7 Determination of the influence of Equity on Shareholders' Wealth Maximization (fixed effect estimation)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-32.04564	21.47696	-1.492094	0.1404
LEQ	3.004546	0.974607	3.082827	0.0030
LTD	-0.503115	1.002902	-0.501659	0.6176

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.502649	Mean dependent var	9.217115
Adjusted R-squared	0.428417	S.D. dependent var	16.54624
S.E. of regression	12.50947	Akaike info criterion	8.020884
Sum squared resid	10484.62	Schwarz criterion	8.353240
Log-likelihood	-301.8145	Hannan-Quinn criter.	8.153932
F-statistic	6.771359	Durbin-Watson stat	1.087785
Prob(F-statistic)	0.000000		

From table 7, fixed effect estimation, the log of equity has a significant effect on earnings per share. The probability of log of equity being 0.0030, which is less than 5% level of significance. We, therefore, fail to accept the null hypothesis that equity has no significant effect on profitability when it is measured by earnings per share. While the log of debt has no significant effect on earnings per share. The probability of log of debt being 0.6176. Which is higher than 5% level of significance. We, therefore, accept the null hypothesis that debt has no significant effect on profitability when it is measured by return on asset.

Table 8 Correlated Random Effects - Hausman Test the effect of Total Debt on Profitability

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.
Cross-section random	10.231556	2

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)
LTD	-0.000000	-0.000000	0.000000
LEQ	0.000000	0.000000	0.000000

The probability of the Hausman test with a probability of 0.0060 which is significant at 5% reveals that fixed effect is appropriate for analysis.

Table 9 Determination of the effect of Total Debt on Profitability (fixed effect estimation)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-34.08798	21.31748	-1.599063	0.1145
LEQ	3.057839	0.967370	3.160982	0.0024
LTD	-0.461767	0.995455	-0.463875	0.6442
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.515929	Mean dependent var		8.718333
Adjusted R-squared	0.443680	S.D. dependent var		16.64714
S.E. of regression	12.41658	Akaike info criterion		8.005977
Sum squared resid	10329.48	Schwarz criterion		8.338333
Log-likelihood	-301.2331	Hannan-Quinn criteria.		8.139025
F-statistic	7.140959	Durbin-Watson stat		1.108928
Prob(F-statistic)	0.000000			

From the table 9, fixed effect estimation, the log of equity has a significant effect on dividend per share. The probability of log of equity being 0.0024 which is less than 5% level of significance. We, therefore, fail to accept the null hypothesis that equity has no significant effect on shareholders wealth when it is measured by dividend per share. While the log of debt has no significant effect on dividend per share. The probability of log of debt being 0.6442. Which is higher than 5% level of significance. We, therefore, accept the null hypothesis that debt has no significant effect on profitability when it is measured by return on asset.

Table 10.Correlated Random Effects - Hausman Test of effect of Total Debt on shareholders' Wealth Maximization

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	14.231556	2	0.0340

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LTD	-0.000000	-0.000000	0.000000	0.0024
LEQ	0.000000	0.000000	0.000000	0.0457

Table 10 depicts that fixed effect is appropriate for the analysis of market price per share and capital structure.

Table 11 Determination of the effect of Total Debt on shareholders' Wealth Maximization (fixed effect estimation)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	42.04653	191.9164	0.219088	0.8272
LEQ	-8.091720	8.709012	-0.929120	0.3562
LTD	14.17080	8.961854	1.581235	0.1185

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.803742	Mean dependent var	137.8359
Adjusted R-squared	0.774449	S.D. dependent var	235.3727
S.E. of regression	111.7836	Akaike info criterion	12.40104
Sum squared resid	837203.4	Schwarz criterion	12.73340
Log-likelihood	-472.6406	Hannan-Quinn criteria.	12.53409
F-statistic	27.43869	Durbin-Watson stat	0.604650
Prob(F-statistic)	0.000000		

Sources: Researchers' Result, (2018).

From table 11 the log of equity has a significant effect on the market per share. The probability of log of equity being 0.3562. Which is higher than 5% level of significance. We, therefore, accept the null hypothesis that equity has no significant effect on shareholders wealth when it is measured by market price per share. Also, the log of debt has no significant effect on market price per share. The probability of log of debt being 0.1185. Which is higher than 5% level of significance. We, therefore, accept the null hypothesis that debt has no significant effect on shareholders wealth when it is measured by market price per share

4.0 Discussion of findings

From the regression analysis, we found that the R^2=0.162655, 0.502649, 0.515929 and 0.803742 for ROA, EPS, DPS and MPS respectively which implies that about 16% of the changes in ROA, 50% changes EPS, 52% in DPS changes 80% of the changes in MPS are caused by capital structure while the

remaining percentages are caused by other factors not considered (included) in the models.

The existence of companies without adequate finance (capital structure) is in doubt, so also companies' positive financial performance. Our findings indicate a negative effect of capital structure variables on return on asset. The effect was insignificant for log of equity while it was significant for log of debt. This is in line with the findings of Salamba (2015) who found that capital structure has a negative impact on the profitability of Small and Medium Scale Enterprises in Tanzania. However, this finding contradicts findings by Gambo et al. (2016) who found that capital structure has a significant effect on the profitability of firms in Nigeria. Also, capital structure proxy by the log of equity has a significant positive effect on earnings per share while the relationship between the log of total debt on earnings per share is negative. This finding partially aligns with earlier findings by Tanver et al. (2012) who discovered that debt to asset ratio has a negative relationship with profitability. Moreover, capital structure measured by the log of equity has a significant positive effect on dividend per share while the relationship between the log of total debt and earnings per share is negative and non-significant.

This finding is also consistent with the findings of Hasson, Tran, and Quach which discovered that leverage has a negative effect on dividend policy of firms in Palestine. Lastly, capital structure, proxied by the log of equity has a negative and non-significant effect on market price per share while the positive but non-significant effect of and a log of total debt was found on market price per share. This finding is in contrast with the findings of Lambe (2012) which conclude that market value is influenced by choice of capital structure (financial leverage).

The study, however, contradicts the pecking order theory which says that more profitable firms would prefer to use less of external finance in financing their operations. Nevertheless, our study corroborates other studies and is likely to influence the way practitioners' in the manufacturing industry in Nigeria perceive the contribution of capital structure to the profitability and shareholders wealth maximisation of the firm.

5.0 CONCLUSION AND RECOMMENDATION

5.1 Conclusion

From this study, it has been established that capital structure is vital to the performance of businesses in Nigeria. Entities are more interested in the cost associated their various sources of finance used by a company in financing its operations and has been considered as one of the most important factors in firm financing policy due to its crucial role in corporate performance. It is with that that the study examined the effect of capital structure on the financial performance of firms in Nigerian manufacturing sector. Is now clear that there are statistically significant and non- significant effects of capital structure on performance variables of interest.

5.2 Recommendation

Despite our findings, we suggest caution should be exercised in concluding differences in industry structure and other factors not captured by this study may affect the position of each firm. Furthermore, there may be other external factors which affect the profitability of the firm which is ignored by most studies such as the quality of Human Resources, environmental factors, organisational structure and operational procedures as opined by Asian (2015).

REFERENCES

Akintoye, I. R. (2016). Investment decisions in the 21st century. Unique Educational Publishers, Lagos. Nigeria

Akinyomi, O. J., &Olagunju, A. (2013). Determinants of capital structure in Nigeria. *International Journal of Innovation and Applied Studies.* 3(4), 999-1005.

Ali, S, Zia, S & Razi A (2012). Impact of capital structure on the profitability of petroleum

sector in Pakistan" *Global Journal of Management and Business Research.* 12(22)

Awunyo-Vitor, D., & Badu, J. (2012). Capital structure and performance of listed Banks in Ghana. *Global Journal of Human Social Science.* 12(5), 57-62.

Asain, A. U. (2015).Assessing the impact of liquidity and profitability ratios on growth of profits in pharmaceutical firms in Nigeria. *European Journal of Accounting, Auditing and Finance Research.* 3(10), pp.97-114.

Brealey, R. A. & Myers, S. C. (2003). Principles of corporate finance. International edition, New

York: McGraw Hill, Boston, MA.

Bialek -Jaworska, A. &Nehrebecka, N. (2015). Determinants of Polish companies' debt

preferences. PP 19-32.

Brigham, E. F., Foster, E., & Houston, J. F. (2004). Fundamental of financial management.10th

ed.,Edn

Dada, A. O. &Ghazali, Z. B. (2016). The impact of capital on firm performance: Empirical Evidence from Nigeria. *Journal of Economics and Finance.* 7(4), 23-30.

David, D. & Olorunfemi, S. (2010). Capital structure and corporate performance in Nigeria *Journal of Mathematics and Statistics.* 6(2), 168 -173

Fosberg, R. H., & Ghosh, A. (2006). Profitability and capital structure of Amex and Nyse firms. *Journal of Business & Economics Research*, 4(11), 57–64.

Gambo, E. J., Ahmad, A., &Musa, A.M(2016): Capital structure and firm performance in the Nigerian cement industry. *Archives of Business Research.* 4(6), 30-44.

Getahun, M. (2016). Capital structure and financial performance of insurance industries in Ethiopia. *Global Journal of Management and Business Research*: C Finance. 16(4), 45-54.

Hassonn, A., Tran, H., & Quach H. The determinants of corporate dividend policy: Evidence from Palestine. *Journal of Finance and Investment Analysis*. 5(4). 29-41.

Iavorskyi, M. (2013). The Impact of capital structure on firm performance: Evidence from Ukraine: Being a Research Thesis Submitted in Partial Fulfillment of the Requirement for the Degree of MA in Financial Economics. 1-43.

Lambe, L. (2014). Corporate capital structure and firm's market value in Nigeria. *Research Journal of Finance and Accounting. 5(12), 16-31.*

Myers, S. (1984). The capital structure puzzle. *Journal of Finance, 39(1),* 572-592.

Nirajini, A.& Priya, K. B. (2013). Impact of capital structure on the financial performance of listed trading companies in Sri Lanka. *International Journal of Scientific and Research Publications,* 3(5): ISSN 2250-3153.

Nwude, E. C., Itiri, I. O., Agbada, B. O., & Udeh, S. N. (2016). The impact of debt structure on firm performance: Empirical evidence from Nigerian quoted companies.

Asian Economic and Financial Review, 6(11): 647-660.

Odi, N. (2014). Effect of capital structure of Nigeria firms on Economic growth. *MediterraneanJournal of Social Sciences*. 5(1), 515-519.

Oladeji, T., Ikpefan, A.O&Olokoyo, F.O. (2015). An empirical analysis of capital structure on performance of firms in the petroleum industry in Nigeria. *Journal of Accounting and Auditing: Research and Practice. 1-9.*

Olokoyo, F. O. (2013): Capitalstructure and corporate performance ofNigerian quoted firms: A panel data approach. *African Development Review.*

Olowe, R. A. (2018). Financial management: Concepts, financial system and business finance. 4th Eds. Brierly Jones Nigeria Limited

Owolabi, S. A., & Obida S. S. (2012). Liquidity management and corporate profitability: Case study of selected manufacturing companies listed on the Nigerian stock exchange. *BusinessManagement Dynamics.* 2(2), 10-25.

Salamba, J. J. (2015). Impact of capital structure on performance of SMEs in Tanzania: Being a Dissertation submitted in Partial Fulfillment for the award of Master of Accounting and Finance of Mzumbe University.

Salim, M & Yadav I. (2012). Capital structure and firm performance: Evidence from Malaysian listed companies. *Procedia-social and behavioural Sciences* 65: 156-166.

Salawu, R.O. (2009). The effect of capital structure on profitability: An empirical analysis of listed firms in Nigeria. *The International Journal of Business and Finance Research.* 3(2), 121-129.