



Journal of Research in International Business and Management (ISSN: 2251-0028) Vol. 5(1) pp. 81-89,  
August 2018  
Available online <http://www.interestjournals.org/JRIBM>  
DOI: <http://dx.doi.org/10.14303/jribm.2018.018>  
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*Full Length Research Paper*

## **Capital structure and financial performance of listed manufacturing firms in Nigeria**

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### **Abstract**

**This study examined the impact of capital structure on financial performance of quoted manufacturing firms in Nigeria over the period 2005-2014. Panel methodology was applied to analyse the impact of capital structure on financial performance of quoted manufacturing firms in Nigeria. The findings of the panel ordinary least square show that a positive statistically significant relationship exist between long term debt ratio(LTD) (0.0001), total debt ratio (TD) (0.0065) and return on equity (ROE) while a positive statistically insignificant relationship between ROE (return on equity) and STD (Short term debt ratio). There was also a negative insignificant relationship between all the proxies of capital structure (LTD, STD and TD) and ROA which makes ROE a better measure of performance. The study concluded that capital structure has a positive impact on financial performance and companies should employ more of long term debts. Therefore it recommends that every firm should make good capital structures decision to earn profit and carry on their business successfully.**

**Keywords:** Capital structure, Profitability, Performance, Leverage, Financing.

### **INTRODUCTION**

The trouble affecting entities in Nigeria lies within financing; either to source equity or debt assets. Finance is so vital and serves as an instant cause for companies not commencing or progressing. Capital structure serves as one of the important variables considered by firms when considering financial performance. Considering a firms capital structure is imperative not just to boost earnings but also its effect on organization's capability to manage competitive environments. The aim of a firm's capital structure may not be focused on wealth maximization but to safeguard management's interest mostly in firms where control is dictated by directors and shares of the corporation carefully held (Dimitris and Psillaki, 2008).

Consequently, firms should be able to improve their market share, finance operations and grow in the long run to improve value added and profits. Firms going through financial distress also have issues with its operational functions, high labour turnover and the organization objective shifted from key corporate objectives since the current issue is funding debt instruments. Consequently, no leverage depicts that a

business forgoing low-cost sources of financing and depending on equity to be exact, a costly source of capital. Capital structure depicts systems in which equity as well as debt are employed for funding the firm's activities to yield optimum returns for the stakeholders to maximise firm's returns given a level of risk (Dada and Ghazali, 2016).

Looking inward to the manufacturing sector it is observed that the association amid capital structure and performance is for long a matter of substantial deliberations for equally scholars and practitioners. Strategic management look towards capital structure because it is related with a corporation's capability to satisfy numerous stakeholders demands (Roy and Minfang, 2000). 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 entails the capability 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 Nigeria 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 and 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 and Ghazali, 2016; Gambo et al., 2016).

In this light, it is essential to comprehend how organisation's financing methods impacts their performance. Therefore, the crucial theme of this research is to evaluate the effect of capital structure on financial performance of quoted firms in Nigeria.

## **LITERATURE REVIEW**

### **Concept of capital structure**

Capital structure denotes means an establishment funds its operations using some blend of equity plus debt (Tsai, 2010). Nirajini and Priya (2013) define it as the technique an establishment applies for financing based on a blend of long-term capital (ordinary and preference shares, debentures, loans, loan stock, etc.) in addition to short-term obligations like overdraft and other payables. Also, 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. 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. The problem of choosing between equity and debt are faced many firms, especially in funding their long term investment opportunities. To finance the larger volume of a debt depends on the amount of interest on debt, financial distress cost, income taxes, imperfections in the market, taxes that are refuse to pay and corporate income etc. Long term debt will bring about increase in the desire of the firm when there is a decrease in the rate of interest. When there is an increase in leverage will provide an upsurge in financial distress. An increase in leverage of the firm will lead to firm's stock unattractive to investors and this is as a result of increase in financial distress. Firms might find difficult to satisfy a required service obligation, which could lead not only administrative expenses and legal expenses but also bankruptcy.

Leverage depicts the sensitivity of equity ownership in line with fluctuations in the fundamental value of an entity. Notably, leverage ratio can be independent, control and dependent variable in capital structure works. High leverage diminishes agency costs of outside equity and boosts corporate worth by limiting or cheering managers to achieve goals in line with shareholders demands (Berger and Di Patti, 2006).

Nonetheless, such incentive will profit shareholders at debt-holders loss. If not wisely applied, the management of leverage to increase profitability may increase agency problem and cost.

### **Elements of capital structure**

The capital structure of an entity is broadly classified into two major groups, which are:

**Equity capital:** This involves the capability to source external and also issue out equity shares right certified by a share certificate. The equity shareholders own part of the firm. At financial period ending, companies issue dividend to shareholders from the profit made by the firm (Efobi, 2008).

**Debt capital:** Ihenetu, Iwo and Ebiware (2016) posits that debt capital is the long span obligation an entity applies in funding its investment activities which is accompanied with a long repayment period. The cost of debt in an entity's capital structure hinge on the state of its financial position.

### **Financial performance**

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 applied to proxy performance of a firm. Different measures applied in measuring performance and which have been used by different authors in examining capital structure and profitability include the returns on equity, returns on asset, 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 worth of the firm's market 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).

### **Theoretical review**

The standings of Modigliani and Miller (1958), which serves as one of the supreme and vital advancement in financial economics examining capital. The trade-off theory model is traceable to the debate over the M and M's theorem. In line with M&M, an advantage for debt is perceived that it protects earnings from taxes (Getahun, 2016). Trade-off theory posits that the optimal capital structure is the trade-off between the benefits (the interest tax shields) and costs of debt (the financial distress and agency costs) (Getahun, 2016; Brigham, Foster and Houston, 2004). Distinct to the trade-off theory, the pecking order theory doesn't adopt an optimal level of capital structure. It posits that establishments rank their source of financing; from internal to equity financing. Agreeing to the principle of the least resistance, choosing to raise equity as a financing means is of last alternative.

Pecking Order Theory, also acknowledged as Asymmetric Information Theory is established on least resistance principle, and a renowned theory advocated by Myers and Majluf (1984). Also, the pecking order theory asserts that internal reserves and sources are used first, and if all internal means of finances have been exhausted, corporations will opt for debt. When not feasible to source for further debt, firm in the end turn to equity as last resort (Olowe, 2018). In distinction to the Trade-off Theory that focuses on interest tax shields and future cost of debt, this theory sees those to be only of secondary importance. Leverage is re-evaluated and only companies whose investment necessities surpassed internally sourced funds would source more debt.

Researchers concluded that each company's debt ratio, reflects its collective necessity for external finance and that profitable enterprises with restricted growth opportunities use their cash surplus to moderate debt rather than repurchasing shares since it does not perform sufficient fund-raising and debt is less costly compared to share (Lambe, 2014; Odi, 2014; Nirajini and Priya, 2013; Salawu, 2009).

The Modigliani and Miller methodology to capital structure irrelevance posits that the market enjoys full information about the activities of a firm. Ross (1977), nonetheless, recommends a methodology for company's capital structure determination established on the presence of symmetric information between the company's insiders and outsiders. Ross contends that if directors have insider information, the approach by directors about the financial structures signal information to the market. Therefore, decision-making to modify financing structure will alter the market's opinion of the company. Subsequently, the value of the entity will increase with leverage.

### Empirical Review of Literature

The entire review of literature with authors, objectives, methodology and findings are given in Table 1.

**Table 1:** Literature.

Author(s)	Positive results	Objective	Methodology	Findings
Nwachukwu, and Akpeghughu (2016)		The relationship between capital structure and firms performance within banking industries in Nigeria	regression	There exists a positive and significantly relationship on equity capital and a negative and significant relationship between debt capital and return on investment.
Iheanyi, Sotonye and Ejiodamen.(2016)		Effect of capital structure on the performance on deposits money banks.	Ordinary least square	Highly geared capital structure increases performance of deposit money than lowly geared capital.
Adesina, Nwidobie and Adesina (2015)		The impact of post consolidation capital structure on the financial performance of Nigeria quoted banks.	Using ordinary least square and secondary data.	Capital structure has a significant positive relationship on financial performance of quoted banks in Nigeria.
Toraman et al. (2013)		investigated the effects of capital structure decisions on firms' profitability in manufacturing sector in Turkey	2005 and 2011. Regression methodology	Findings displayed that short term liabilities to total assets and long term liabilities to total assets have a negative association with ROA as performance indicator. There is positive relationship between operating income to financial expenditures and profitability
Javed and Akhtar (2012)		examined capital structure and financial	2004-2008 Correlation And	The findings depicts a positive link between the Leverage, financial

	performance in Pakistan	Regression Test	performance and Growth, Size of the firms
Magara (2012)	examined capital structure and its determinants at the Nairobi Securities Exchange	2007 To 2011 Regression	there exists a positive and significant association between firm size, tangibility and growth rate and the degree of leverage of the firm
Salim and Yadav (2012)	explored the association amid capital structure and organisations financial performance	1995-2011 Panel Data Methodology	There is a positive association between growth and performance for all the sectors. Tobin's Q reveals that there are significantly positive relationship between short term debt (STD) and long term debt (LTD). It also reports that total debt (TD) has significant negative relationship with the performance of the firm.
Kannadhasan (2011)	examined the connection amid leverage and value of pharmaceuticals companies in India	2000-2012 panel regression	The findings show a positive and significant relationship between financial leverage and performance of a firm
Margaritis and Psillaki (2010)	examined the relationship between leverage and firm's performance	1998 to 2009 panel data methodology	found a significant positive relation between leverage and firm's performance
<b>Negative Results</b>			
Nwangi, Makau and kosimbei (2014)	investigated the relationship between capital structure on the performance of non-financial companies listed in the Nairobi Securities Exchange	panel data and Feasible Generalised Least Square regression	Financial leverage had a statistically significant negative association with performance as measured by return on assets (ROA) and return on equity (ROE).
Raluca (2014)	investigated Capital Structure and Corporate Performance of Romanian Listed Companies	2010 to 2012 Regression	The results indicate that firm's performance, which is measured by ROA, ROE, RCA and MBR is significantly influenced by the degree of capital structure.
Abdul (2012)	determine the relationship between capital structure	2003-2009 Pooled Ordinary Least Square regression	Financial leverage proxied by short term debt to total assets and total debt to total assets has a

	decisions and the performance of firms in Pakistan		significantly negative relationship with the firm performance proxied by Return on Assets (ROA), Gross Profit Margin (GM) and Tobin's Q. The relationship between financial leverage and firm performance measured by the return on equity (ROE) is negative but insignificant. Asset size has an insignificant relationship with the firm performance measured by ROA and GM but negative and significant relationship exists with Tobin's Q
<b>Mixed Results</b>			
Oyedokun, Olatunji and Sanyaolu (2018)	The study sought to examine the effect of capital structure on the financial performance of firms in Nigerian manufacturing sector.	ex-post facto Descriptive statistics and regression	The study reveals that there are statistically significant and non-significant impact of capital structure on performance variables
Saeedi and Mahmoodi (2011)	examined the relationship between capital structure and performance of listed firms in the Tehran Stock Exchange	1995-2011 panel data methodology	The findings specify that financial leverage might affect different measures of performance in diverse means.
Ibrahim (2009)	examined the impact of debt (capital structure) on the performance of listed companies in Egypt	multiple regression model 1997-2005	The results exhibited that capital structure shows a weak-to-no impact on performance

Source: Authors Computation (2018).

## METHODOLOGY

The longitudinal design was considered suitable for this study because data on the variables were based within a selected period of time. The study will obtain data to be analysed from published reports of the designated quoted manufacturing companies for each of the periods from 2005-2014. 10 companies are selected out of the 64 manufacturing firms registered on the Nigerian stock market. The manufacturing sector was chosen because it remains the most powerful engine for economic structure of countries (Jide, 2010). In addition, in line with Uwuigbe (2011), a minimum of 5% of a defined population is seen as an appropriate sample size in making a generalization. This was also supported by Ogolo (1996) who

furthered argued that in a situation where population is known, a minimum of 10% can constitute a sample. With a population size of 64 Nigerian manufacturing firms listed on the stock market. The selection of companies is done bearing in mind that sample drawn represents at least 10% of the total population. The objective of this study will be achieved using a panel OLS method to determine the impact of capital structure on financial performance. This was done by using the E-views software. The panel data methodology is established on combined time-series and cross-sectional data. It is very relevant in investigating the predictable power of the independent variables on the dependent variable (Okere, Imeokparia, Ogunlowore and Isiaka, 2018).

### Model Specifications

This study will adopt the model applied by Shoaib, Onaolapo and Kajola (2010) with little modification to suit the objective and purpose of the study. The model is as follows:

$$CS=f(STD,LTD,TD) \quad (i)$$

$$PERF = f (CS) \quad (ii)$$

$$PERF = f (STD, LTD, TD).$$

Using multiple regression analysis, the model was modified as follows

$$ROE_{i,t} = \beta_0 + \beta_1LTD_{it} + \beta_2TD + \beta_3STD + \epsilon_{it} \quad 1$$

$$ROA_{i,t} = \beta_0 + \beta_1LTD_{it} + \beta_2TD + \beta_3STD + a_{it} \quad 2$$

Where,

PERF= performance measured by ROA, ROE

CS= Capital Structure

STD, = Short Term Debt to Total Assets for Firm i in Year t

LTD = Long Term Debt to Total Assets for Firm i in Year t

TD = Total Debt to Total Asset for Firm i in Year t

$\epsilon_{it}$ = Error Term

ROE = Returns on Equity

ROA= Returns on Asset

T= time

$\beta_1, \beta_2, \beta_3$  = Co efficient of associated variables.

The priori signs of the coefficients are indicated to be positive, which implies that capital structure is supposed to have a positive impact on financial performance of manufacturing firms in Nigeria i.e.  $\beta_1-\beta_4 > 0$ .

### Measurement of Variables

Variables measurement

ROA  $\frac{Net\ income}{TOTAL\ ASSETS}$  as applied by Okere, Isiaka and Ogunlowore (2018)

ROE	$\frac{NET\ INCOME}{SHAREHOLDERS\ EQUITY}$
Short Term Debt Ratio	$\frac{SHORT\ TERM\ DEBT}{EQUITY + DEBT}$
Long Term Debt Ratio	$\frac{LONG\ TERM\ DEBT}{EQUITY + DEBT}$
Total Debt Ratio	$\frac{TOTAL\ DEBTS}{TOTAL\ ASSETS}$

## DATA ANALYSIS AND RESULT INTERPRETATION

### Empirical analysis of the relationship between capital structure and financial performance

The co-efficient of STD (short term debt ratio) has a positive slope and it is statistically insignificant at 5% level of significance. This means that there is a positive but statistically insignificant relationship between ROE (return on equity) and STD (short term debt ratio). This also implies that a unit increase in STD (short term debt ratio) will result to 0.323 increase in ROE. The co-efficient of TD (total debt ratio) has a positive sloped and it is statistically significant at 5% level of significance. This means that there is a positive significant relationship between ROE (return on equity) and TD (total debt ratio). This also implies that a unit increase in TD (total debt ratio) will result to 0.134 increase in ROE (return on equity). The co-efficient of LTD (long term debt ratio) has a positive slope and it is statistically significant at 5% level of significance. This means that there is a positive significant relationship between ROE (return on equity) and LTD (long term debt ratio). This also implies that a unit increase in LTD (long term debt ratio) will result to 0.455 increase in ROE. The adjusted R-squared shows that the model's explanatory power explains 57% of the total variations in the ROE. The Durbin-Watson is approximately 1.88 shows that the result is free from auto-correlation problem (Table 2).

**Table 2:** Panel ordinary least square analysis

Dependent Variable: ROE				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
STD	0.322953	0.210780	1.532175	0.1291
TD	0.133797	0.047951	2.790296	0.0065
LTD	0.454642	0.111847	4.064844	0.0001
C	-0.056331	0.086011	-0.654934	0.5142
R-squared	0.622169			
Adjusted R-squared	0.570054			
F-statistic	11.93846	Durbin-Watson stat		1.875973
Prob(F-statistic)	0.000000			
Source: Author's Computation (2018)				



The prob (F-statistic) is statistically significant as it is less than 1% which means the model has high goodness of fit.

**Table 3:** Panel ordinary least square analysis

<b>Dependent Variable: ROA</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
STD	-0.094880	0.086791	-1.093205	0.2805
TD	-0.007448	0.048394	-0.153904	0.8784
LTD	-0.102386	0.119189	-0.859022	0.3952
C	0.233918	0.050832	4.601823	0.0000
R-squared	0.640203			
Adjusted R-squared	0.580237			
F-statistic	10.67608	Durbin-Watson stat		0.883393
Prob(F-statistic)	0.000000			
Source: Author's computation (2018)				

The co-efficient of STD (short term debt ratio) shows a negative slope and also statistically insignificant at 5% level of significance. This means that there is a negative insignificant relationship between ROA (return on assets) and STD (short term debt ratio). This also implies that an increase in STD (short term debt ratio) will result to 0.16 decrease in ROA (return on asset), and a unit decrease in STD (short term debt ratio) will result to 0.16 increase in ROA. The co-efficient of TD (total debt ratio) has a negative slope and it is statistically insignificant at 5% level of significance. This means there is a negative insignificant relationship between ROA (return on assets) and TD (total debt ratio). This also implies that a percentage increase in TD (total debt ratio) will result to 0.007 decrease in ROA (returns on assets), and a unit decrease in TD (total debt ratio) will result to 0.007 increase in ROA (returns on assets). The co-efficient of LTD (long term debt ratio) shows a negative slope and also statistically insignificant at 5% level of significance. This means that there is a negative insignificant relationship between ROA (return on assets) and LTD (long term debt ratio). This also implies that a percentage increase in LTD (long term debt ratio) will result to 0.1 decrease in ROA (return on assets), and a unit decrease in LTD (long term debt ratio) will result to 0.1 increase in ROA (return on asset). The adjusted R-squared shows that the model's explanatory power explains 58% of the total variations in the ROA. The Durbin-Watson is indicating the existence of serial auto-correlation which is common in time series data (**Table 3**).

The prob (F-statistic) is statistically significant as it is less than 1% which means the model has high goodness of fit.

#### **SUMMARY, POLICY RECOMMENDATION**

This study observed the effect of capital structure on financial performance of quoted manufacturing firms in Nigeria. The study is based on 10 listed manufacturing businesses over the period of 2005 to 2014. The study made use of Long term debt ratio (LTD), Short term debt ratio (STD), and Total debt Ratio (TD) as components of capital structure and also returns on assets (ROA) and return on equity (ROE) as measures of evaluating the financial performance of companies. The research work employed the use of secondary data obtained from annual reports of sampled manufacturing firms as contained in Nigerian Stock

Exchange fact book. The research work employed panel ordinary least square regression technique for the analysis of the effect of capital structure on financial performance.

The results from the research work showed a positive and also statistically significant relationship existing between long term debt ratio (0.0001) , total debt ratio (0.0065) and returns on equity (ROE) while a positive statistically insignificant relationship between ROE (returns on equity) and STD (Short term debt ratio). This means that, if LTD ratio (i.e. the ratio of long term debt to total equity and debt) is increased, there would be 4.5% increase in ROE. This further explains the notion that long term debt is important when considering a company's capital structure. For STD ratio (i.e. the ratio of short term debt to total equity and total debt) when increased will cause an increase in ROE. This means that short term debt is important in the financing decision of a firm same as TDR (i.e. total debt to total asset). Furthermore, there was a negative insignificant relationship between all the proxies of capital structure (LTD, STD and TD) and ROA which makes ROE a better measure of performance. The outcomes of this research work are in tandem with studies such as Tian and Zeitun (2007), Salawu (2007), Chen (2004), Tzelepis and Skuras (2004), Gleason et al. (2000), Krishnan and Moyer (1997) and Rajan and Zingales (1995) among others.

### **CONCLUSION**

This project has established that capital structure has a significant effect on financial performance of an entity. So every company should execute efficient capital structure to make profit and ensure going concern. From the analysis conducted, it can be concluded that ROE (Return on Equity) is a better measure of performance compared to ROA (Return on Asset). However, LTD (Long term debt ratio) which has the highest co-efficient (0.454642) with a probability of 0.0001 is also a very good proxy of capital structure compared to STD and TD ratios. Therefore, companies should employ more of long term debts (Loans that mature in three or more years). From this study, capital structure has been established to remain vital to profitability 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 a key factor in firm financing strategy due to its crucial role in corporate performance. It is with that that the study observed the influence of capital structure on financial performance of firms in Nigerian manufacturing sector.

### **RECOMMENDATIONS**

1. Based on the research, the following recommendations have been provided:
2. Capital structure of a company ought to be adequately planned to safeguard the interest of the equity holders, shareholders and financial requirements of the firm.
3. Companies should invest more in long term debts as it gives them more time before payback.
4. Recognizing faults of investment might be paramount to develop the business's financial performance, since it specifies the loopholes which corrective decision can be applied.
5. Companies should depend less on short term debt, which made the main portion of their Leverage and emphasis on developing internal schemes to improve on their financial performance.

### **REFERENCES**

- Abor J (2005). The effect of capital structure on profitability: Empirical analysis of listed firms in Ghana, J Risk Financ 6: 438-445.
- Abdul G (2012). The relationship of capital structure decisions with firm performance: a study of the engineering sector of Pakistan. Int J Account Financ Reporting.

Adesina JB, Nwidobie BM, Adesina OO (2015). Capital structure and financial performance in Nigeria. *Int J Bus Soc Res* 5: 21-31.

Akintoye IR (2016). *Investment Decisions in the 21st Century*. Unique Educational Publishers, Lagos, Nigeria.

Akinyomi OJ, Olagunju A (2013). Determinants of capital structure in Nigeria. *Int J Innov Appl Stud* 3: 999-1005.

Berger AN, Bonaccorsi DI, Patti E (2006). Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry. *J Bank Financ* 30:1065-1102.

Boodhoo, R (2009). Capital structure and ownership structure: A review of literature.

Brealey RA, Myers SC (2003). *Principles of Corporate Finance*. International edition, New York: McGraw Hill, Boston, MA.

Brigham EF, Foster E, Houston JF (2004). *Fundamental of Financial Management*. 10th ed., Edn.

Brown EIS (1993). An experimental investigation of explanations for outcome effects on appraisals of capital-budgeting decisions. *Contemporary Accounting Research* 10: 83-111.

Chowdhury, Chowdhury SP(2010). Impact of capital structure on firm value. Evidence from Bangladesh. *Business and Economic Horizon*.

Dada AO, Ghazali ZB (2016). The impact of capital on firm performance: Empirical Evidence from Nigeria. *J Econ Financ* 7: 23-30.

Dimitris M, Psillaki M (2008). *Capital Structure, Equity Ownership and Firm Performance*. Department of Finance, University of Nice-Sophia Antipolis, Einstein 06560 France.

Roden DM, Lewellen WG (1995). *Corporate capital structure decisions: Evidence From leveraged buyouts*. Financial Management.

Ebaid IE (2009). The impact of capital structure choice on firm performance: Empirical evidence from Egypt. *J Risk Financ*.

Efobi R U (2008). *The Impact of Capital Structure on Corporate Profitability in Nigeria*.

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

Getahun M (2016). Capital structure and financial performance of insurance industries in Ethiopia. *Glob J Manage Bus Res: C Finance*. 16: 45-54.

Ibrahim EE (2009). *J Risk Financ*.

Ihenetu HI, Iwo S, Ebiware AE (2016). Impact of capital structure on the performance of deposit money banks (a study of selected deposit money banks in Nigeria. *Int J Econ Bus Manage* 2: 23-34.

Javed B, Akhtar S (2012). Interrelationships between capital structure and financial performance, firm size and growth: Comparison of industrial sector KSE. *Eur J Bus Manage*.

Jensen M, Meckling W (1976). Theory of the firm: Managerial behaviour, agency costs and capital structure, *J Financ Econ*.

Kannadhasan MAS (2011). Relationships among business strategy, environmental uncertainty and performance of firms operating in transport equipment industry in India. *J Emerg Capital Market*.

Kannadhasan M, Nandagopal R (2010). Influence of decision makers characteristics on risk analysis in strategic investment decisions. *J Mod Account Auditing*.

Khalaf A (2014). The relationship between capital structure and firm performance: Evidence from Jordan. *J Financ Account*.

Lambe L (2014). Corporate capital structure and firm's market value in Nigeria. *Res J Financ Account*. 5: 16-31.

Magara M (2012). Capital structure and its determinants at the Nairobi Securities Exchange.

Margaritis D, Psillaki M (2010). Capital structure, equity ownership and firm performance. *J Bank Financ*. 34: 621-632.

Malekian (2012). The relationship between capital structure and firm performance evaluation measures: Evidence from the Tehran Stock Exchange. *International J Bus Comm*.

Modigliani F, Miller MH (1963). Taxes and the cost of capital: A correction. *Am Econ Rev*. 53, 433-443.

Myers S (1984). The Capital Structure Puzzle. *J Financ*. 39: 577-5779.

Myers SC, Majluf NS (1984). Corporate financing and investment decisions when firms have information that investors do not have. *J Finance* 12: 187-221.

Nimalathasan B, Brabete V (2010). Capital structure and its impact on profitability: A study of listed manufacturing companies in Sri Lanka. *Int. J. Res. Comm Manage*.

Nirajini A, Priya KB (2013). Impact of capital structure on the financial performance of listed trading companies in Sri Lanka. *Int J Sci Res Publ*, 3: 2250- 3153.

Nwachukwu U, Akpeghughu MK (2016). Effect of capital structure on firm performance (A Study of Selected Quoted Banks in Nigerian Stock Exchange). *Int J Bus Manage* 4:114-122.

Mwangi LC, Makau SM, Kosimbei G (2014). Relationship between capital structure and performance of non-financial companies listed at the Nairobi Securities Exchange, Kenya. *Glob J Contemp Res Account, Auditing and Bus Ethics*.

Odi N (2014). Effect of capital structure of Nigeria firms on Economic growth. *Mediterranean Journal of Social Sciences*. 5: 515-519.

Odit MP, Chitto HB (2011). Does financial leverage influence investment decisions? The case of Mauritian firms. *J Bus Case Stud*.

Ojo AS, (2012). The effect of financial leverage on corporate performance of some selected companies in Nigeria. *Canadian Social Science*.

Okere W, Imeokparia L, Ogunlowore JA, Isiaka M (2018). Corporate social responsibility and investment decisions in listed manufacturing firms in Nigeria. *J Econ, Manage Tr*. 21: 1-12.

Okere W, Isiaka M, Ogunlowore A J (2018). Risk management and financial performance of deposit money banks in Nigeria. *Eur J Bus, Econ Accountancy*, 6: 30-42.

Onaolapo A, Kajola S (2010). Capital structure and firm performance: Evidence from Nigeria. *European J Econ, Financ Admin*.

Owolabi SA, Obida SS (2012). Liquidity management and corporate profitability: Case study of selected manufacturing companies listed on the Nigerian stock exchange. *Business Management Dynamics* 2: 10-25.

Prahalathan B, Ranjani RPC (2011). The impact of capital structure –choice on firm performance: Empirical investigation of listed companies in Colombo Stock Exchange in Sri Lanka. *Int. J. Res. Comm Manage*.

Rajan RG, Zingales, L (1995). What do we know about capital structure? Some evidence from international data. *J Financ*.

Raluca, (2014). Capital structure and corporate performance of Romanian listed companies. *International J Acad Res Account, Financ Manage Sci* 4: 287-292.

Ross (1977). The determination of financial structure: the incentive signalling approach. *The Bell J Econ* 8: 772-792.

Roy L, Minfang L (2000). Environmental dynamism, capital structure and performance: A theoretical integration and an empirical test. *Strategic Manage J*.

Saeedi A, Mahmoodi I (2011). Capital structure and firm performance: evidence from Iranian Companies, *Int Res J Econ*.

Salawu RO (2009). The effect of capital structure on profitability: An empirical analysis of listed firms in Nigeria. *Int J Bus Financ Res*. 3: 121-129.

Salim M, Yadav R (2012). Capital structure and firm profitability: Evidence form Malaysian listed companies. *Procedia Social and Behavioural Sciences*, 65: 156-66.

Siddiqui MA, Shoaib A (2011). Measuring performance through capital structure: evidence from banking sector of Pakistan, *Afr J Bus Manage*.

Titman S, Wessels R (1988). The determinants of capital structure. *Journal of Finance*.

Toraman C, Kihc Y, Reis SG (2013). The effects of capital structure decisions on firm profitability: evidence from Turkey. *International Conference on Economic and Social Studies*.

Tsai L, Tserng H, Ho SP, Sung C, Chou Y (2010). Developing an analytical model for the optimal capital structure of the building company. *Journal of Marine Science and Technology*, 18: 385-394.

Zeitun R, Tian G (2007). Capital structure and corporate performance: evidence from Jordan. *Australasian Account BusFinanc J*.