



# **Gusau Journal of Accounting and Finance (GUJAF)**

**Vol. 2 Issue 1, April, 2021 ISSN: 2756-665X**

A Publication of  
Department of Accounting and Finance,  
Faculty of Management and Social Sciences,  
Federal University Gusau, Zamfara State –Nigeria

## **LIQUIDITY AND CAPITAL STRUCTURE OF LISTED OIL AND GAS COMPANIES IN NIGERIA**

**Hadiza Umar**

Department of Entrepreneurship Technology  
School of Innovative Technology  
Federal University of Technology, Minna.  
[uhadiza0083@gmail.com](mailto:uhadiza0083@gmail.com)

**Abdulrahman Abubakar**

Department of Accounting,  
ABU Business School  
Ahmadu Bello University, Zaria.  
[abtsauni@yahoo.com](mailto:abtsauni@yahoo.com)

### **Abstract**

*This paper examined the effect of liquidity on the capital structure of listed oil and gas companies in Nigeria for the period 2006-2016. The population of the study is ten (10) oil and gas companies listed on the Nigeria Stock Exchange (NSE) out of which eight (8) was used for the study. Linear regression technique using Ordinary Least Square (OLS) was used in analyzing the data obtained from the audited financial reports and accounts of the sampled companies. The findings revealed that liquidity has a positive and significant effect on the capital structure of listed oil and gas companies in Nigeria this finding is in line with the prediction of trade-off theory of debt financing. Based on the findings, this study recommends that listed oil and gas companies in Nigeria should remain liquid at all times by ensuring that their current liabilities do not exceed their current assets so that their financial obligations can be discharged on time.*

**Keywords:** Liquidity, Capital Structure, Deregulation, Long-term Debt, Short-term Debt.

### **1. Introduction**

The important role the Nigeria oil and gas sector plays in its economic development cannot be over-emphasized. Since the discovery of oil in the 50's, there has been a heavy reliance on the income generated from this sector. The revenue generated by the government from the sector is used in transforming and developing the country (Brown & Nnamaka, 2019). However, the downstream sub-sector of the Nigerian oil and gas sector witnessed a partial deregulation in April, 2004 during the Obasanjo administration which according to Monday *et al* (2016) leads to growth and expansion in the sector.

Consequently, companies in the downstream sub-sector, in order to cope with the expansion resulting from increase in investment, need additional fund to finance such investment (Monday *et al.*, 2016). Selecting the best source of financing will undoubtedly lead to value maximization and healthy growth. Therefore, managers in the oil and gas industry need to be furnished with the knowledge of capital structure determinants to facilitate their selection of optimal capital mix. However, the financing options available to a firm are debt or equity which forms its capital structure. According to Chechet *et al* (2013), the proper utilisation of a perfect blend of debt and equity is invaluable to the growth and future of a company. Thus, in the achievement of a company's goals, the importance of capital structure opinions cannot be over emphasized. Hence, the purpose of this study is to examine liquidity and capital structure of listed oil and gas companies in Nigeria.

Capital structure according to Martina (2015) is the method assets of a company are financed through the mixture of debt and equity. Regardless of how a company is financed, either debt or equity or a mixture of both, some implications are inherent. As both debt and equity are not devoid of cost, companies tend to have a mixture of debt and equity that will achieve optimum benefit at a least-cost combination. Thus, the measuring tools for capital structure are the amount of debt and equity.

In addition, the importance of liquidity cannot be over-looked in the financial decision-making process of any company whose aim is to make profit and maximize shareholders' wealth. According to Ghasemi and Razak (2016), a company can only meet its short and long term obligations as at when due when it is liquid. So, debt interests are discharged with higher firm liquidity. Thus, higher liquidity means a company can depend largely on debt since it means ability to easily discharge debt obligations. On the other hand, such companies may use their own capital to finance investment (Ghasemi & Razak, 2016).

Furthermore, several studies indicate the determinants of capital structure in Nigeria (Salawu & Agboola, 2008; Ajao & Ema, 2012; Olakunle & Oni, 2014; Onaolapo *et al.*, 2015). However, firm liquidity has so far received scanty attention. Similarly, Salawu and Agboola (2008); Onaolapo *et al.*(2015) argue that companies in Nigeria use more short-term debt in their financing choice necessitates an investigation of liquidity-capital structure nexus in Nigeria. Nigerian studies on capital structure also based their measurement on book leverage which is believed to; produce results which are comparable to other results on capital structure, be in conformity with theoretical predictions and capture the value of assets in place (Magwai, 2014). It is worthy of note that book leverage overstates the ratio of a company's debt that is used to finance its assets since there is no room for current value of the firm. This thereby makes potential investors and lenders to be wary of committing their funds into a company with a high debt/equity ratio. However, the market leverage which is a modification of the traditional book leverage has the potential of boosting investors' and creditors' confidence as it reflects the growth options reflected in the current market values against value of assets in place (book value). It thus serves as a better measure of solvency. In sum, the steps taken so far are hoped to minimize the seeming inconsistencies amongst the existing theories on capital structure.

Motivated by the foregoing, this study seeks to examine firm liquidity and capital structure of listed oil and gas companies in Nigeria for the period 2001 to 2016. Market based methodology is adopted as a justified departure from the previous studies within the Nigerian context.

## **2. Review of Empirical Studies**

There are different approaches to capital structure definitions and measurements in which Julia (2013) summed into four. The first approach views capital structure as the proportion of total debt and equity (Rajan & Zingales, 1995; Booth *et al.*, 2001; Olakunle & Oni, 2014; Martina, 2015). The second approach sees capital structure as the fixed capital in an organisation, that is, the relationship between long-term debt and equity (Frank & Goyal, 2008; Ajao & Ema, 2012; Kinde, 2013). The third approach sees capital structure as the issued securities (Brealey & Myers, 1999). The fourth approach includes only the shareholder's equity and those components of capital the use of which entails incurring interest expenses by the company (Ross *et al.*, 1990). Whereas, Julia (2013) opined that, capital structure measurements should depend on the purpose

of the analysis bearing in mind the effect of corporate financial decisions. These decisions are probably best represented by the relationship of total debt and total capital employed, as defined by Rajan and Zingales (1995) – the sum of equity and total debt.

Therefore, this study sees the proportion of debt to total assets as capital structure. This is because the debt ratio's focal point is the link between debt obligations and a company's total assets base. Debt includes all short-term and long-term obligations. It should however be noted that market definition of leverage as given by Frank and Goyal (2009), Mitto and Zhang (2008) and Ovtchinnikov (2010) is adopted for this study. Hence, market leverage is defined and measured as the ratio of total debt divided by market value of asset (MVA) in line with definition given by Frank and Goyal (2009), Mitto and Zhang (2008) and Ovtchinnikov (2010). MVA is equal to total debt divided by market value of equity (price x outstanding shares) plus book value of long-term debt and short-term debt plus preferred stock. However, Dhingra and Dev (2016) observed that, the investigation of total debt ratio may generate results which are difficult to interpret due to the inclusion of trade credits in the amount of short-term debt. Therefore, another leverage measure is considered. That is the measure based on long-term liabilities proportion in the capital structure.

Liquidity is a variable whose importance is worthy of emphasis in the financial decision-making process of any business organization whose aim is to make profit and maximize the wealth of the shareholders. Liquidity helps a company to discharge its short and long-term financial burdens. So, debt interests are easily paid-off when a company is having high liquidity (Jahfer & Madurasinghe, 2019). Financing of investments may be carried out by a company when external financing is difficult to get or expensive. Similarly, when revenues are low and also when unexpected expenses spur, high liquidity enables a company to sail through seamlessly (Ghasemi & AbRazak, 2016).

The quick, or acid-test, ratio is used to measure liquidity. Ramlall (2009) used the current ratio to measure liquidity and defined liquidity as a measure of current assets over current liabilities. Sharif *et al* (2012) also used the current ratio similar to that of Ramlall (2009). On the other hand, Zabri (2012) as well as Ghamesi & AbRazak (2016) defined liquidity using both quick and acid ratios as thus;

Quick Ratio:  $(\text{current assets} - \text{inventories}) / \text{Total assets}$ , and

Current Ratio:  $\text{current assets} / \text{current liabilities}$ .

These ratios show the ability of the company to deliver on both its short-term and long term financial commitments and they measure the liquidity of the company. This study adopts the current ratio in line with Ramlall (2009). Although the quick ratio is a measure that further refined current ratio by measuring only the most liquid assets to cover current liabilities, still current ratio is adopted for this study because oil and gas inventories are highly liquid assets.

### **Liquidity and Capital Structure**

There exist various studies conducted on liquidity and capital structure, among is the study of Ramlall (2009) who explored capital structure determinants of the non-quoted non-financial companies in Mauritius. Ramlall (2009) gathered data from the Registrar of Companies for the period 2005-2006 using 395 companies. Regression model was developed and used to run the

data which revealed that liquidity is negatively related to leverage. However, current assets divided by current liabilities was used to measure liability and book leverage of short-term debt and long-term debt measurements were used. Although large sample size was employed for Ramlall's 2009 study, the time frame chosen was too short may not adequately guide decisions on capital structure.

Additionally, Ebadi *et al* (2011) studied company characteristics and capital structure in Iran. The study was done using 72 quoted Iranian companies and a panel data from 2003 to 2009 was used. Findings indicated that liquidity is negatively related to debt ratio. Also in Malaysia, Zabri (2012) examined capital structure determinants among SMEs. Fifty (50) award winning SMEs formed the population of the study of which forty-seven (47) were used for the study from 1998 to 2010. Primary data were collected and analyzed using descriptive, bivariate, and multivariate analyses and the result showed that liquidity (both quick and current ratios) has a negative relation with debt ratio. The use of both quick and current ratios give a better understanding on how healthy a company is. Since quick ratio is more conservative as a measure of liquidity.

A similar study was conducted in Pakistan by Sharif *et al* (2012). Firm characteristics and capital structure of quoted insurance companies in Pakistan was investigated. Panel data of 31 insurance companies were collected and Hausman specification test was used to analyze the data. The result indicated an inverse but insignificant relationship between liquidity (the ratio of current assets to current liabilities) and debt ratio. They argued that the non-significance stemmed from the possibility that insurance companies faced more liquidity risk as compared with other financial institutions, as they receive premium in installments but are obliged to pay claims in bulk amount. The result from the study cannot be used as the basis for capital structure decisions of non-financial firms.

Furthermore, Shala *et al* (2014) investigated the factors of capital structure of insurance sector in Kosovo. Information used covered a period of three years (2009-2012) and was gleaned from the financial statements collected from the Central Bank of Kosovo's website. Ten (10) general insurance companies and one (1) life assurance company formed the sample of the study. The hypotheses formulated are tested using regression analysis and the empirical result shows a positive insignificant relationship between liquidity and debt ratio, indicating that liquidity (short-term assets over short-term liabilities) is not considered an appropriate determinant of leverage (total debt over total assets). The result of Shalal *et al* cannot be generalized to non-financial companies since the rules and regulations governing both financial and non-financial companies are not the same.

Ghasemi and Razak (2016) also confirmed the effects of firm liquidity on capital structure. The study explored the impact of liquidity on capital structure of listed Malaysian firms for the period from 2005 to 2013 using 300 randomly selected firms based on some criteria. To achieve the objective of the study, two measures of liquidity (current and quick ratios) were used as part of the independent variables, whereas the dependent variable, leverage (debt/equity), was decomposed into three components (total, long-term and short-term debts). Pooled OLS was used to analyse the data and the result showed a significant negative relationship between current ratio and leverage, while a significant positive relation exists between quick ratio and leverage

measures. The findings further revealed that short-term debt is largely influenced by liquidity compared to long-term debt.

Consequently, two (2) theories are most relevant in explaining the connection between liquidity and capital structure. The first is the pecking order theory which builds on the asymmetric information between the managers and the investors (Myers and Majluf, 1984). The pecking order theory postulates the following hierarchy of financing for companies; internally raised funds, then for debt, and outside equity as the last option. The pecking order theory postulates a negative relationship between liquidity and capital structure. The second theory is the trade-off theory. It argues that the optimal capital structure is achieved by a company through weighing the debt tax-shield and cost of bankruptcy (Bradley *et al.*, 1984). A positive relationship is expected between liquidity and capital structure because companies with higher liquidity ratio can support much more debt ratio due to the fact that short-term debt obligations can be satisfied easily on time (Akinlo, 2011).

It is clear from the above literature survey that liquidity is an important factor in the financing decisions of companies thus necessitating the examination of liquidity and capital structure of listed oil and gas companies in Nigeria.

### **3. Methodology and Specification of Models**

This study employed correlational research design and descriptive research design for the purpose of addressing the problem of the research. Financial Data of the sampled companies were gleaned from the Nigeria Stock Exchange Fact Book for the period 2006 – 2016 by extracting the required variables manually and measuring them in line with the set variable measurements. This study focused on the oil and gas companies operating in the downstream sector as classified by the Nigerian Stock Exchange and the Corporate Affairs Commission. A total of ten (10) oil and gas firms were quoted on the Nigerian Stock Exchange as at 31st December, 2016. However, only eight (8) companies were selected for this study because they were listed prior to 2006 and their shares were constantly traded on the floor of the stock exchange for the period of the study.

Ordinary least square (OLS) was used as technique for the first model because after conducting hausman specification test to select between fixed and random, the result from hausman was insignificant as such Breush pagan lagrangian multiplier (LM) test was conducted to select between random and OLS, the result from the LM was equally insignificant, thus OLS model was interpreted.

Similarly, the second model took the same approach and had similar outcome, however, instead of interpreting OLS, OLS model was corrected for heteroskadcity in the model, and thus robust OLS was conducted and analyzed.

### **Variables Measurement**

The measurement of the dependent and independent variable are provided in table 1 below.

**Table 1: Variable specification and Measurements**

Dependent Variable	Measurements	Source
Capital Structure 1	Total debt divided by market value of assets	Rajan & Zingles (1995)
(CAPSTRUCTURE1)		Booth et al. (2001)
Capital Structure 2	Long term debt divided by Market Value of assets	Booth et al. (2001)
(CAPSTRUCTURE2)		Frank and Goyal (2009)
Independent Variable		
Liquidity (LIQUI)	Current assets divided by current liabilities	Ramlall (2009)

**Source: Compiled by researcher, 2021**

Most of the existing empirical studies on capital structure use regression techniques with proxies for the determining factors used to explain the variation in leverage ratios across firms (Rajan&Zingales, 1995; Frank &Goyal, 2009; Onaolapo *et al*, 2015). Panel data regression model is estimated on the relationship between the financial leverage (debt to total assets) and liquidity of the oil and gas firms listed on the Nigerian stock Exchange.

The model is therefore specified as follows:

$$CAPSTRUCTURE_{it} = \beta_0 + \beta_1 LIQUI_{it} + \beta_2 GROWTH_{it} + \beta_3 TAN_{it} + \beta_4 PROF_{it} + \beta_5 SIZE_{it} + \beta_6 INFLA_{it} + \beta_7 INDUSTM_{it} + \epsilon_{it}$$

This is decomposed into two models in line with Frank and Goyal (2009):

$$CAPSTRUCTURE1 = \beta_0 + \beta_1 LIQUI_{it} + \beta_2 GROWTH_{it} + \beta_3 TAN_{it} + \beta_4 PROF_{it} + \beta_5 SIZE_{it} + \beta_6 INFLA_{it} + \beta_7 INDUSTM_{it} + \epsilon_{it} \dots \dots \dots (1)$$

$$CAPSTRUCTURE2 = \beta_0 + \beta_1 LIQUI_{it} + \beta_2 GROWTH_{it} + \beta_3 TAN_{it} + \beta_4 PROF_{it} + \beta_5 SIZE_{it} + \beta_6 INFLA_{it} + \beta_7 INDUSTM_{it} + \epsilon_{it} \dots \dots \dots (2)$$

Where: CAPSTRUCTURE<sub>it</sub> stands for leverage, β<sub>0</sub> being the intercept (Constant) and the other β<sub>i</sub>'s are the coefficients of the respective regressors. Similarly, LIQUI, GROWTH, TAN, PROF, SIZE, INFLA, INDUSTM symbolize liquidity, growth, tangibility, profitability, size, expected inflation, median industry leverage respectively. The regressors except for liquidity are control variables used to improve fitness of the model. Finally, ε<sub>it</sub> captures the stochastic disturbance (the error term).

**4. Findings and Discussion of Results**

**Descriptive Statistics**

Table 2 shows the descriptive statistics for the dependent and independent variables of the study.

**Table 2: Descriptive Statistics of the Variables**

Variables	Obs	Min	Max	Mean	Std. Dev	SK test Prob.
CAPSTRUCTURE1	88	0.0831	0.9359	0.5566	0.2388	0.0000
CAPSTRUCTURE2	88	0.0011	0.6792	0.1454	0.1789	0.0000
LIQUI	88	0.2948	4.4746	1.0680	0.5908	0.0000

**Source: Descriptive Statistic Results from Stata 13**

The first measurement of leverage which is the ratio of total debt to market value of assets ranged from 0.0832 to 0.9359. This implies that amongst the firms and within the study period, there was a firm that recorded lowest value of total debt at 1%, while the highest value for total

debt was about 94%. The mean value for total debt to market value of assets was 0.5566 within the study period implying that on average the firms recorded 56%. The standard deviation for total debt to market value of assets was 0.2388 which indicates that the variability about the average total debt ratio of listed oil and gas companies in Nigeria. The joint p-value of skewness and kurtosis is significant at 1% which implies the data were not normally distributed.

The second measure of leverage (CAPSTRUCTURE2) which is ratio of long-term debt to market value of assets displayed a minimum value of 0.0011 and maximum value of 0.6792 indicating that there was a firm that recorded lowest value of long term debt at 1%, while the highest value for total debt was 68%. The mean value for long term debt to market value of assets was 0.1454 within the study period showing that on average the firms have 15%. The standard deviation for total debt to market value of assets was higher than its mean value implying that there was high deviation from the actual mean. The skewness and kurtosis depict that the data were not normally distributed as it recorded a joint p-value of 0.0000. However, the average values of lev1 (56%) and lev2 (14%) reveal that short-term debts account for a larger portion of financing for oil and gas companies in Nigeria.

The current ratio was used to measure liquidity which is equal to current assets divided by current liabilities. Liquidity has a minimum value of 0.2948 and maximum value of 4.4746 implying that liquidity of the firms was as low as 29% for a firm within the study period, while the firm with largest value of liquidity was about 447%. The average value of liquidity stood at about 106%. The standard deviation for liquidity shows that the average value recorded represent the true mean while the skewness and kurtosis values imply that the data was not normally distributed.

### **Correlation Analysis**

Table 3 displays the correlation coefficients between dependent and the independent variables.

**Table 3** Correlation Matrix

<b>Variables</b>	<b>CAPSTRUCTURE1</b>	<b>CAPSTRUCTURE2</b>	<b>LIQUI</b>
CAPSTRUCTURE1	1.0000		
CAPSTRUCTURE2	0.4483	1.0000	
LIQUI	-0.0444	0.2376	1.0000

**Source: Correlation Matrix Result from Stata 13**

\*Correlation is significant at 0.01 or 5% level

From Table 3, Liquidity was found to have insignificant and negative correlation with CAPSTRUCTURE and CAPSTRUCTURE2. The level of relationship between liquidity and CAPSTRUCTURE1 is at about 4%, while the relationship between liquidity and CAPSTRUCTURE2 is at a degree of 24%.

### **Interpretation of Regression Result**

This section presents the regression result showing the coefficient values, t-values and the probability values for liquidity. It also presents and discusses the cumulative result in respect of fisher exact test and coefficient of determination.



**Table 4:** Summary of OLS Regression Result for the two Model

Variables	Model I CAPSTRUCTURE1			Model II CAPSTRUCTURE2		
	Coef.	Std Err.	Prob	Coef.	Std Err.	Prob.
LIQUI	0.0020	0.325	0.956	0.0795	0.0236	0.001
R <sup>2</sup>	0.5597			0.6218		
F.Stat	14.53			13.46		
f-sig	0.0000			0.0000		

**Source:** Author’s computation using STATA 13

Table 4 shows the cumulative R<sup>2</sup> for model I and II are 0.5591 and 0.6218 respectively. They are multiple coefficients of determination measuring the proportion of the total variation in the dependent variables jointly explained by the independent variables. That is, the values indicate that 56% and 62% of the total variation in capital structure of listed oil and gas companies in Nigeria was caused by liquidity.

The F-statistics of 14.53 and 13.46 for models I and II respectively which are significant at one percent indicate that the capital structure and liquidity models are well fitted. It implies that for any change liquidity of listed oil and gas companies in Nigeria, their capital structure will be affected directly. The values of F-Statistics for the two models which are statistically significant at 1% imply that there is a 99.9 percent probability that the relationships discernible amongst the variables were not due to mere chance.

### Liquidity and Capital Structure

Liquidity recorded a t-value of 0.06 and a coefficient value of 0.0020 with insignificant value at all levels of significance for total debt, while liquidity was found to have significant positive effect on long-term debt as it recorded a coefficient value of 0.0795 and t-value of 8.71 which was significant at 1% level. This result means that liquidity is positively and significantly influencing capital structure (long-term debt) of listed oil and gas companies in Nigeria except for total term debt. It implies that when there is an increase in the level of liquidity of the firm, the capital structure need of listed oil and gas companies for long-term debt will increase by the coefficient value except for total term debt. This may be as a result of the fact that, when firms are liquid, they can support more debt ratio as such they will be able to discharge their short-term contractual obligation (interest payment) on time. Implying that the sampled companies go for long-term debt due to their ability to cover their short-term obligations as at when due and also using the excess liquidity to indulge in more investments hence attract more returns and as such the need for debt financing especially short-term debt will decrease or may not even arise. This finding is in line with the prediction of trade off theory of debt financing.

From foregoing discussion in respect of liquidity of firm having significant positive effect on capital structure (long-term debt) except total term debt. The finding is in line with the result of Ghasemi and Razak (2016) and contradicts the findings of Ramlall (2009), Ebadi *et al* (2011), Zabri (2012), Sharif *et al* (2012), Shala *et al* (2014) Ghasemi and Razak (2016). The contradiction with prior studies is due to firm-specific and country factors of the sector under study that is the oil and gas companies in Nigeria. The average liquidity of oil and gas companies in Nigeria during the span of this study is 106% (see table 2) indicating that oil and gas companies in Nigeria are very liquid thereby making them to go for more long term debt.

## **5. Conclusion and Recommendations**

This study investigated the effect of liquidity on the capital structure of listed oil and gas companies in Nigeria. Based on the key findings, the study concludes that liquidity has significant impact on the choice of capital structure by listed oil and gas companies in Nigeria. The findings of this study revealed that appropriate level of liquidity depends on the measure of leverage. Therefore, this study concludes that liquidity portrayed a positive effect on the long term debt measure of leverage of listed oil and gas companies for the period under review.

The study also concludes that a single measure of leverage as a proxy of capital structure especially total debt as used by previous studies may not adequately capture its significance and level of correlation with the explanatory factor. That is, when measuring capital structure, adequate attention should be given to the proxies used in measuring it. This is because decisions on capital structure are long-term based. Therefore, measuring capital structure using total debt may be difficult to interpret due to the amount of trade credit included in short term debt.

The study recommends that the option of debt should be chosen with utmost circumspection to hedge against shareholders losing control to the bondholders. More clearly, when opting for debt liquidity should be considered and the associated costs and benefits must be carefully evaluated. It is also recommended that the management of firms should remain liquid at all times by ensuring that their current liabilities do not exceed their current assets so that their financial obligations can be discharged on time.

## **References**

- Ajao, O. S., & Ema, U., (2012). Determinants of Capital Structure in Nigerian Firms: *Review*. 2, 10-21
- Akinlo, O. (2011). Determinants of Capital Structure: Evidence from Nigerian Panel Data. *African Economic and Business Review*, 9 (1), 1-16.
- Booth, L, Aivazian V., Demirguc-Kunt, A. & Maksimovic, V., (2001). Capital Structures in Developing Countries. *The Journal of Finance*, 56(1), 87-130.
- Bradley, M., Jarrell, G., & Kim, E., (1984). On the Existence of an Optimal Capital Structure: Theory and Evidence. *Journal of Finance*. 39(3), 857–878.
- Brealey, R. A., & Myers, C., (1999). Principles of Corporate Finance, New York, Mcgraw-Hill.
- Brown E. D., & Nnamaka, U. C. (2019). Oil Revenue and Economic Growth: an Empirical Evidence from Nigeria. *International journal of science and management studies*. 2 (6), 29-40
- Chechect, I. L., Garba, S. L., & Odudu, A. S., (2013). Determinants of Capital Structure in Nigerian Chemical and Paint Sector. *International Journal of Humanities and Social Sciences*. 3(15), 247-263.
- Dhingra, R & Dev, K., (2016). Determinants of Capital Structure “A study of oil Industry in India. *International Journal of Engineering and Management Research*, 6(1), 35-42
- Ebadi.M., Thim, C. K., & Choong, Y. V., (2011). Impact of Firm Characteristics on Capital Structure of Iranian listed Firms. *European Journal of Economics, Finance and Administrative Sciences*, 42, 160-171
- Frank, M. Z., & Goyal, V. K. (2009). Capital Structure Decisions: which Factors are Reliably Important? *Financial Management*, 38(1), 1-37.
- Ghamesi, M. & AbRazak, N. H. (2016). The Impact of Liquidity on Capital Structure: Evidence from Malaysia. *International Journal of Economics and Finance*. 8(10), 130 – 139

- Jahfer, A., & Madurasinghe, S. I. (2019). Liquidity and Capital Structure: Special Reference to Manufacturing Sector in the Colombo Stock Market. *Journal of Management*.4(2), 66-77
- Julia, K. B., (2013). The Relative Importance of Industry and Size Effect in Corporate Capital Structure-Empirical Evidence from the EU Countries, *Eurasian Journal of economics and Finance*, 1(2), 1-27.
- Kinde, B. A., (2013). "Impact of Firm Level Factors: Evidence from Ethiopian Insurance Companies". *Global Journal of Management and Business Research Finance*. Vol.13, No.4, 24-30
- Magwai, M. K., (2014). Effect of Macroeconomics conditions on capital structure choice for listed South African Firms. An Unpublished Master project submitted to the Gordon Institute of Business Science, University of Pretoria
- Martina, H., (2015). The Relationship between Tangible Assets and Capital Structure of Small and Medium-Sized Companies in Croatia. *EKONOMS KIVJESNIK/ECONVIEWS*. XXVIII, 213-224
- Monday, J. U., Ekperiware, M. C & Muritala, B. R., (2016). Downstream Oil Deregulation and Nigeria Economy. *Ecoforum Journal*, 8(1), 207-214.
- Mitto, U. R., & Zhang, Z. (2008). The Capital Structure of Multinational Corporations: Canadian versus U.S Evidence, 14(5), 706-720.
- Myers, S. C., & Majluf, N. S., (1984). Corporate Financing and Investment Decisions When Firms Have Information that Investors Do Not Have. *Journal of Financial Economics*. 13, 187– 221.
- Olakunle, A.O & Oni, E.O., (2014). Assessing the Impact of Asset Tangibility on Capital Structure: Choice for Listed Firms in Nigeria. *Journal for Applied Economics and Business*.2(3). 5-20;
- Onaolapo, A. A., Kajola, S. O., & Nwidobie, M. B., (2015). Determinant of Capital Structure: A Study of Nigerian Quoted Firms. *European Journal of Business and Management*. 12(3), 170-183.
- Ovtchinnikov, A. V., (2010). Capital Structure Decisions: Evidence from Deregulated Industries. *Journal of Financial Economics*. 95, 249-274.
- Rajan, R. & Zingales, L., (1995). What Do We Know about Capital Structure? Some Evidence from International Data. *Journal of Finance*. 50, 47-81.
- Ramlall, I. (2009). Determinants of Capital Structure among Non-Quoted Mauritian Firms under Specificity of Leverage: Looking for a Modified Pecking Order Theory. *International Research Journal of Finance and Economics*.31, 83-92.
- Ross, S. A., Westerfield, R. W., & Jaffe, J., (1990). Corporate Finance, McGraw-Hill Irwin, New York.
- Salawu, R. O., & Agboola, A. A., (2008). The Determinant of Capital Structure of Large Non-Financial Listed Firms in Nigeria. *The International Journal of Business and Finance Research*.2(2), 75-84.
- Shala, A., Ahmeti, S., Berisha, V., & Perjuci, E., (2014). The Factors that Determine the Capital Structure among Insurance Companies in Kosovo: Empirical Analysis. *Academic Journal of Interdisciplinary Studies*. 3(2), 43-50
- Sharif, B., Naeem, M. A., & Khan, A.J., (2012). Firm's Characteristics and Capital structure: A Panel Data Analysis of Pakistan's Insurance Sector, *African Journal of Business management*, 6(14), 4939- 4947.

Zabri, S. M. (2012). The Determinants of Capital Structure among SMEs in Malaysia”: *Proceeding at International Conference of Technology Management, Business and Entrepreneurship*. Renaissance Hotel, Malaysia 18-19 December. 132-146